Covering the time period from July 1973 to July 1974, the report documents the first year of a project to implement career education in the Highline High School in Seattle. A career alternatives model (CAM) to provide each student with opportunities to consider all alternatives is described as a means for student development in self awareness, economic understanding, decision making, and employment skills. Goals and procedural components of CAM, in which guidance and inservice teacher education are stressed, describe the project. A 43-page report of an evaluation conducted by the University of Washington's Bureau of School Service and Research (BSSR) is included in the document. The concluding section (67 pages) consists of sample instructional materials and other program-related documents. (MU)
INTERIM REPORT

Project No. V361123
Grant No. OEG-0-73-5289

Highline's Career Alternatives Model

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

The Project reported herein was performed pursuant to a grant from the 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.

Dr. Ben A. Yormark
Highline School District #401
15675 Ambaum Boulevard S.W.
Seattle, Washington 98166

July 1, 1975
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>THE PROBLEM</td>
<td>6</td>
</tr>
<tr>
<td>GOALS AND OBJECTIVES</td>
<td>10</td>
</tr>
<tr>
<td>BASIC PROJECT DESIGN</td>
<td>17</td>
</tr>
<tr>
<td>PROJECT COMPONENT</td>
<td>19</td>
</tr>
<tr>
<td>EVA</td>
<td>20</td>
</tr>
<tr>
<td>Work Samples Exploration</td>
<td>40</td>
</tr>
<tr>
<td>Value Renewal</td>
<td>49</td>
</tr>
<tr>
<td>Employment Skills Clusters</td>
<td>51</td>
</tr>
<tr>
<td>Guidance and Placement Systems</td>
<td>55</td>
</tr>
<tr>
<td>Infusion</td>
<td>64</td>
</tr>
<tr>
<td>Exportation</td>
<td>71</td>
</tr>
<tr>
<td>Staff Development</td>
<td>75</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>79</td>
</tr>
</tbody>
</table>
I. Time Period

This report covers the second year of the Career Alternatives Model Project, beginning July 1, 1974 and ending June 30, 1975.

II. Project Goals and Objectives

A. District Goals

Prior to application for this project, the Highline District Board of Directors adopted four groups of goal statements, including the following one:

To Provide Each Student Opportunities to Consider Career Alternatives by:

- providing an insight into his relationship to various facets of the world of work.
- assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles
- developing in him an understanding of the value and dignity of each person's work in creating a productive society.
- developing his employment skills and competence to enter the job market.
- providing decision-making and planning activities as preparation for future training and education related to his life's work.

The Career Alternatives Model (CAM) has adopted these statements as its primary goals. Consequently, the project has been designed to develop and implement a district-wide, K through 14 career education program that will achieve them.

B. Other Project Goals

In addition to the goals stated above, the project is committed to the following goals:

1. Exportation

The project is committed to disseminating information to other educators who are concerned with the development and implementation of career education programs. Such information may include published reports, instructional materials and verbal discussions.
2. Staff Development

In order to assure the success of the project and its lasting impact on the Highline School District, the project is committed to promoting professional development of district and project staff in relationship to career education.

C. Project Objectives

After (1) establishing the compatibility of the project's original student objectives with the guidelines prepared for the U.S.O.E. by Development Associates, and (2) dropping fifteen post-secondary goals due to lack of cooperation from the post-secondary school institutions, the project has retained fifty-four student objectives. These objectives are grouped according to the five district goals pertaining to career alternatives and categorized according to the appropriate grade level for their attainment.

III. Procedures and Objectives

Although each of the project's five program goals is based on the continuous development of the student from grades K through 12, it was determined that a series of "major thrust" efforts aimed at key points in the educational process would achieve the greatest results in terms of the resources available. Consequently, the original project design included five "major thrust" components plus several areas of emphasis. These have now been reorganized and include eight project components. All project activities, accomplishment, conclusions and recommendations are reported within the format of these eight components. A summary of each follows:

A. Early Vocational Awareness (EVA)

Activities in this elementary level component are directed toward the goal of

Providing each student opportunities to consider career alternatives by providing an insight into his/her relationship to various facets of the world of work.

The EVA component was broadened from its original description to include several activities occurring at the elementary levels. These include the original "career kits," the Bread and Butterflies television series, community resources utilization and individual building projects.

Approximately sixty percent of the district's elementary teachers were involved in at least one career activity during the 1974-75 school year. Data regarding the utilization of various activities is presented in the report, including positive teacher reaction, particularly with the television series and career field trips.

Product accomplishments include the development of a new kit, "parents' Occupations," and fifteen packets to accompany the Bread and Butterflies series.
B. Work Samples Exploration

Activities in this junior high level component are aimed at the goal of

Providing each student opportunities to consider career alternatives by assisting in self-evaluation of his/her interests, abilities, and values relating to a variety of occupational roles.

The Work Samples Lab continues to be the primary activity in this component. A fully developed two-day format was initiated and over 1,000 students from four separate junior high schools visited the lab. Classroom related activities and materials were made available to teachers whose classes were scheduled to visit the lab and more than fifty percent of the teachers made use of them.

A number of other related activities were also utilized during the year including (1) the Ohio Vocational Interest Survey, (2) audio visual materials, and (3) several commercial kits. One school provided a tri-semester English elective titled "Careers." Initial popularity of the program saw nearly two hundred students take the class the first time it was offered. Several other schools are looking toward similar type classes.

C. Career Value Renewal

The Career Value Renewal component is aimed at

Providing each student opportunities to consider career alternatives by developing in him an understanding of the value and dignity of each person's work in creating a productive society.

The report and recommendations prepared during the first year by the Career Value Renewal Task Force were presented to the Board of Directors and project staff are awaiting official action. In the meantime, a concern with the role of values as they relate to work is being incorporated in many of the project's other components.

D. Employment Skills Clusters

The Employment Skills Clusters and the district's established vocational education program are basically one and the same and are aimed at

Providing each student opportunities to consider career alternatives by developing his/her employment skills and competence to enter the job market.

Improvements in the program included (1) qualification of the home and family life program for vocational funding, (2) a stepped up articulation program between the Occupational Skills Center and the nine high schools which it serves, (3) an increased enrollment of approximately 400 students in all
vocational education programs, and (4) the creation of six new advisory
councils. Two new courses, horticulture and electronics, were added to the
program.

E. Guidance and Placement

Originally two separate areas of emphasis, it became apparent during the project's
second year that guidance and placement are two closely related areas of activity
and that very little is accomplished by dealing with them as separate components.
Together they are aimed at the goal of

Providing each student opportunities to consider career alternatives by
providing decision-making and planning activities as preparation for future
training and education related to life's work.

The second year saw the development and implementation of a counselors' in-
service program which has been the key to getting the guidance staff involved
in career education. The program included a series of evening workshops
accompanied by mini field trips to local employers, work-related agencies and
post-secondary training institutions.

An increase in the level and variety of activities within this component was
also noted during the second year including: (1) administration of the Ohio
Vocational Interest Survey in all secondary schools; (2) field testing of a
computerized career information system in each of the five high schools; (3)
introduction of a Job Line, a job-search and job-securing program aimed at
senior high students; (4) implementation of an additional senior high career
resource center; and, (5) planning and initial implementation of a district-wide
centralized career information system.

Provision for a new staff position in each of the high schools titled Vocational
Information Specialist, has laid the ground work for maintaining the second
year's momentum into the project's third year.

F. Infusion

From the beginning of the project, staff have made an effort to encourage the
infusion of career education activities into the on-going curriculum. Plans were
made to step up these efforts during the project's second year, including the use
of "Infusion Notebooks." In part these plans failed because other opportunities
were capitalized on at the expense of staff time required to fully implement the
infusion plans. Nevertheless, a good many activities have occurred which might
be considered an application of the infusion concept and these are reviewed.

But many questions still remain unanswered, and the project's staff has begun to
develop reservations about the overall role of infusion and the importance which
many career educators attach to it as an implementation strategy. The report
cites some of the problems and concerns which have led to these reservations.
and goes on to question the basic assumptions which may lie at the heart of the problem.

G. Exportation

Many projects fail to have an impact beyond the target group due inadequate plans for exportation. To make sure CAM did not fall into this category, definite plans have been implemented to keep other career educators appraised of the project's progress. Primary efforts have included: (1) Publication of periodic newsletters, (2) sharing of instructional materials and other publications prepared by project staff, (3) hosting visits/consultations with other professional career educators, (4) and making presentations to both professional and lay groups.

H. Staff Development

The promotion of staff development, both among the district staff at large and CAM's management staff in particular, has been a basic concern of the project. Many of the activities which have promoted staff development are included throughout the report as they are directly related to other program components. Others, which do not appropriately fit into the report anywhere else, are identified in this section of the report.

IV. Evaluation

The third party evaluator's report makes up the final section of this report. Prepared by the Bureau of School Services at the University of Washington, the report summarizes the evaluation study conducted, and presents the findings which were an outcome of that study.
I. Review of the Original Problem

During recent years educational leadership at the national level has drawn attention to the fact that a gap has come to exist between school and work, that is, between the content and objectives of the educational program provided for our youth and the tasks and problems they must face in becoming "working" members of our society. Career education has been proposed as the corrective to this problem. However, no explicit definition of career education has been offered, particularly in terms of the specific student outcomes to be sought, or the essential ways to go about achieving such outcomes at the local district level.

Highline's Career Alternatives Model project (CAM) has addressed itself to this problem. Following guidelines established by the U.S.O.E., the project's staff has brought together a K through 12 sequence of activities, each of which has proven workable in previous experience, to produce a "total" career education program at the local district level. Simultaneously, the staff has struggled with the problem of refining the project's goals in terms of student outcomes which might reasonably be expected to help students bridge the gap between school and work.

II. Subordinate Problems

As so frequently happens, an organized attack upon a major problem soon encounters a number of subordinate problems. Here we do not have in mind those difficulties which any management effort must typically overcome. They are expected. Rather, we mean those persistent, seemingly irresolvable issues that appear to be inherent in either the original problem or the proposed solution. The following are among those with which the project staff has spent a great deal of "thrashing" time.

A. The Definition of Career Education

In a recent paper titled "The Career Education Concept," John Wilcox, Director of Cornell Institute for Research and Development in Occupational Education, stated:

In the beginning we were inclined to agree with Commissioner Marland that it would be well for the concept of career education to evolve through the efforts of education professionals, parents, businessmen, and labor to meet the needs of our youth. The strategy has not withstood the test of time. A year ago we proposed, before an audience at the AVA Convention in Atlanta, that change required more precise definitions.

The publication of its policy paper titled "Career Education" by the U.S.O.E. may mark the beginning of the preciseness which Wilcox and many others, including the staff of CAM, feel is necessary. Certainly it begins to chisel out at least a rough outline from the coagulated mass of notions, concepts, materials,
methods and slogans which has become known as career education. But a
careful reading of even this document reveals contradictory assumptions as
well as the absence of a structural organizations which clarifies the relation-
ship between such diverse elements as theory, objectives, methods and
materials, rather than enumerating them as twenty-five programmatic
assumptions.

Although CAM's definition of career education has been largely shaped by
established district goals that predated the career education movement, the
staff has still had to wrestle with the problems created by the lack of a clear
definition shared by all, for a project of this type hardly exists in isolation.
CAM must still look to the national leadership for direction, to other practi-
tioners for assistance and to commercial publishers for materials. Amidst such
relationships, a more precise definition of career education is almost
a must for clear communication.

B. The Question of Infusion

Perhaps no aspect of the total career education picture has plagued CAM's
staff more persistently then the questions revolving around the strategy of
infusion. From the beginning of the career education thrust, infusion has
been advocated by national leadership as the best and most promising method
(if not the essential one) for establishing career education in the curriculum.
But whether this is so for philosophical, theoretical or practical reasons is
rarely explained.

Nor is a demarcation line drawn. When the sixth grade teacher spends
several class sessions relating a new arithmetic skill to jobs, this is undoubtedly
infusion. But how about when he or she utilizes upwards of twenty hours on
Bread and Butterflies? Is this still infusion? And what about a quarter-length
English class that is offered to junior high students as careers within an elective
program that includes fifteen titles ranging from Mythology to Basic Grammar?

Although CAM's staff has made a commitment to the concept of infusion, we
believe there are many unanswered questions as well as a great deal of fuzzy
thinking surrounding the concept. A bit of clarification would help as we
move ahead with this strategy.

C. Confused Evaluation Strategy

Evaluation of a major new educational thrust such as career education is
bound to be difficult in terms of coming up with conclusive evidence that
students are significantly affected. This is particularly true considering the
comments made above regarding the absence of a clearly stated definition.
But the problem has been further complicated by the managerial procedures
which were followed.
After their first year's experience with a third-party evaluator, an experience for which the U.S.O.E. provided little or no guidance, the project's staff was very receptive to guidance and direction. However, what followed only made the problem worse. First, there was no opportunity for project directors to provide input in the development of the strategy which Developmental Associates came up with. Consequently, both project staff and the third party evaluator had to struggle through the guidelines in an attempt to relate them to the project's activities. Secondly, the delay in getting these guidelines out put the detailed development of the local evaluation plan behind schedule. Finally, rescinding the mandatory status of the guidelines added additional confusion and delay as project staff and the third party evaluator tried to interpret the implications of this action.

The project staff believe they have made a sincere effort to follow the spirit of the guidelines which U.S.O.E. set forth. But the cost, in both time and quality of the second year evaluation plan, has been great.

D. Lack of State Leadership

To date, no strong leadership role in career education has been played by the several state agencies, including the Office of the Superintendent of Public Instruction and the Washington State Coordinating Council for Occupational Education, both of which have an interest in the area. There are, unquestionably, problems hindering these agencies, including funding and staff. Nevertheless, leadership could be exerted, including (1) promoting greater visibility with professional groups in order to tell the story of career education, and (2) organizing a task force of school leaders who have current on-going programs in career education for the purpose of developing guidelines for future program development.

During the past several months a preliminary "state plan" has been developed by the Superintendent of Public Instruction. This is a move in the right direction. The process of discussing this plan, revising it and then implementing it could provide the focal point for an active state-level leadership. Without this kind of leadership, individual districts, including projects such as CAM, can neither share their experiences nor benefit from the experiences of others, nor is a state-wide career education effort likely to come about.

E. Local Financial Climate

Though the educational leadership in Washington State has lived with the threat of massive levy failures for many years, 1975 was the year it actually happened. The problem is too complicated to review here, including the chances for a long range solution. But it is apparent that in the short run, at least, schools will be operating with reduced funding.

Although these state-level developments do not have a direct impact on CAM's funding, the project is definitely effected. During the final quarter
planning was very difficult because of the uncertainty of staff reductions, staff reassignments and school closures. Furthermore, there are some understandable resentments encountered among staff who see their programs cut back while career education continues under categorical funding. Offsetting these indirect consequences will require extra effort and attention from the project's staff.
GOALS AND OBJECTIVES

I. Project Goals

A. Definition by Goals

Current definitions of career education run the gamut from the myopic to the universal. At one end of the line are those which tend to zero in on the traditional concerns of vocational education, namely skills training for specific employment. These are a legitimate part of career education, but not the whole picture. At the other extreme are those definitions that see all education as career education. Like most truisms, this one has little value when it comes time to plan and initiate concrete programs.

Basically, the Career Alternatives Model is a goal-oriented project, and the definition of career education that has provided direction in its planning, is an operational one to be found in the goals adopted.

B. District Goals

In May 1972, after extensive community, staff, and student input, the Highline District Board of Directors adopted four groups of goal statements, including the following one:

To Provide Each Student Opportunities to Consider Career Alternatives By:

- providing an insight into his relationship to various facets of the world of work.
- assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.
- developing in him an understanding of the value and dignity of each person's work in creating a productive society.
- developing his employment skills and competence to enter the job market.
- providing decision-making and planning activities as preparation for future training and education related to his life's work.

The Career Alternatives Model has been designed to implement a district-wide, K through 14 career education program which shall achieve these district goals. Thus, in terms of providing student services, the districts' goals and the project's goals are one and the same.
II. Project Objectives

A. Student Objectives

1. Background

The original project proposal identified sixty-nine separate student outcomes which were grouped under the five district goals pertaining to career alternatives. These in turn were categorized according to the grade level for which they were deemed appropriate, including grades 3, 6, 9, 12 and 14. At the beginning of the project's second year the U.S.O.E. provided a group of student objectives that had been developed by Development Associates and requested that all Part D exemplary programs use these student objectives in conducting their third-party evaluations. This left project staff with the question of what to do with the original sixty-nine objectives.

After comparing the two sets of student objectives a remarkable compatibility was noted as can be seen in Appendix A. Furthermore, the U.S.O.E. then backed away from their previous request and asked that the student objectives prepared by Development Associates merely be used as guidelines. Considering these two facts, the staff has retained the project's original objectives, with the exception of fifteen objectives which had been categorized as appropriate at grade level 14.

These latter fifteen objectives were dropped only after the project's staff had made several attempts to bring representatives of four-year institutions, technical institutes and community colleges together for meetings. These meetings were partially productive. We did receive information and insights that have been useful in developing our guidance thrust. But the development of program activities which can achieve the original objectives just cannot occur within the present state political environment. At the time the project was written there was a community college staff member at the state level responsible for career education. However, there has been little indication of program development or interest in the two years that have passed. If significant state legislation is passed before CAM's three years is completed it may be feasible to direct an effort toward these objectives again.

2. Objectives

The following constitute CAM's revised student objectives as grouped by project goals and categorized according to appropriate grade level.
Goal: To provide each student opportunities to consider career alternatives by providing insight into his relationship to various facets of the world of work.

Objectives

Grade 3  The student will:

1. Be aware of the main functions of highly visible careers and occupations.
2. Will know major ways in which occupations differ.
3. Recognize that being a student is his present career.

Grade 6  The student will:

1. Know which occupations are in the same field (cluster).
2. Know the major duties and required abilities of common occupations and occupational families.
3. Identify the interdependency between the many jobs in the culture.

Grade 9  The student will be able to:

1. Describe the changing nature of technology in relation to an occupational field.
2. Identify career hierarchy levels and educational requirements for entry when given a list of career clusters.
3. Recognize careers available to students which require knowledge and use of all basic disciplines such as mathematics, fine arts, science, and humanities.

Grade 12  The student will:

1. Understand that technological, economic, and social changes result in decreases in the availability of some kinds of jobs and increases in others.
2. Know possibilities for career advancement beyond entry jobs in different occupations.
3. Recognize that persons must update their skills in such ways as securing additional training, re-training, reading job-related periodicals, and attending night school.

b. Goal: To provide each student opportunities to consider career alternatives by assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.

Objectives

Grade 3 The student will:

1. Recognize that different jobs require different interests and abilities.

2. Examine various rewards for performing work.

3. Recognize that career selection may be based on one's avocational interests.

Grade 6 The student will:

1. Recognize that one's life style is strongly influenced by one's work.

2. Cite and compare reasons why people prefer certain occupations over others.

3. Perceive himself or herself as able to achieve skills in data, people and things categories.

Grade 9 The students will be able to:

1. Understand the necessity for planning and preparation in the choosing of a career.

2. Understand the relationship between school curriculum choices and career planning.

3. Recognize personal deficiencies while realizing that many can be overcome and thus do not necessarily preclude entry into desired training or occupations.

Grade 12 The student will:

1. Actively pursue part-time or summer work in order to better understand his perceptions of employment.
2. Perceive own specific abilities that may affect pending career decisions.

3. Become aware of own current interests and values that may affect career decisions.

c. Goal: To provide each student opportunities to consider career alternatives by developing in him an understanding of the value and dignity of each person's work in creating a productive society.

Objectives

Grade 3 The student will:

1. Discuss how we talk about work at home, in the school, and on the playground.

2. Describe in positive terms, adults (parents, relatives, neighbors) who work.

3. Recognize the value of own accomplishments.

Grade 6 The student will:

1. Identify persons who work for themselves, who work for others, and who work for no pay.

2. Describe potential problems which would face America if no one worked.

3. Describe positive consequences of work upon the society.

Grade 9 The student will:

1. Select "holding a job" as a desired goal when given an alternative of concerns.

2. Perceive vocational training as an acceptable role for any and all students who may desire that training.

3. Develop an appreciation for the work of producers of goods.

Grade 12 The student will:

1. Identify how attitude, abilities, and experiences affect work performance.
2. Understand why people have the attitudes that they do toward work.

3. Evidence a significantly increasing tendency to elect skills training programs at the senior high level.

d. Goal: To provide each student opportunities to consider career alternatives by developing his employment skills and competence to enter the job market.

Objectives

Grade 3  The student will:

1. Make change: total up own purchases; do very simple mental computations without figuring on paper.

2. Complete personal data card.

3. Follow printed directions to find business names and addresses in the yellow section of a telephone book.

Grade 6  The student will:

1. Figure simple budgets.

2. Systematically arrange tools and materials for storage.

3. Be able to successfully manipulate the equipment, tools, and instruments included in the majority of EVA resource packages.

Grade 9  The student will:

1. Compare his work-sample performance levels with business and industry performance standards.

2. Complete a job application form.

3. Recognize the role of organization in getting a task or project completed.

Grade 12  The student will:

1. Be able to synthesize the knowledge, job skills, and attitudinal learning into a simulated or actual job experience.
2. Be able to develop a job resume.

3. Feel competent in experiencing a job interview.

e. Goal: To provide each student opportunities to consider career alternatives by providing decision-making and planning activities as preparation for future training and education related to his life's work.

Objectives

Grade 9

The student will:

1. Identify or describe alternatives in career areas which are open should a student choose to leave school.

2. Be aware of sources of information about short-term manpower training programs available for youth.

3. Be aware that further schooling and guidance services are available.

Grade 12

The student will:

1. Identify major training institutions in the Puget Sound Basin.

2. Develop plans for entry into employment, military or further schooling.

3. Be aware of manpower and counseling services available after high school graduation.

B. Procedural Objectives

To assure successful operation of the project and a reasonable chance of attaining the goals and objectives presented above, the project staff identified a number of specific procedural objectives within the framework of the project's major components. These objectives were identified in a document submitted to the Region X office titled "Highline's Career Alternatives Model Time Schedule for the 1974-75 School Year," which is included in Appendix B.
I. Exemplary Nature of the Project

In keeping with the exemplary nature of the project, as defined by the guidelines developed by the U.S.O.E., program components have been selected by:

A. Expanding programs currently existing on a limited operational basis in the Highline District.

B. Implementing on an operational basis programs from the "fragmented" successes the district has developed on a research and experimental basis.

C. Adapting procedures and techniques that have been effectively used in the field of education to attain similar goals.

D. Introducing programs that are new to the district, but are built upon proven concepts and procedures.

II. Major Thrust Strategy

The original design of this project was built around a "major thrust" strategy. Although each of the five goals defined under the district's commitment to career alternatives is based on the continuous development of the students from grades K through 12, the staff recognized that there are points at which a major thrust will bring the greatest results in terms of reaching the project's objectives. Thus, five major program components were developed, each aimed at one of the project's five goals and the student objectives developed for that goal.

In addition to these major thrust components, the project was designed to (1) strengthen the role played by the guidance staff in career education, and (2) provide the classroom teacher with assistance in the process of infusing career education into the ongoing curriculum. As the second year progressed it became apparent that the distinction between "placement" and "guidance" was negligible. Consequently these two components are now viewed as one. As for infusion, project staff views it primarily as a method which can be used throughout the entire project wherever it is deemed as an appropriate means for achieving project objectives.

The following outline clarified the relationship between the major program components and the goal(s) toward which it is directed.
<table>
<thead>
<tr>
<th>Program Components</th>
<th>Project Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Early Vocational Awareness (Elementary Level)</td>
<td>To Provide Each Student Opportunities to Consider Career Alternatives by:</td>
</tr>
<tr>
<td>B. Work Sampling Exploration (Junior High Level)</td>
<td>providing an insight into his relationship to various facets of the world of work.</td>
</tr>
<tr>
<td>C. Career Value Renewal (All Levels)</td>
<td>assisting in self-evaluation of his interests, abilities and values relating to a variety of occupational roles.</td>
</tr>
<tr>
<td>D. Employment Skills Clusters (Senior High Level)</td>
<td>developing in him an understanding of the value and dignity of each person’s work in creating a productive society.</td>
</tr>
<tr>
<td>E. Guidance and Placement (Secondary Level)</td>
<td>developing his employment skills and competence to enter the job market.</td>
</tr>
<tr>
<td>F. Infusion (All Levels)</td>
<td>providing decision-making and planning activities as preparation for future training and education related to his life’s work.</td>
</tr>
</tbody>
</table>

**III. Support Components**

In addition to the program components described above, two support components have been built into the design of the project.

A. Exportation and Dissemination

CAM has made a definite commitment to exporting its experience base to other career education proponents throughout the nation with particular emphasis on the State of Washington and Region X of the U.S.O.E. This is in addition to a concerted effort to disseminate information about the project among school staff and members of the local community.

B. Staff Development

Although staff development activities are not aimed directly at student objectives, their indirect contribution is often a crucial one to the eventual success or failure of program activities. Consequently, the project’s design provides for an ongoing program of inservice and staff development activities aimed at various groups including teachers and administrators as well as the project’s own staff.
Though project reports of this nature usually present the procedures, methods, conclusions, etc. in separate sections, this format was deemed inappropriate in this case. The basic structure of this project has been determined primarily by the program and support components outlined in the previous section. As each of these components is distinctly different, it was decided to pursue a format that would maintain and convey the individual integrity of each component. Consequently, the remainder of this section is composed of eight separately prepared reports which are easily read, but do not slavishly follow a given format. These include:

- Early Vocational Awareness
- Work Samples Exploration
- Career Value Renewal Task Force
- Employment Skills Clusters
- Guidance and Placement
- Infusion
- Exportation
- Staff Development
I. Early Vocational Awareness

A. District Goal:

The Early Vocational Awareness component of CAM is primarily aimed toward the following district goal: "To provide each student opportunities to consider career alternatives by providing an insight into his relationship to various facets of the world of work.

B. Summary of Year One - 1973-74

During the first year of CAM one primary emphasis was placed upon the development of new career kits and the completion of a variety of procedural objectives which related to beginning a new project. At mid-year the position of Community Resource Specialist was initiated. While some activities were implemented district wide, primary concentration was within one service area. This concentration included materials, meetings and utilization of CAM staff time. The CAM elementary school specialist also attended planning meetings for eventual utilization of the Bread and Butterflies series in Washington State.

C. Year Two - Activities and Accomplishments

Over the last two years, the EVA concept has broadened to represent a variety of activities at the elementary school level. Initially a system of kits, the advent of better commercial materials, the need for utilization of community resources and the varying needs of buildings have broadened the base of career education. Further, it is felt that "career education" as a title provides a more consistent identity than the acronyms of previous projects. Within this section of the report are included the following topics:

- Kits (EVA) Commercial Materials
- Bread and Butterflies television series
- Community Resource Specialist
- Building Level Activity
- Utilization Summary
- Recommendations

1. Kits and Commercial Materials

   a. Locally developed kits (EVA). One major aspect of the CAM elementary program has been the development and utilization of locally developed career kits. These kits were originally developed to provide both hands-on activities and teaching ideas to supplement existing curricular topics through a career emphasis.

   Topics of kits centered on either occupational clusters, data-people-things, and special topics. Currently twenty-seven kits are available to teachers on a "check-out" basis.
Current titles include:

<table>
<thead>
<tr>
<th>Title</th>
<th>Focus</th>
<th>Grade Level</th>
<th>Teachers Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-On</td>
<td>(C) Construction</td>
<td>Int</td>
<td>10</td>
</tr>
<tr>
<td>Airport Careers</td>
<td>(C) Transportation</td>
<td>Pri</td>
<td>3</td>
</tr>
<tr>
<td>They Have the Whole World in Their Hands</td>
<td>(C) Government: Protective</td>
<td>Pri</td>
<td>5</td>
</tr>
<tr>
<td>Concert Careers</td>
<td>(C) Fine Arts</td>
<td>Int</td>
<td>4</td>
</tr>
<tr>
<td>Parent Occupations</td>
<td>(ST) Families and Work</td>
<td>Pri</td>
<td>2</td>
</tr>
<tr>
<td>People Who Count</td>
<td>(D) Data: Counting</td>
<td>Pri</td>
<td>2</td>
</tr>
<tr>
<td>Feeling Good</td>
<td>(C) Health</td>
<td>Pri</td>
<td>4</td>
</tr>
<tr>
<td>Communicating</td>
<td>(D) People: Communicating</td>
<td>Pri-Int</td>
<td>4</td>
</tr>
<tr>
<td>The Letter People</td>
<td>(D) Things: Precision</td>
<td>Int</td>
<td>0</td>
</tr>
<tr>
<td>Four in a Role</td>
<td>(SP) Role Playing: Community</td>
<td>Pri</td>
<td>3</td>
</tr>
<tr>
<td>Get it While it Lasts</td>
<td>(C) Serving, Sales &amp; Distribution</td>
<td>Pri</td>
<td>7</td>
</tr>
<tr>
<td>Build Me a World</td>
<td>(D) Manipulating</td>
<td>Pri</td>
<td>6</td>
</tr>
<tr>
<td>Northwest Careers</td>
<td>(ST) Geographical Relationships to Careers</td>
<td>Int</td>
<td>2</td>
</tr>
<tr>
<td>Click and Print</td>
<td>(C) Communication/Photography</td>
<td>Int</td>
<td>5</td>
</tr>
<tr>
<td>Saving the World</td>
<td>(C) Environmental Career</td>
<td>Int</td>
<td>0</td>
</tr>
<tr>
<td>Ocean of Jobs</td>
<td>(C) Marine Science</td>
<td>Int</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(D) Manipulating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine Assembly</td>
<td>(D) Things/Manipulating</td>
<td>Int</td>
<td>4</td>
</tr>
<tr>
<td>Moving Around</td>
<td>(C) Transportation</td>
<td>Pri</td>
<td>5</td>
</tr>
<tr>
<td>I Run Things Around Here</td>
<td>(D) Things/Controlling</td>
<td>Int</td>
<td>2</td>
</tr>
<tr>
<td>Making a Million</td>
<td>(C) Manufacturing</td>
<td>Int</td>
<td>8</td>
</tr>
<tr>
<td>How Big Is It</td>
<td>(D) Data/Measurement</td>
<td>Pri</td>
<td>4</td>
</tr>
<tr>
<td>What's a Bus</td>
<td>(C) Transportation</td>
<td>Pri</td>
<td>2</td>
</tr>
<tr>
<td>Who Am I</td>
<td>(ST) Role Playing (Hats)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(C) Cluster
(D) Data-People-Things
(ST) Special Topics
During the past year only one additional kit was added to the inventory (Parents' Occupations). This reduction in effort related primarily to the increased production of materials to accompany the Bread and Butterflies television series. During the summer period (1975) an additional three kits will be developed.

Utilization of locally produced kits has been spasmodic—increasing if "promotion" efforts increase and decreasing if reversed. Until January no individual continued responsible for maintenance and supply of kit materials. Efforts to build a control factor into kit distribution will need to continue.

A further factor in the kit utilization is the improved quality of materials available from publishers. Utilization information is included in part "E" of this section.

b. Commercial Materials

(1) Audio Visual. Eight films from the When you Grow Up Series (CFI) have been purchased. Previously, the Kingdom of Could Be You was purchased as well. Both series have been utilized by teachers, with a higher use observed for the CFI series. The "Education Who Needs It" filmstrip series was also purchased from CFI.

(2) Consumable

(a) Madrona Elementary continued to expand purchase of "The Valuing Approach to Career Education."

(b) McKnight's "Highway to Work and Play" was used K-6 in two elementary schools.

(c) Chronicle Guidance Publishers, Inc. published three workbooks, "Curriculum Careering," "Community Careering," and "Word of Workers." The content of these workbooks appeared to be consistent with CAM objectives. Each was used by at least four classroom groups.

(d) CFI also produced "My Career Workbook," which was used by at least 800 students.

(e) A "Child's Dictionary of Occupations," and "Career Flashcards" were furnished to each elementary school.

A catalog of locally developed and commercial items available for check-out was made available to all schools in December.
2. Bread and Butterflies

During the past year, a fifteen week television series entitled Bread and Butterflies was produced by the Agency for Instructional Television. This series focused on the career education needs of intermediate grade students. Locally the series was made available through Channel 9 KCTS T.V. from the University of Washington.

a. Nature of Series. The Bread and Butterflies series stressed an effective approach to career education through problem-oriented programs. Within the context of many programs was significant cognitive information as well. Program titles included:

- Treasure Hunt (Self-Independence and the Economic System)
- Work Means (Why People Work)
- Me, Myself & Maybe (Self-Clarification)
- Decisions, Decisions (Decision-Making)
- School & Jobs (Relationship--School, Work, and Society)
- Taking Care of Business (The Responsible Self)
- I Agree, ... You're Wrong! (Interpersonal Skills)
- Success Story (What is Success?)
- The Way We Live (Life Styles)
- Planning Ahead: The Racer (Shaping One's Destiny)
- Things, Ideas, People (People at Work)
- People Need People (Interdependency of Workers)
- Our Own Two Hands (Human Dignity)
- Power Play (Power and Influence)
- Choosing Changes (Freedom to Hope, to Choose, and to Change)

b. CAM Involvement. One of the assistant directors of CAM began serving on the original committee in 1973-74 that led to Washington State's eventual membership in the consortium which funded the Bread and Butterflies series. During the past year he has served on the Career Education Advisory Committee for Channel 9 - which aired the series.

At the opening CAM workshop in August, 1974, two representatives from Channel 9 described the series and showed sample films to the CAM building representatives. At this point the CAM staff began assuming the role of entrepreneur for the series. A committee of teachers and counselors was formed to recommend more effective methods of encouraging utilization of the series. The committee members were:

- Maureen Zawoysky, chairperson, teacher, White Center
- Wally Murphy, teacher, Des Moines Elementary
- Helen Stedronsky, teacher, Southern Heights Elementary
- Bob Ewing, counselor, Cedarhurst Elementary
- Ron Ravatt, teacher, Angle Lake Elementary
- Minon Triplett, teacher, McMicken Elementary
At the recommendation of the committee, two workshops were held in January. Both were conducted by Marlena Scordan, Utilization Specialist for Channel 9 and the CAM staff. One workshop was for elementary counselors and the second for interested teachers. During January promotional material was distributed to each school, and enough teachers' guides for each teacher planning to view the series were purchased and distributed.

Sample films from the series were shown at both a principal's meetings and various staff meetings.

c. Bread and Butterflies Packets. Perhaps the most ambitious recommendation of the Bread and Butterflies Committee was that of furnishing packets of material, including student copies, to each teacher utilizing the series. It was felt that appropriate follow-up activities for each program would be more likely if material was immediately available. As a result, each of the committee members took the responsibility for two or three programs. Material was both selected from the teachers' guide and newly developed. A deadline of two weeks prior to each program was established. When the material was prepared, it was typed in the CAM office, and 120 teacher packets were printed and assembled. In addition, each activity in the packet that required a student copy was printed and assembled in sets of 30. Each week, then, between 9,000–12,000 sheets of paper were distributed to elementary schools.

The packets and earlier promotion efforts resulted in an extremely high utilization pattern. Between 110–120 intermediate grade teachers used the series on a weekly basis. This comprised approximately 50% of the teaching staff at these grade levels. The programs reached between 3000–3500 students each week, approximately 25% of the elementary school enrollment. A sample of one packet is included in Appendix C. Sample packets were sent to Seattle, South Kitsap, Kent, and Renton School Districts, to Channel 9 and to the Agency for Instructional Television.

d. Evaluation. Both because of the number of career concepts and because of its high utilization, Bread and Butterflies was made a major component in the contract with the third party evaluator. Two major areas of evaluation included career knowledge and perception of control of the environment (locus of control). Data is included in the third party evaluation report.

In addition, a questionnaire was sent to those teachers who had utilized the series. The questions and responses are listed below.
The Bread & Butterflies series seemed interesting to students.

Students appeared to learn new information about the world of work from the series.

Students appeared to gain more awareness of the value and dignity of work from the series.

Students appeared to gain more interest in their future careers from the series.

Follow-up activities were utilized quite often.

Follow-up activities were worthwhile and usable with students.

If I were in the same teaching assignment, I would use the series again.

<table>
<thead>
<tr>
<th>Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Response</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>0%</td>
</tr>
<tr>
<td>2%</td>
</tr>
<tr>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>No response or no reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2%</td>
<td>31%</td>
<td>43%</td>
<td>22%</td>
<td>2%</td>
</tr>
<tr>
<td>2%</td>
<td>36%</td>
<td>45%</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>3%</td>
<td>24%</td>
<td>42%</td>
<td>24%</td>
<td>7%</td>
</tr>
<tr>
<td>7%</td>
<td>3%</td>
<td>15%</td>
<td>0%</td>
<td>75%</td>
</tr>
</tbody>
</table>
In summary, teachers utilized both the series and follow-up materials and rated both quite positively. Several teachers at the fourth grade level felt that the follow-up materials were too difficult.

Recommendations for the coming year include the assessment of a preferred grade level for the series so that those teachers can assume students have not viewed the programs and the production of a workbook of activities to simplify the distribution of materials. It was also suggested that a pre and post test be developed and used with the series that might relate more closely to program content than current standardized tests.

In cost effectiveness, including $1200 in paper for packets, extra guides and teacher time, was relatively inexpensive--$0.50 per pupil for the amount of involvement which would be no less than 15 hours.

3. Community Resource Specialist

As noted in previous reports, one service that is available through the CAM project is that of the Community Resource Specialist. A fifteen passenger bus was purchased for her use in taking small groups of students to visit business and industrial sites. Tape recorders and cameras are utilized to insure maximum student involvement. The Specialist meets with the requesting teacher to plan a career-oriented trip, which will also meet the teacher's other curricular objectives. After this meeting she then arranges the tour, drives the bus, and guides the tour at the site. In addition, pre and post trip suggestions and activities are furnished to the teacher.

While perhaps this service could also be described under "Infusion" (Section VI), the specificity of career materials at its utilization at the elementary level have led to its inclusion here.

a. Utilization. The following table portrays the number of trips and students for the 1975-76 school year.

<table>
<thead>
<tr>
<th>1973-74</th>
<th>1974-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of trips</td>
<td>No. of students</td>
</tr>
<tr>
<td>46</td>
<td>830</td>
</tr>
<tr>
<td>219</td>
<td>3442</td>
</tr>
</tbody>
</table>

A comparison of 1973-74 and 1974-75 is as follows:
### Career Exploration Bus Trips 1974-75

<table>
<thead>
<tr>
<th>Month</th>
<th>Elem</th>
<th>Sec</th>
<th>Teacher Admin</th>
<th>Total</th>
<th>Elem</th>
<th>Sec</th>
<th>Teacher Admin</th>
<th>Total Passengers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>60</td>
<td>45</td>
<td>25</td>
<td>422</td>
</tr>
<tr>
<td>Oct</td>
<td>22</td>
<td>3</td>
<td>1</td>
<td>26</td>
<td>352</td>
<td>45</td>
<td>25</td>
<td>414</td>
</tr>
<tr>
<td>Nov</td>
<td>24</td>
<td>2</td>
<td></td>
<td>26</td>
<td>384</td>
<td>30</td>
<td></td>
<td>346</td>
</tr>
<tr>
<td>Dec</td>
<td>16</td>
<td>1</td>
<td>.5</td>
<td>22</td>
<td>256</td>
<td>15</td>
<td>75</td>
<td>346</td>
</tr>
<tr>
<td>Jan</td>
<td>15</td>
<td>2</td>
<td>17</td>
<td>17</td>
<td>240</td>
<td>30</td>
<td></td>
<td>270</td>
</tr>
<tr>
<td>Feb</td>
<td>28</td>
<td>4</td>
<td>1</td>
<td>33</td>
<td>448</td>
<td>63</td>
<td>15</td>
<td>526</td>
</tr>
<tr>
<td>Mar</td>
<td>21</td>
<td>1</td>
<td>1</td>
<td>26</td>
<td>336</td>
<td>16</td>
<td>30</td>
<td>382</td>
</tr>
<tr>
<td>April</td>
<td>28</td>
<td>1</td>
<td>29</td>
<td>448</td>
<td>10</td>
<td></td>
<td></td>
<td>458</td>
</tr>
<tr>
<td>May</td>
<td>17</td>
<td>4</td>
<td>2</td>
<td>23</td>
<td>272</td>
<td>60</td>
<td>25</td>
<td>357</td>
</tr>
<tr>
<td>June</td>
<td>12</td>
<td>1</td>
<td></td>
<td>13</td>
<td>192</td>
<td>15</td>
<td></td>
<td>207</td>
</tr>
<tr>
<td>Total</td>
<td>187</td>
<td>16</td>
<td>16</td>
<td>219</td>
<td>2988</td>
<td>244</td>
<td>210</td>
<td>3442</td>
</tr>
<tr>
<td></td>
<td>85%</td>
<td>7%</td>
<td>7%</td>
<td></td>
<td>87%</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>
Community Resource Speakers 1974-75

<table>
<thead>
<tr>
<th>Month</th>
<th>Speakers</th>
<th>Students Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oct</td>
<td>6</td>
<td>180</td>
</tr>
<tr>
<td>Nov</td>
<td>5</td>
<td>150</td>
</tr>
<tr>
<td>Dec</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Jan</td>
<td>6</td>
<td>180</td>
</tr>
<tr>
<td>Feb</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>Mar</td>
<td>3</td>
<td>90</td>
</tr>
<tr>
<td>Apr</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>May</td>
<td>5</td>
<td>150</td>
</tr>
<tr>
<td>June</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>28</strong></td>
<td><strong>825</strong></td>
</tr>
</tbody>
</table>

A partial list of sites visited by students includes the following:

Seattle Police Training Academy
Grandview Pre-School
Sambo's Restaurant
Windjammer Restaurant
Albertsons Supermarket and Bakery
Pike Place Market
Sea-Tac Airport
Instructional Resource Center
Occupational Skills Center
United Air Lines
Hair House
Wayco Lens Corp.
Sea-Tac Motor Inn
KING, KIRO, KOMO, KCTS
Television Studios
Fisher Flour Mills
Farnum's Pickle Co.
King County Transfer Station
Union Pacific
Burien General Hospital
Bellevue World Travel
Alaska Air Lines
Tandy Leather
Sea-Tac Weather Station
Marine View Veterinary Hospital
Pacific Trail
Industrial Heritage, U.S.A. Exhibit
Pacific Northwest Bell
Metro Sewage Treatment Plant
Society Candy
Marine Technology Laboratory
Ralph Burchart, architect
Bank of Tokyo
Bethlehem Steel
Weyerhaeuser Corporate Offices
House under construction
The Woodshop
Safeway Stores
America Mail Lines
Harbor Tour
King County Blood Bank
Host International

-28-
Procedures. A number of forms for access, scheduling, and follow-up have been developed. A sample is included in Appendix D. Based on her eighteen months of experience a number of perceptions have been gained. The following information was submitted by the Community Resource Specialist as an end-of-year report.

The key to a successful Career Exploration Activity is preparation -- by the teacher, coordinator-bus driver, and the business or service participating in a specific activity.

(1) **Preparation by the teacher for students should include:**

- (a) Discussion or activity concerning career education prior to activity.
- (b) Verbal or written goals to be achieved during activity.
- (c) Relevancy to curriculum studies should be noted.
- (d) Discussion of student conduct when guests are invited to classroom or class is visiting an outside resource.
- (e) Objectives and desires for career activity discussed with Community Resources Specialist.

(2) **Preparation by coordinator-bus driver**

- (a) Adequate discussion with teacher requesting activity to thoroughly understand objectives and desires.
- (b) Record pertinent information on request form.
- (c) Contact appropriate business or service organization to fulfill objective of teacher's request.
- (d) Ascertain that business or-service understand the goals of career activity.
- (e) Send confirmation to teacher and business.
- (f) Prepare bus for activity: check mechanical functions, clean, gas and service.
- (g) When students board bus, create atmosphere on bus to get and keep students in receptive mood:
  - Introduce driver and explain purpose of trip.
Find out "where students are" by short question and answer period on career exploration.

Relate student interests to career activity, e.g., if trip is planned to candy factory, ask how many students have made candy at home. Listen to answers--suggest students look for comparisons of home-made and commercial methods--ask students to observe variety of jobs necessary to operate candy factory--suggest they choose a job they might like to do.

Provide maps of area to be covered by trip. Students practice being navigators by finding names of streets and areas and locating our position on maps.

With help of assisting adult play "career game" when desirable.

Give directions and suggestions for using cameras and tape recorders.

Before leaving bus remind students of conduct expected on activity.

When students return to bus give them an opportunity to discuss their observations and feelings about the activity.

(h) If teacher has not accompanied students on activity, share incidents and reactions with teacher.

(3) Preparation by business or service organization.

(a) Understand the commitment assumed when agreeing to take part in a career activity.

(b) Discuss appropriateness of the business to the career activity.

(c) Select a guide knowledgeable of business operation with ability to relate to students.

(d) Share activity goals with personnel who will be involved in career activity.

(e) Provide a "hands-on" experience whenever possible.

(f) Permit a short time for students to question some employees whenever possible.
(g) Provide students with written material, diagrams, explanations of processes for follow-up work in classroom when available.

c. Evaluation. While part of the extensive field trip activity is included as a sub-group in the third party evaluators report, a questionnaire was sent to each teacher who had requested the services of the Community Resource Specialist. The questions and responses follow:

Please mark each of the following statements as to your agreement or disagreement.

<table>
<thead>
<tr>
<th></th>
<th>Don't Agree</th>
<th>Don't Know</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The career field trip related to classroom instruction</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2.</td>
<td>Students appeared enthusiastic about their experience</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3.</td>
<td>Students appeared to learn more about that particular topic because of the career field trip</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>4.</td>
<td>Students appeared to gain new career insights because of the trip</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>5.</td>
<td>Arrangements, planning and assistance were satisfactory</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>6.</td>
<td>Compared with &quot;regular&quot; field trips this approach seems more valuable</td>
<td>2%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Teachers comments attached.
1. "My class was involved in individual field trips. Most arrangements were made in the CAM office. I have been most impressed and feel my students have benefited tremendously."

2. "We have not gone on any field trips this year at the resource room. However, I have experienced the Career Exploration program during the Fall at the time of my student teaching. In my opinion the program is very beneficial to the students in making them more aware of the many different careers in this community."

3. "This was of real value to the students, especially when there was good follow-up in the classroom. It is much better for students in the small groups as they can see and hear much more."

4. "Great! We had a follow-up speaker and demonstration. Fit right in with 2nd grade Social Studies, 'Design for Learning' unit on 'Clothing---Man's Needs.'"

5. "This was my second year of field trips with the CAM Project. My students have always returned enthusiastic and eager to share what they saw. I think small groups along with a guide helps make this more successful. I only wish there were some way I could attend."

6. "A worthwhile approach because of size of groups--more individual attention results in greater interest and understanding."

7. "I was very impressed with the idea of a camera and tape recorder for the students' use. I also found the notebook, with classroom activities, etc., very valuable."

8. "I especially appreciate the small group approach. With the thorough organization and follow-through done by Fran, the kids really gained valuable experiences."

9. "I have nothing but good comments about the trips my children have been on and the cooperation from the CAM people."

10. "Compared with regular they were very valuable. I was sorry I didn't get to attend. I did stay with a fifth grade class so their teacher could attend."

12. "Fran does an excellent job setting up these trips. We visited an architect and a house under construction. I would like to see more of these trips."

13. "I liked taking a smaller group, especially in primary--easier to handle and better able to see that all students gain the most. EXTRA thanks to Mrs. Harrison for the trips to United Air Freight and Southcenter. She's great."

14. "The trip to KIRO was very good. We had the misfortune of scheduling problems, and a cancellation which resulted in the second half going to Channel 9. This did interfere with the continuity of the objectives I had set."

15. "I wish to express my thanks for the pictures taken and the time and energy spent for a worthwhile field trip. This meant four trips for my Kindergarten class."

16. "The value of taking a small group is great."

17. "Great!"

18. "The trips seemed quite planned. The children enjoyed the smaller groups for they were able to see more and discuss freely what they saw among themselves and with the guides. These trips provide an excellent opportunity to see and visit places where a regular field trip couldn't accommodate larger groups."

19. "Fran Harrison was tremendous in thoroughly planning trips which were very meaningful to our classroom instruction."

20. "The students developed into entirely new enthusiastic students on all of their work. I feel that the trips did it to them. Thank you."

21. "Our students were not that cooperative as this was the nature of their attitudes, however we have had many other successful field trips, career related, that required a bigger bus."

22. "I feel that the career trips were a valuable teaching experience. I especially appreciate the work done by Mrs. Harrison in arranging and planning these trips. I would not have found the time to make all these necessary arrangements myself."

23. "Our field trip was to the Occupational Skills Center which I feel gives them knowledge of training opportunities available to students."

24. "I do feel all field trips should and could be handled in this manner."
In summary, this service appears to be well received by teachers. It is, however, an alternative method of meeting the out-of-building needs. A more typical approach would be to use existing field trip resources and provide in-service for teachers. This system couples the advantages of "good" field trips, i.e., small groups, use of tape recorders and cameras, and good pre-planning with a person who will keep the trip career-oriented through interviews, career games, and a people-centered approach. Its disadvantage is that it exceeds the cost of "usual" field trips and is limited to the number of students one person can carry on a small bus through the school year.

4. Building Activity

a. Mini Grants. During the past year mini grant funds for career education were made available to teachers through the State Superintendent of Public Instruction Office. Eight applications were sent from individual teachers or staff groups. Of the eight, seven were funded. The titles, groups, and funding are listed below. The CAM office provided writing assistance, advertised the mini grants, planned with teachers, and assisted in management.

<table>
<thead>
<tr>
<th>Title</th>
<th>Applicant</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Activity Room</td>
<td>Angle Lake Staff</td>
<td>$350</td>
</tr>
<tr>
<td>Hands On Room</td>
<td>McMicken Staff</td>
<td>500</td>
</tr>
<tr>
<td>Aprodoughmints</td>
<td>Anna Denton, Cedarhurst</td>
<td>161</td>
</tr>
<tr>
<td>Career Activities for Gifted Students</td>
<td>Mary Buzard, Gregory Heights</td>
<td>100</td>
</tr>
<tr>
<td>Woodworking Skills for Girls and Boys</td>
<td>Liz Northrup, Shorewood</td>
<td>175</td>
</tr>
<tr>
<td>Bread and Butterflies</td>
<td>Teacher Committee</td>
<td>150</td>
</tr>
<tr>
<td>Early American Careers</td>
<td>Maywood Staff</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$1936</td>
</tr>
</tbody>
</table>

Each project was completed prior to the end of the year. One of the summary statements has been included from one recipient.
Project Title: "Hands On Room Supplies"

Grant to: McMicken Heights, Highline School District

Evaluation Submitted by: Colleen Stevens

I. Description

This project encompassed a variety of experience based activities in each of the six grades. A brief description of the types of activities includes the following:

A. The first grade tied its activities into a pioneer unit in which students constructed a log cabin, made clay pots and baked biscuits.

B. The second grade worked with clay and extended these skills to the formation of animal shapes.

C. The third and sixth grades combined in a woodworking project which also involved extensive cross-age teaching experiences. Each sixth grade student studied cross-age teaching techniques for two weeks. After this training he or she then designed a woodworking project and taught the skills to a third grade student.

D. One fourth grade class gained a variety of skills in working with leather as they produced medallions, key chains, and comb carriers. The other fourth grade worked with nails and crochet thread to complete beautiful string art pictures. These boys and girls also created apple-head dolls with their own personally designed outfit.

E. One fifth grade built bird houses while the other worked as a class and completed a model pioneer village on a 4' by 8' plywood sheet. Houses for the village were constructed from balsa wood. The students even created their own trees from branches and lichen.

F. One sixth grade class designed wrist bracelets on Indian beading looms.

The culminating activity was a student-parent hobby fair in which the entire community shared the students' work as fifteen community members demonstrated skills and hobbies.
2. Growth in Skills and Attitudes

In addition to the skills acquired while working with tools and a variety of materials the projects developed student growth in attitudes and values. Throughout the projects there was a sharing of ideas and skills. Many times there was a crossing over of grade levels to help with the projects. The older students helped build the frame for the log cabin, the sixth-third grade cross age project, the fourth-second grades working with clay. At the fair the students were very interested in what other grade levels had accomplished. They expressed praise for each other's work regardless of grade level.

3. Community and Staff Reaction

The parents and retired members of the community were very pleased with the various displays. Staff participation as described in the first paragraph was excellent. The final event, the hobby fair combined both the work of parents and children. One indices of success was the fact that over 500 community members were in attendance at the hobby fair.

4. Career Insights

Many career insights were gained by the students through the projects. Often adult models were used when working on the projects. A carpenter designed the bird houses; leather work was related to the leather craft industry. At the fair fifteen community members demonstrated their skills. For many the skill was also their occupation. For example, one father and son team operate a train store and they had a display. An extension from the Indian beading project was a woman from the community who demonstrated the Indian beadwork she produces and sells. A retired man extended his income by making apple head dolls. He had many on display. One father and son team explained their bee keeping materials. It proved to be very interesting and educational having the student's work and the community members involved in the fair.

5. Relation to Curriculum

In most grades the projects were related to areas of the curriculum. The fifth and first grades tied their projects into their social studies unit on pioneer life. Math received positive reinforcement for most of the projects helped develop measuring skills. It is true, however, that some of the bird houses took seven nails for one wall to be successfully attached.
b. Building summary. The following buildings were involved in career-oriented activities other than those described under other headings.

- Angle Lake
- Beverly Park
- Burien Heights
- Cedarhurst
- Des Moines
- Gregory Heights
- Lake Burien
- Madrona
- Maywood
- McMicken
- Normandy Park
- Shorewood
- Southern Heights
- White Center

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>No. Elem. Teachers Utilizing Activity</th>
<th>Approximate Number of Students Involved</th>
<th>% of Total Elem Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eva Kits</td>
<td>91</td>
<td>2730</td>
<td>22%</td>
</tr>
<tr>
<td>Bread and Butterflies</td>
<td>110</td>
<td>3300</td>
<td>27%</td>
</tr>
<tr>
<td>Career Field Trips</td>
<td>71</td>
<td>2988</td>
<td>17%</td>
</tr>
<tr>
<td>Audio Visual</td>
<td>73</td>
<td>2190</td>
<td>18%</td>
</tr>
<tr>
<td>Commercial Consumable Material</td>
<td>46</td>
<td>1380</td>
<td>11%</td>
</tr>
<tr>
<td>Building or Class Projects</td>
<td>87</td>
<td>2610</td>
<td>21%</td>
</tr>
<tr>
<td>Used at least one of above activities</td>
<td>250</td>
<td>-7500</td>
<td>61%</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>Used at least two of above activities</td>
<td>115</td>
<td>3450</td>
<td>28%</td>
</tr>
<tr>
<td>Used three or more of above activities</td>
<td>53</td>
<td>1590</td>
<td>13%</td>
</tr>
</tbody>
</table>

5. Gifted and Talented

In the previous report, an advisory committee formed to develop plans for meeting the career education needs of gifted and talented students was described. This group continued meeting and did submit a proposal to the Career Education Office, U.S.O.E. The following paragraphs from the abstract of the new project proposal describe its nature.

"This project (Career Education for the Gifted and Talented) bridges a current exemplary program in career education and locally developed programs for gifted and talented students. The major thrust of the project is at the elementary level, accompanied by a limited focus at the junior high school level.

Building on parallels between activities recommended to accomplish career education goals and those recommended by professionals in the field of gifted education, activities will be developed which could improve self-assessment, decision making, and career knowledge. Specific procedures include curriculum and materials development, a parent resource system, advisory committee involvement, a disseminating school concept, and a unique personnel plan which utilizes "implementing days" as a method of involvement and dissemination."

Preliminary word has been received that there is a high likelihood of this project being funded for the coming year. The project will be managed entirely by the CAM staff. As can be seen from the project description, the objectives and goals are coordinated with those of the CAM project.
6. Summary and Recommendations

As the previous information indicates, the elementary phase of career education activities extended beyond the service areas originally planned. As a result, more students were involved in career education activities. Also indicated, however, is that the number of teachers using several activities is still a minority.

The positive reception given the "Bread and Butterflies" series appears to indicate that teachers will use a given program of curricular content if presented and followed-up in a consistent manner. This response was also indicative of a possible problem area in the use of other career materials. Each kit, film, or field trip is a discrete activity which a teacher should "infuse" or relate to other areas of the curriculum, as such it becomes an addenda rather than a program.

The common element among the more active schools in implementing career education actively seemed to be the CAM representative. That individual's efforts in sharing, distributing, and making other staff members aware of available resources was rewarded by increased building activity.

Based on the early sections of this report, the following recommendations are made for the 1975-76 school year:

a. That a controlled system of distribution be developed for kits and audio visual material, i.e., that a certain kit be automatically sent to a teacher requesting a field trip, or who is viewing a particular Bread and Butterflies program.

b. That discussions with principals occur which may result in new CAM representatives in certain buildings.

c. That the EVA kits be re-emphasized and complimented by additional kits to "round out" cluster and data-people-things approaches.

d. That materials and services offered within the new "Gifted and Talented" project be consistent with CAM goals and procedures.

e. That the Community Resource Specialist expand the utilization of classroom speakers, as a means of reaching additional classrooms.

f. That the Bread and Butterflies series be continued and that a preferred grade level be recommended, further, that packets be edited and combined into a single workbook for ease in distribution.
II. Work Samples Exploration

A. Project Goal

The work samples exploration component has been designed to make a major thrust toward the goal of:

Providing each student opportunities to consider career opportunities by assisting in self-evaluation of the student's interests, abilities, and values relating to a variety of occupational roles.

Activity is aimed at the junior high level.

B. Summary of the First Year

Major activities and accomplishments of the first year include the following:

1. The Work Samples Lab

As planned in the original proposal, a work samples lab was developed and implemented as the mainstay of the work samples exploration program. Steps included:

a. Emphasis on exploration. It was determined that exploration rather than assessment should be the appropriate aim of the work samples lab. Furthermore, it was recognized that exposing students to the vast variety of jobs available in the world of work was not feasible, nor was a suitable logic available for the selection process that would have to occur in deciding which jobs should be illustrated. Consequently, the main focus has been on providing students with a conceptual framework which they can use to explore the diversity of jobs found and make useful comparisons between them.

b. Development of materials. After a thorough review of commercial materials, project staff decided to develop their own materials for the lab.

c. Development of a master plan. A master plan built around the "data—people—things" concept was developed with provisions for implementing the plan in three stages, one per each year of the project.

d. Implementation. Stage one was developed by the middle of the second semester and three hundred eighth grade students from Chinook Junior High School visited the lab for a one-day experience by the end of the school year.
2. Related Activities

Efforts were made to promote the development and use of related activities which would support the work samples lab and help students relate their experiences there to the total junior high curriculum. As Chinook Junior High was the target school for the first year, these efforts were aimed primarily at the staff of that school.

a. Classroom activities. Efforts to develop classroom activities were not very successful. However, by the end of the school year eight junior high staff members from the entire district were recruited to prepare materials during a summer workshop and several excellent classroom units were prepared which have subsequently been used during the second year.

b. Library and Resource Center Materials. A good beginning was made on the utilization of career exploration materials within the library at Chinook, including a series of short film strips, SRA occupational briefs and multiple copies of the Occupational Outlook Handbook.

c. Guidance Activities. Initial experimentation was done with the Ohio Vocational Interest Survey (OVIS) with the ninth graders at Chinook. A group of counselors was also brought together to explore the concept of a student "career portfolio."

3. Conclusions

With the exception of the classroom activities described above, the work samples exploration component met its major procedural objectives for the first year. No attempt was made to evaluate student outcomes as such an effort was considered premature.

C. Second Year Activities and Accomplishments

During the second year of the project, activity in the work samples exploration component was accelerated and in several instances far exceeded the original expansion plans for the second year.

1. Work Samples Lab

a. Additional Development and Expansion.

(1) Expansion of the Master Plan. By the time the lab began serving students on the 30th of September, it had been expanded to stage three. This expansion completes the basic format designed in the master plan and put development of the lab a full year ahead of time. A total of nine separate work samples provide the student with an opportunity to try a high, medium and low level task in
each of the basic categories of the data-people-things construct. A brief description of these activities can be found in Appendix E as well as Appendix F. The most significant addition to the lab involved the use of a closed circuit video system which allows students to view their role playing behavior in the "people" activities. This expansion of lab activities has required participating students to spend two days at the lab rather than one.

(2) Additional staffing. The expanded work samples described above, particularly the inclusion of the closed-circuit video system, has required additional staffing in the lab. A work samples aide was hired to work under the direct supervision of the lab supervisor with primary responsibility for the three people-centered activities. This position was funded under C.E.T.A.

(3) Expanded Schedule. The lab began serving students on the 30th of September and operated four days a week until May except for several brief shut downs. A total of over 1,000 students from four separate junior high schools attended the lab.

(4) Additional Supplementary Activities and Materials. A variety of supplementary activities and materials were added to the lab during the second year. These included:

(a) Mini sample. A mini sample on "lifting" was developed.

(b) Slide presentations. Two slide presentations titled "Other Factors" and "Physical Requirements" were developed and incorporated into the routine schedule for each student.

(c) Job sheets. Sixty additional one-page job sheets were developed for use with the new work samples.

(d) Work book. A self-exploratory work book was developed which students may elect to take with them as a follow-up activity after they have completed the lab experience.

(e) Browsing materials. The lab supervisor has continued to gather both written and audio-visual materials which students may browse through after completing their assigned work samples.

b. Tactical Changes

(1) Shift to Ninth Graders. During the second year project staff made the decision to serve ninth, rather than eighth, graders at the lab. The decision was made after receiving advice from staff members of the Appalachia Education Lab in Charleston, West Virginia, and

AG

-42-
consulting with the junior high principals and CAM Reps. This move was accompanied by a shift in the administration of the Ohio Vocational Interest Survey from the ninth to the eighth grade. Basically, all agreed that (1) the OVIS at the eighth grade, followed by (2) the work samples lab at the ninth would provide a more logical sequence in terms of helping the student develop a framework for viewing the world of work centered around the data-people-things concept.

(2) Class group visits. During the first year students came to the lab in alphabetical groups. After consultation with the junior high principals and CAM Reps, it was decided that students visiting the lab should come from pre-established groups such as Washington History or English classes. One-half of a class would come for two days and then be followed by the other half. This permitted teachers to carry on related activities with the entire class before and after their visit and with half the class during the visit. As a part of this strategy, teachers whose classes were involved were brought to the lab for a visit several weeks prior to their classes participation.

(3) Special Ed students. Approximately forty special education students between the ages of fourteen and eighteen were brought to the lab in small groups. This process involved some adjustments in the work routine which were worked out in cooperation with staff members of Woodside School, the district's special education school.

(4) Third year student selection. During the third year of the project it is anticipated that the work samples lab will be able to serve approximately 1,200 ninth grade students from a total population of 2,000 at eight separate schools. Consultation with the junior high principals was initiated in an effort to arrive at preliminary alternatives for selecting which students should be served. Firming up a plan will be the first order of business when administrative staffs return from summer vacations on the first of August.

2. Related Activities

Continued efforts were made to promote the development and use of activities which would help students at the junior high level relate the lab experiences to their overall career development, including the classroom curriculum.

a. Classroom activities. Although the development and use of classroom activities have been slower than hoped for, definite progress was made during the second year. (A discussion of this problem in greater detail is found in section VI. titled Infusion, pp. 64). The most significant
accomplishments in this area include:

(1) Washington History Unit. A career education unit for Washington History classes was developed during a summer workshop. Approximately four hundred of the ninth grade students who attended the lab were involved in this unit either while attending the lab or at some other time during the school year. In addition, several teachers in schools not served by the lab during the second year have also used the unit. Because a Washington History course is required for all ninth grade students and provides a logical format for studying local facets of the world of work, this unit would appear to be one that will continue to be used.

(2) English Units. Two English units, one related to use of the OVIS and the other to the Work Samples Lab, were developed in a summer workshop and used extensively at one junior high school. Approximately one hundred and fifty students were involved in each of these units.

(3) English Elective. "Careers," a tri-mester English elective for eighth and ninth grade students, was developed and introduced during the final tri-mester at Chinook Junior High School. Six sections of this class, which involved a variety of activities including making the Computerized Information System available to students for an entire week, were taught. Approximately two hundred students were involved. First impressions of the course have been favorable and include supportive comments from the school's principal as well as students and parents. In addition to offering the course again next year, the teacher has been contracted to prepare a detailed outline of the course content and activities during the coming summer. This material will then be promoted among other junior high English teachers throughout the district.

(4) Occupational Versatility Photography Unit. A unit was developed within the junior high occupational versatility which utilizes photography as a means for students to examine the working world. Initial field testing of the unit culminated in taking two groups of students on mini-field trips into industry where they had an opportunity to utilize the skills and concepts they had been acquiring.

(5) "Discovery." At one of the non-target junior high schools, a counselor-teacher utilized the Discovery exploration kit marketed by Scholastic. Reaction was favorable by staff as well as students and initial plans are underway to supplement the materials next year and with other activities (including the OVIS results) in the development of a six-week "careers" elective which would be offered at least four times during a year.
b. Library and Resource Center Materials

(1) Hoffman Filmstrip Series. Fifty-five additional Hoffman filmstrips and accompanying cassettes were purchased to supplement the twenty field tested in the library at Chinook Junior High during the first year. The total seventy-five were then organized into five portable kits which have been rotated among five junior high school libraries throughout the year. Each school was provided with promotional materials as well as its own Hitachi filmstrip projector. The total system permits each library to offer students a greater variety of titles to browse through than if they tried to develop their own collection.

The Hoffman series were selected originally because of their brevity. They are not intended as an in-depth source of career information, but rather a method of exposing students to the wide diversity of job opportunities which they should be aware of.

(2) Other Materials. A variety of other materials have been gathered by CAM and made available on a check-out basis to libraries and/or career resource centers. In addition, most junior high librarians have accumulated an assortment of career education materials over the years. Although these collections, and methods of accessing them, range from very poor to good, CAM has begun to attack the problem. (See the section titled Career Centers on pp. 58-59.)

c. Guidance Activities. As reported in section V. Guidance and Placement, pp. a very successful in-service guidance program was conducted for secondary counselors during the project's second year. It is anticipated that these efforts will begin to generate additional student activities on the part of counselors which will relate to the work samples lab.

At the junior high level, the most notable activity to date has been the administration of the Ohio Vocational Interest Survey to approximately fifteen hundred eighth graders. This instrument, with its interpretive emphasis on worker traits, including the data-people-things concept, ties in directly with the objectives of the work samples lab. The use of the OVIS has been financed and promoted by CAM's staff, but its administration and coordination at the building level has been handled by the counselors.

D: Conclusions and Recommendations

The impact created by the work samples exploration component on students is among the objectives addressed by the third-party evaluator and progress on this objective is included in the final section titled EVALUATION.
However, project staff have gathered a number of impressions and formulated several recommendations for the coming year.

1. Work Samples Lab

   a. Two-day format. The additional activities permitted by the two-day format seem to justify having students attend the lab for two days rather than one. This is particularly true with students who by their own admission have never given jobs and careers much thought. By the end of the second day many of them have become quite involved in the process of exploration. Furthermore, students are able to grasp a better understanding of the levels of complexity that can be found within the major categories of data, people, and things. Unless other considerations forced a return to a one-day format, the staff recommends continuation of a two-day lab experience.

   b. Ninth graders vs. eighth graders. Though ninth graders did seem to behave a little more maturely at the lab and become more involved than the eighth graders did during the first year, it is too early to determine whether this shift in the grade level of students served has a long range benefit. A primary consideration in this shift revolved around the logic of introducing students to the data-people-things terminology through the OVIS in the eighth grade and then following it up with the lab experience in the ninth. It would seem best to continue following this line of thinking until evaluation data proves otherwise, or administrative considerations suggest a need to change.

   c. Value of locally developed materials. Among the considerations which led staff to develop many of their own audio-visual materials for the work samples was the fact that the local labor market could be more adequately portrayed. There appears to be support for this consideration. On numerous occasions students have remarked that they had not been aware how many different types of jobs were performed by workers in the local labor force. Though it is difficult to match the professional quality of commercially prepared materials, the difference is probably more than offset by the "local color." Project staff would heartily recommend that others contemplating adopting the work samples concept keep this fact in mind.

   d. Teacher orientation to the lab. During the second year each teacher who had a class that would be attending the lab was brought to the lab for a brief orientation. Even a short visit seemed to make a difference in the teachers' perception of the program. In the future it is recommended that at least a half-day workshop be conducted for these teachers. Such a workshop might also increase the use of classroom related activities, (see p. 47).

   e. Mini work samples. Though the lab has zeroed in on the data-people-things concept, it is important to acquaint students with the whole

-46-
breath of the worker trait concept. Additional mini-samples offers a potential means for reaching this broader objective.

f. Negative student reaction. A number of students continue to make negative comments about the lab experience, including the all-encompassing "this is dumb!" Though many of these students are expressing genuine feelings, the staff is convinced that a certain amount of this "comes with the age." Interestingly, several students who had expressed such feelings were later inadvertently rescheduled for the lab and returned for the entire two days rather than bring this fact to the attention of their teacher or principal. In each case the student not only participated in a positive manner on the second visit, but also expressed the belief they had learned something additional on the second visit.

g. Supplementary materials. The additional supplementary materials which were provided for student browsing in the lab seem to foster additional inquiry and exploration. Though teaching students a conceptual framework for viewing the world of work is the lab's primary objective, apparently many students at this age either need or want data about a specific job before they can or will become involved in thinking about jobs. It is recommended that additional materials be collected for use in the lab. The development of career resource centers in the individual schools would also help in this respect.

h. Lab staffing. Expansion of the lab to include nine separate work samples, including the three people samples which utilize closed-circuit video-taping, was accomplished by adding a lab assistant through C.E.T.A. funding. Since this funding source cannot be viewed as permanent, and considering the fact that the lab's operation beyond CAM's funding period will have to come from local funds, it is imperative that a format be developed which can be run by a single lab supervisor. This will undoubtedly require some compromises and trade-offs, but project staff should set this as their primary objective, beyond the daily operation of the lab, for the coming year.

2. Related Activities

a. Classroom activities

(1) Classroom activity increases lab involvement. Without a doubt, students attending the lab who had been involved in related classroom activities prior to their visit definitely became more involved in the activities. Consequently, more emphasis should be placed on getting teachers to carry out related activities in conjunction with their students' visit to the lab.
Too much drill. Comments from students who had been involved in classroom related activities suggest that teachers tend to rely too much on "drill-type" activities (e.g., worksheets of job titles to be looked up in the Occupational Outlook Handbook). Teachers need to be encouraged to utilize more challenging techniques.

Relationship to the infusion issue. The development and use of classroom related activities is related to the whole issue of infusion which is covered in section VI., pp. 64-71.

b. Library and Career Resource Centers

A quick review of the career education resource materials available in each of the junior high school libraries revealed, with the exception of one school, that much improvement is needed if the libraries (or career centers) are to be effective delivery systems for career education information.

The Hoffman filmstrips were initiated to encourage this sort of development, but by no means constitute a total system.

CAM (or other district personnel) need to develop and implement ways of assisting librarians/counselors to provide organized career material. In particular, these people need help with (1) organizing efficient ways of ordering, receiving and filing such information; and (2) developing workable student access systems to the materials.

c. Guidance Materials and Activities

(1) Ohio Vocational Interest Survey. To date, implementation of the Ohio Vocational Interest Survey has been accomplished through a deliberate management strategy based on (1) providing materials to the schools and coordinating administration dates, but (2) leaving each school on its own in terms of administration and interpretation procedures. Obviously such a strategy has its pluses and minuses. The most notable weakness is the fact that some school guidance staff have not given the OVIS a high priority. During the coming year project staff should be prepared to offer greater assistance as a means of promoting better utilization of the OVIS.

(2) The broad spectrum. The utilization of guidance materials and activities in relationship to the work samples lab is part of the total guidance spectrum. For additional comments see section V., Guidance and Placement, pp. 55-63.
III. Career Value Renewal Task Force

A. Project Goal

The Career Value Renewal Task Force was designed to make a major thrust toward the district goal of:

Providing each student opportunities to consider career alternatives by developing in him an understanding of the value and dignity of each person's work in creating a productive society.

B. Summary of First Year's Activity

The Career Value Renewal Task Force, comprised of thirteen lay and district staff members, was created and charged with the responsibility of (1) conducting a study of the district's goal statement dealing with value and dignity, and (2) making recommendations for implementation of their findings.

After a series of meetings spanning the entire school year, the task force submitted their report including the following recommendations:

1. Adopt a new goal statement on Career Value Awareness.
2. Take attitudinal surveys to measure CAM project effectiveness.
3. Revise the district grading system and give more emphasis to self-growth and social mobility.
4. Include in our curriculum materials which enhance a strong set of personal values.
5. Form a permanent advisory board to help keep CAM informed and updated.
6. Hold periodic workshops to keep Career Value Awareness programs continuous.
7. Encourage students to reexamine their ingrained values regarding work in light of the fact that we live in a world where change is the rule rather than the exception.
8. Establish an internship program permitting and encouraging teachers to gain experience in jobs outside the educational establishment.

C. Second Year Activities and Accomplishments

1. Board Presentation

Due to the broad nature of most of the Task Force's recommendations, CAM's
staff felt no direct action should be taken (except in those areas pertaining
directly to CAM's program) without board approval. However, the
board's busy schedule did not permit CAM to make its annual presentation
to the board, including the Task Force recommendations, until March,
1975.

Though board members reacted favorably to the entire presentation and
accepted the recommendations for further study and action, subsequent
events related to the double levy failure and the financial crisis in school
funding throughout the state, have precluded their giving them further attention.
Nor, under the circumstances, has the project director felt it
appropriate to press the matter.

2. Other Activities

Because the major goals established by the district included a specific
statement related to "human needs" CAM has not given self-awareness the
in-depth treatment that many career educators and materials are advocating.
This is a recognition that career education has neither a monopoly on
insight in this area, nor a mandate to be responsible for the school
effort in this area. But the slow pace of action described above should not be
taken to imply that project staff have not shown an interest in the
goal relating to the "value and dignity of work."

A concern for the role work plays in providing people a variety of satisfac-
tions and meeting diverse needs is incorporated, at one point or another,
in most of the activities. Furthermore, eighteen specific "curricular com-
ponents" have been identified within the loosely organized scope and
sequence presented on the Infusion Chart (see p. 64). Regardless of board
action taken on the recommendations made by the Career Value Renewal
Task Force, "the value and dignity of work" in the district's total
career education effort remains an active concern of the project's staff.

C. Conclusions and Recommendations

As suggested above, many career educators seem to believe that they have
brought a concern for values into the educational process that was sorely missing,
that they were in effect filling a vacuum with their emphasis on self-awareness.
This simply is not the case. The valuing process pertains to the objectives of
career education, but it also pertains to many other educational objectives as
well.

1. Recommendations

a. Value Renewal Task Force. As deemed appropriate, the project director
should pursue the matter of board action regarding the recommendations
submitted to them last spring.
b. Continued emphasis. CAM should continue to emphasize, within the framework of the district's adopted goal statements, the role of values in the individual's work life.

IV. Skills Training Clusters

A. District Goal

The Skills Training Cluster component of CAM is aimed at the following district goal:

Providing each student opportunities to consider career alternatives by developing his employment skills and competence to enter the job market.

B. Relationship to Vocational Education Program

Basically CAM's Employment Skills Cluster and the district's established secondary vocational education program are one and the same. As the Director of Vocational Education submits a detailed report to the appropriate state agency, as required by federal law, this report shall merely summarize the major activity and accomplishments that have occurred within the district's vocational education program.

C. Summary of First Year Activities

During the project's first year the following activities were accomplished.

1. Program Improvement

   a. Home and Family Life. Initial steps were taken to qualify the district's home and family life program for vocational funding.

   b. Auto and Service Station Program. Both the Auto Mechanics program at Glacier High School and the Service Station Program at Evergreen High School were expanded. These programs, as the programs at the Occupational Skills Center, are open to students from all five of the district's high schools.

2. New Programs

Three programs were introduced at mid semester. One at the Occupational Skills Center and two at Glacier High School. Those at Glacier are available to students in the district's other four high schools as are all offerings at O.S.C. Programs included:

   a. Real Estate. This one hour program at Glacier High School introduces students to the basic knowledge and skills required for many jobs in
the field of real estate.

b. Health Career Exploration. This two hour program at Glacier High School introduces students to a basic cluster of skills and knowledge common to many health occupations and explores the opportunities, additional requirements etc. related to specific health occupations.

c. Hydraulics. This three hour program at the Occupational Skills Center offers students initial training in the knowledge of hydraulic systems and the skills required for repairing and maintaining them.

D. Second Year Activities and Accomplishments

1. Program Improvement

a. Total Program Enrollment. Total district enrollment in all vocational programs was approximately 4,500 students. This compares with an approximate total of 2,522 students during the previous school year. After subtracting 1,522 in the home and family life program, who were not counted as vocational last year, the net gain is in excess of 400 students.

b. Home and Family Life. With the exception of the seventh and eighth grade program, all secondary home and family life programs were brought under vocational education funding. This, of course, necessitated meeting specific standards which reflect a definite improvement in the programs themselves.

c. Early Childhood Education. The success of the early childhood program at Mt. Rainier High School led to implementation of a similar program at Evergreen High School.

d. Occupational Skills Center. A review of the Occupational Skills Center was conducted. It was determined that some rigidity in philosophy and some barriers to open enrollment had developed over the years. A concerted effort was launched by the OSC staff to develop open communication with the nine high schools being served, and particularly with the counseling and teaching staff members of these schools. Preliminary enrollment figures for the 1975-76 school year indicate that these increased efforts at articulation have paid off.

e. Advisory Councils. Six new advisory councils were formed, including representatives from employer and employee groups and labor. This brings the number of active vocational advisory councils to over thirty.
f. **In-service.** A concerted effort was launched to encourage staff members to attend conferences, seminars, and participate in in-service training. As a result, staff participation in such activities has tripled and nearly twenty in-service offerings were made available in the area of career and vocational education.

g. **Vocational Information Specialist.** A new staff position, Career Information Specialist, to be implemented through vocational education funds, was proposed to senior high principals and favorably received. These new positions will be filled by the beginning of the next school year. See the section titled Vocational Information Specialist, p. 60 for a job description of this position.

2. **New Programs**

New programs initiated during the year included:

a. **A new horticulture program, complete with greenhouse, was initiated in the special education program at Woodside School.** Thirty students were involved this first year and plans call for serving upwards to sixty students per year as the program progresses.

b. **Electronics.** A new program in electronics was introduced at Highline High School. This program, like other vocational programs offered at only one high school, is open to students from the other four district high schools.

3. **Exploration of New Program Areas**

Preliminary exploration of new program areas have included the following efforts:

a. **Occupational Versatility.** Preliminary work was done in the area of adapting the Occupational Versatility program, which has been very successful at the junior high level, to the senior high program and bringing it up to standards that would qualify it for vocational education funding. This effort was dropped, however, after the levy failures as initial cost studies indicated it could not be done at this time.

b. **Nurses Aide.** Mt. Rainier High School is interested in offering a program in nurses aide training and preliminary work was done on program design, etc. A final decision on this program has not yet been reached.

c. **Small engine repair.** Mt. Rainier has also shown an interest in offering a small engine repair program. However, it is doubtful that such a program could be offered in the 1975-76 school year.
4. Follow-up Study

The annual follow-up study of vocational education graduates was completed as required by federal law. An analysis of these figures continues to show the same ratio of placement as found in previous years. This is summarized below:

33% Employed in a job related to their training or pursuing related training

33% Employed in a job unrelated to their training or pursuing additional unrelated training

33% Unemployed, full-time homemakers, military service and unaccounted for.

The placement record of individual programs varies considerably and may be studied further in Appendix G.

E. Conclusions and Recommendations

A review of follow-ups and student requests for programs seem to suggest basically that there is not as much need for diversity in vocational education programs at this time as there is for increased enrollment in existing programs. Although program development should be an ongoing effort, for the next few years emphasis should probably be upon improving the vocational guidance provided to students with particular emphasis on acquainting them with existing programs. It should be noted that the job description for the new positions of Vocational Information Specialist, (p. 60) include this sort of emphasis.
V. Guidance and Placement

A. Relationship of Guidance and Placement at the Secondary Level

The original proposal for this project called for both (1) a "placement systems" component at the senior high level, and (2) an emphasis on the "guidance role" in career education. As the project has progressed these two thrusts have, in all practical terms, become one. Several reasons account for this.

1. The Broad Context of Placement

Although the term "placement" has traditionally been associated with the process of actually bringing students and jobs together, this step is often the last and culminating one in a total process that has been going on for some time, including: (1) making students aware of their own interests, abilities, etc.; (2) acquainting students with requirements, working conditions and related aspects of different jobs; (3) orienting students of both short-term and long-range labor market opportunities; and (4) informing students of the educational and training programs available and assisting them to become enrolled.

2. The Role of the Guidance Staff

Though the aspects of placeinent outlined above are not the sole province of any given department and can be included and stressed throughout the curriculum, the guidance staff has traditionally been associated with these activities (if not always ardent in their promotion and implementation.) Certainly these are the kinds of activities which CAM would like to stimulate among the guidance staff of the district's secondary schools.

B. Counselors In-Service Program

Early in this project it became apparent that many secondary counselors did not have a good grasp of the world of work. Asking them to become enthused about career education was somewhat akin to the proverbial problem of putting the cart before the horse. With this in mind efforts were directed toward getting counselors involved. Project staff knew it was important that the direction taken must come from the counselors themselves. Though CAM could provide financial and staff assistance, the momentum had to originate with the guidance staff. Unfortunately, very little happened the first year, but in year two the counselors began to move.

1. Employment Security Internship

During the past summer three high school counselors were placed in an internship at the Seattle office of Washington State Employment through a research grant received from the Washington State Coordinating Council for Occupational Education. In fulfilling the conditions of the grant, the three
counselors planned and presented a program to nearly forty counselors in the district and presented written guidelines and recommendations to the secondary counselors' Steering Committee.

It was the enthusiasm of these three counselors, more than any other factor, which stimulated the counselors to move toward developing a guidance program in career education.

2. In-service Committee

As an initial move, the Steering Committee appointed an In-service Committee including two junior high and two senior high counselors. This group, with staff assistance from CAM, developed guidelines for an ongoing in-service program to acquaint secondary counselors with the world of work and career education concepts.

3. In-Service Program

The in-service program conducted along the guidelines developed by the In-service Committee included three basic elements.

a. Evening workshops. A series of four evening workshops were held between December and May, with programs presented by staff members of Employment Security and Green River Community College. The final meeting was devoted to reviewing the year's progress and discussing directions for the coming year.

b. Field trips. A series of mini field trips were organized and scheduled during working hours. These groups, which included teacher/administrator guests, averaged about ten in size, an arrangement which seemed to promote greater impact on the counselors. A total of thirteen trips visited nine different locations including:

- Boeing Plant II
- Boeing Auburn Plant
- Employment Security
- Green River Community College
- North Seattle Community College
- Clover-Park Voc-Tech School
- Renton Voc-Tech School
- Bon Marche Distribution Center
- Sears Roebuck Distribution Center
- Associated Grocers Distribution Center
Committees. Four committees were established to discuss, review, and make plans as deemed appropriate. Committees included:

- Ohio Vocational Interest Survey
- Career Information System
- Career Classes
- Career Day(s)

Each committee met once during school hours for an initial meeting at which time recommendations were outlined.

Activities designed to take action on these recommendations will be among the first order of business during the 1975-76 school year.

C. Guidance Delivery Programs

In addition to personal counseling, guidance staff were either responsible, or influential, in the following delivery programs.

1. Ohio Vocational Interest Survey

   a. Students served. Originally second year plans called for extending administration of the OVIS to three high schools and five junior high schools, including a total of approximately 1,800 students. These plans were greatly exceeded, and the OVIS was made available to all five high schools and nine junior high schools as well as the special education school. As a result, the OVIS was administered to 1,800 senior high school students (primarily juniors) and 1,900 junior high students (1,300 eighth graders and 650 ninth graders).

   b. Administration and interpretation. As mentioned previously in reference to the work samples exploration component, project staff adopted a strategy of (1) providing materials and coordination for both the administration and interpretation of the OVIS, but (2) left each building staff to determine how the instrument could best be used. Consequently, a variety of methods were tried. Hopefully the project staff will be able to meet with counselors early in the next school year to iron out the difficulties experienced, and share some of the more successful techniques that were used during the past year.

2. Computerized Career Information System

   a. Developmental work. Beginning in early fall, project staff began meeting with Dr. Jim Marble, of Clark College, who had been working on a computerized career information system under a Part C grant from the Washington State Coordinating Council for Occupational
Education. In consultation with project staff, Dr. Marble made revisions in the program, which is centered around the Worker Trait Groups as defined in Volume II of The Dictionary of Occupational Titles.

b. Field testing. Field testing of the system began on January 6 in the Career Center at Evergreen High School. A single terminal was rotated among the five senior high schools and by the end of the school year approximately 1,000 senior high students had been served plus several hundred junior high students. Throughout this time revisions have been made in the basic program, including both the information content and the student access system.

c. Initial reaction. To date reaction from administrators, staff, students, and parents has been all positive. In many cases students arrived before school and remained after closing in order to get a chance on the computer. Unsolicited parental support for the program was particularly rewarding and the comments made suggested that on many occasions the student’s “printout” was a topic of family conversation.

d. Future use. A consortium of Washington State agencies, including the Superintendent of Public Instruction, have been recently awarded a Department of Labor grant to develop an occupational information system complete with computerized delivery format. At this point no final decision has been made regarding the computer system to be used, but the model field tested by CAM is a definite contender and appears to have significant advantages over several others currently in operation throughout the nation.

3. Job Placement Program

During the latter half of the year the district secured two persons funded through C.E.T.A. to promote the Job Line Program developed locally by the King County Bureau of Youth Affairs. This program, aimed primarily at senior high age students, is designed to acquaint students with job search and job-securing skills. Basically the district effort was aimed at demonstrating the program to teachers with the objective of having them pick it up on their own in the future. In most of the schools the counseling staff played an essential part in securing classroom teachers who were willing to participate. (See Appendix H.)

4. Career Centers

The career center concept has become a key part of CAM’s guidance and placement effort at the senior high level, and to a lesser degree at the junior high level.

a. Senior high level. To date three high schools have developed career
centers. In two of these schools the centers are maintained by full-time staff with either counseling/vocational education background. In the other school the center is a part of the library. Discussions with the administrative and guidance staff of the other two schools have proceeded, and at this time it appears that both schools will initiate some kind of center next year. (See Vocational Information Specialist, p. 60.)

In addition to a variety of career information sources, including audio visual materials, the computer terminal described above was also located in the career centers during its rotational schedule.

b. Junior high level. It appears that career centers, as they begin to develop at the junior high level, will most likely be a part of the library with counselors referring students to the center, or classroom teachers utilizing it as a resource center for career education activities. To date only one school has a well developed center with several others getting off to a good start. The development of strong centers at this level will no doubt depend a great deal on the services which can be provided by a centralized system described below.

c. Centralized information system.

(1) The need. Even though CAM has committed itself to the development of career centers, providing good career information to secondary students is a task that still faces several major problems. Left on its own to preview, select and purchase materials, the library/counseling staff in each school has not been able to do the job. Too often they have had to settle for the materials which are easily available, or most often requested by students when they should be exposing students to the full spectrum of career information. Furthermore, when they do get good materials they rarely have the time or expertise to classify and file the material into a student access system which will assure its usefulness.

(2) The solution. In order to overcome these obstacles, CAM is studying the feasibility of developing and initiating a centralized system for securing, classifying, and distributing materials to each school where it can then be filed into a uniform student access system. Such a total system would provide the necessary support to keep career information materials current and up to date.

(3) Efforts to date. To date CAM has developed a comprehensive plan and submitted it to the U.S.O.E. for career education funding. Though the grant was not awarded, the plan will serve as a guideline for implementation as funds are made available. In the meantime, a small grant of two thousand dollars from the Superintendent of
Public Instruction has made it possible to take initial steps toward the establishment of such a system.

D. New Directions

During the latter part of the past year, several new directions have been pursued by either CAM, or other district staff, which are expected to have a future impact on the guidance and placement component.

1. Vocational Information Specialist. As described in the section titled Career Centers, above, two high schools currently have full-time staff assigned to operate the career centers. Naturally these people have tended to provide a broader leadership within their respective buildings than merely maintaining the career centers. The district's Director of Vocational Education proposed to senior high principals the reallocation of Part D monies in order to expand the role assigned to these staff members, and to assure that each of the five high schools has one. Principal's reaction to this proposal was favorable and steps will be taken to implement it by the beginning of next year.

Carrying the title of "Vocational Information Specialist," staff filling these jobs will be vocationally certifiable (preferably with guidance background) and will be coordinated by the Director of Vocational Education, though directly responsible to their building principals. Their job description covers five areas: (1) Operating and maintaining career information centers; (2) Assisting staff to plan and develop student learning experiences in career development; (3) Assisting junior high and elementary schools in the service area to articulate a career development program; (4) Identifying and coordinating the use of school and community resources to facilitate career guidance and placement; and, (5) Assisting in the development of vocational education programs.

2. Community Resources

Many career education leaders are advocating both (1) an increase in the use of community resources as a means of expanding the classroom, and (2) a much more organized and sophisticated use of these resources than educators have typically practiced. Along these lines, the project's staff has begun to explore potential methods for developing an organized framework in which community resources may be tapped and effectively made use of. Initial steps taken include:

a. Submission of letter of intent. The Washington State Coordinating Council for Occupational Education recently requested "letters of intent" regarding proposals that might be submitted for research funds under Part C and Part D during the 1975-76 school year. In response to this request, project staff submitted the outline of a proposal which would have provided for initiating phase one of a total community
PAGES 65 OF THIS DOCUMENT WERE MISSING PRIOR TO ITS BEING SUBMITTED TO THE ERIC DOCUMENT REPRODUCTION SERVICE BECAUSE THEY WERE UNOBTAINABLE FROM THE SOURCE.
information specialist is discussed first in this section because of the key role it is likely to play in the future. Since the Career Information Specialist will become a permanent part of the district's secondary staffing pattern, and thus outlive CAM, during the third year these people should be used by CAM to promote and coordinate the guidance and placement activities already under way, including the counselor's ins-service program. This should be accomplished without too much difficulty as the director of CAM will be assuming the duties of the Director of Vocational Education during the project's third year.

2. Deliver Programs

a. Ohio Vocational Interest Survey. CAM should continue to support the use of the OVIS during the project's third year and work toward assuring its incorporation into the district's permanent testing program. Support should include both (1) assistance to counselors in choosing and developing the most advantageous methods for administering the test and interpreting its results, and (2) encouragement to experiment with new and different techniques for utilizing the instrument as a teaching device.

b. Computerized Career Information System. This system has been one of the most exciting and promising methods tried by CAM to date. The close working relationship that project staff were able to develop with Jim Marble, who developed the basic program, has enabled them to have important input into the system. The response from students has been very encouraging, and the computer no doubt acts as a stimulus to further inquiry into careers on the part of the student. CAM should continue to support use of the computer system as well as keep in close contact with the Washington State consortium that will be developing a state-wide system under a Department of Labor grant.

c. Job line. The C.E.T.A. funding which supported this program has expired, and it will not be continued. However, the program was intended to stimulate teachers and other staff to incorporate and use the program on their own. This would seem a logical program to be encouraged by the Career Information Specialist.

d. Career centers. Where building principals and their staff have made a commitment to establish a career center and followed through, the payoff has been quite rewarding. With the establishment of Career Information Specialists in each high school, CAM should provide whatever financial support and staff assistance it can to these centers, especially the two new ones to be developed.

At the junior high level the problem of establishing effective career centers will be more difficult as the staffing commitment has not been made. However, with the direct support of the Career Information
Specialists, whose job description includes a service area responsibility, counselors/librarian should be able to make progress. CAM should lend whatever support possible at this level too.

CAM's greatest contribution to the career center concept will probably be the efforts it can muster to develop and implement a district-wide centralized system to gather career information materials. This should remain a high priority though additional funding would be required to fully implement such a plan within the next year.

e. Community Resources. Although much of the national leadership promoting the use of community resources has never grappled with the complicated mechanics and massive logistics required to make a system work, the concept has merit, and CAM should continue to investigate means and methods for developing and implementing such a program. The eventual success of such a program would no doubt rest a great deal upon the laying of a sound foundation of initial planning. This is probably the best CAM can hope to accomplish in the final year of the project.

3. Student Follow-up

The district's move toward developing and implementing an improved follow-up system is encouraging. The Project Director, as a member of the committee established to develop and initiate the new follow-up, was in a good position to reflect the feedback needs of career education staff for sound planning. CAM should both (1) study the results of this first year with an eye to making improvements in the career education program, and (2) take an active part in promoting the improvement and maintenance of the new follow-up procedures.
VI. Infusion.

A. Preview of First Year Activity

1. Major Thrust Strategy and Infusion

Although each of the five goals defined under the district's commitment to career alternatives is based on the continuous development of the student from K through grade 12, there are points at which a major thrust will bring the greatest results in terms of reaching the objectives of career education. Taking this line of thinking into account, CAM was originally designed with five major thrust components, each aimed at one of the district's five major goals related to career alternatives. This design did not provide for a sustained effort at infusing career education into the ongoing curriculum.

However, during the early months of the project, staff became aware of the emphasis being placed on the strategy of infusion by career education leaders throughout the nation. This emphasis stressed that infusion appeared to be the best way, if not the only way, for career education to find a solid and effective place in the instructional program. Consequently, project staff began to exert efforts toward making infusion an integral part of CAM.

2. First Year Activities

Once committed toward infusion, project staff directed their effort in several directions.

a. Collection and review of materials. A definite campaign was mounted to gather career materials designed for inclusion in the ongoing curriculum, including both materials developed by projects throughout the nation as well as those being promoted by commercial publishers. The net results of these efforts amounted to a large accumulation of either free or inexpensive sample materials. Some of these were reviewed by the staff, others circulated among teachers in an effort to appraise their potential. Unfortunately, most of the materials were not very promising.

b. Development of an "Infusion Chart." It became apparent to staff that discussing infusion with teachers was difficult without a point of reference. Exactly what did career educators want the classroom teacher to infuse, and at what juncture in the educational process? Beginning with the five district goals relating to careers, project staff developed nineteen objectives followed by nearly one-hundred "curricular components" which were plotted along a K through 12 continuum. The net result was an attractive chart which provided a loosely arranged
scope and sequence as a starting point for discussion and the development of specific career activities which teachers could infuse into their classroom programs.

c. Summer workshop. Finally, approximately twenty elementary and secondary teachers, counselors and librarians were recruited for a summer workshop to begin preparing infusion activities. The intent was to then circulate and promote these materials among the total district's staff. Although CAM's staff never expected one hundred percent success, the actual results were disappointing. Many of the teachers did come up with useful materials, but others seemed to flounder and never did produce materials that could be promoted with any hope of their adoption by other classroom teachers.

B. Second Year Activities and Accomplishments

During the second year a definite plan of action was planned and attempted in an effort to make the infusion process an integral part of the district's career education effort.

1. Infusion Notebooks

   a. Initial development. An "Infusion Notebook" was developed as the primary means for distributing infusion materials to the classroom teacher. Separate books were developed for each of the major levels—primary, intermediate, junior high and senior high. Each notebook contained appropriate ideas and/or materials for classroom use which had either been developed in the summer workshop described above or selected and edited from the materials gathered from other projects.

   Through the CAM Representatives, each building was provided with at least one notebook. Buildings requesting additional copies were provided them.

   b. Further development. Projected plans called for developing new materials which would then be forwarded to the CAM Reps who would file them in the Infusion Notebooks. These additional materials would include both newly developed materials and edited materials gathered from other sources. Unfortunately, other demands on staff time which had not been anticipated, namely the stepped up activities within the Guidance and Placement Component, precluded more than a feeble attempt to follow through with the further development of the Notebooks.

2. In-service Efforts

Recognizing that infusion would require support at all levels, project staff made an effort to acquaint various groups and seek their support. Major
efforts included the following:

a. CAM representatives workshop. A one-day workshop was held for all CAM representatives on August 28, with the main emphasis on explaining the infusion process and exhibiting a variety of infusion materials that had been developed during the summer workshop.

b. Principals' groups. Staff members met with the principals in elementary, junior high and senior high sessions to explain the infusion effort being mounted. This group was considered a key element in the success or failure of the infusion concept. They were receptive, as a group, however, past experience suggested that their individual support would vary considerably from building to building.

c. Building staff. The responsibility for acquainting building staff fell primarily on the CAM representatives. In most cases these people made a definite effort to present the concept and demonstrate the notebooks at a formal faculty meeting. The more aggressive, of course, followed through with individual teachers whom they knew might be interested and make an effort to use the materials.

3. Other Classroom Activities

It has been impossible to ascertain the impact of the Infusion Notebooks on classroom activity. The project staff suspects it has been minimal for reasons discussed below. On the other hand, a great number of career education activities have taken place in the classroom, but whether or not they can properly be called "infusion" is a debatable question.

Many of these classroom activities are related directly, or indirectly to other components and are described in greater detail elsewhere in this report. They are mentioned again here because (1) they are either truly infusion activities, or would be considered so by many career educators, and (2) a brief listing of them will help clarify some of the issues discussed in the following section dealing with conclusions and recommendations.

a. Elementary Level.

(1) Early Vocational Awareness Kits. Some of these kits were designed to tie directly to particular grade level objectives within the total curriculum. Others can be used quite arbitrarily by teachers and often are. (See pp. 20-22.)

(2) Community Resource Specialist. The field trips, speakers etc. arranged by the CRS are often a direct result of an ongoing curricular activities. Other times they are part of a "careers unit"
or special project which has been introduced without any particular curricular tie in. (See pp. 26.)

(3) Building or Class Projects. Again, these projects may be directly related to established curriculum and objectives, or they may be independent and arbitrarily introduced. (See pp. 34.)

(4) Bread and Butterflies. This nationally produced program has been very well received and implemented by the district's intermediate teachers. Some aspects can be, and are in some cases, directly related to curricular objectives. But the total series of programs are quite complete in themselves, and it would be more accurate to describe them as an "addition" to the curriculum rather than an infusion. (See pp. 23.)

b. Junior High Level. A number of classroom related activities have been developed in relationship to the work samples exploration unit. These include the following.

(1) Washington State History Unit. This is definitely an attempt to relate career education to a specific course. (See pp. 44.)

(2) English Units. These, like the Washington History unit, are a definite attempt to infuse career education. (See pp. 44.)

(3) English Elective. English skills are still a major concern, of this tri-semester class, but the length of the course seems to stretch beyond the concept of infusion. (See pp. 44.)

(4) Occupational Versatility Photography Unit. This unit definitely uses career education concepts as an organizational framework for a self-teaching photography unit in the industrial arts program (p. 44).

(5) "Discovery." This commercial material was in several settings, including an English class and a health class. It need not tie in directly with the on-going curriculum in either course to be valuable. (See pp. 44.)

c. Senior High Level. Though not as clearly defined or as easily identified as at the junior high level, career education activities do occur in classrooms at the senior high level. These include the following types.

(1) Career Education Units. A number of teachers report using career education units in their classroom. In some cases the counseling staff, or career center supervisor, are brought into the classroom in conjunction with these units, and in one school the counseling staff takes over the eleventh grade health classes for a two-weeks
C. Conclusions and Recommendations

1. Conclusion

Probably no efforts which CAM's staff have tried to carry out have proven so frustrating as those aimed at making infusion a workable career education strategy. Some of the problems encountered result from an opportunistic shift of staff priorities during the past year. For instance, in planning the strategy revolving around the Infusion Notebooks, the project staff recognized such an effort, to be successful, would require spending considerable staff time and a tentative commitment was made to do so. Later a chance to become involved in field testing the Computerized Career Information System arose. At about the same time the district's guidance staff began to move toward their in-service program. Both of these developments required additional staff time and the decision to pursue and support them became a de facto decision to slight the Infusion Notebook.

However, even if ample staff time had been made available, a number of perplexing questions and issues would still have plagued the effort. These are discussed below.

a. What is infusion? The term infusion has been used by both career education leaders and practitioners need to define it. However, a central concept comes through. Basically, infusion aims toward the development and incorporation of career education concepts and activities into the established subject area curriculums as currently being taught in classrooms at all levels. Furthermore, it is implied by the term itself that this will be accomplished by the spirit of the effort as much as the action. For instance, the term integration, which has been with education for quite some time now, refers to bringing together "separate parts and making one of them." On the other hand, infusion refers to the process of "filling or imbuing, as with a spirit." Perhaps such semantical differences are not important (but
if not, why isn't the term integration used?). On the other hand, such subtle shades in meaning may account for some of the confusion surrounding infusion.

In addition to providing a rather murky definition of infusion, its proponents have also implied that it is (1) either the best, if not (2) the only way that career education can successfully establish itself in the school curriculum. Furthermore, these advocates usually claim that infusion of career education will somehow make the student more interested in classroom activities because he/she will now see their relevance to personal needs. But the needs referred to are often far in the future, a fact which seems to contradict the claim of relevance. Such assertions are offered without much supporting evidence, much like other assumptions which educators tend to latch on to and refuse to give up in spite of the fact that their validity is rarely proven (and sometimes disproven).

In any event, the question still remains, when is career education infused into the on-going curriculum rather than becoming a separate subject or process to be taught or integrated into the curricular program? For instance:

- Is a quarter or tri-semester English elective developed around careers infusion, integration, or simply the most logical place in the departmental organization of secondary schools for career education to get a footing?
- Is a program such as Bread and Butterflies, which includes fifteen separate films and related activities, infusion into the on-going social studies curriculum, or is it in fact an addition to the social studies curriculum?
- Is a four week unit on occupations in a Washington History class infusion of career education, or simply a broadening and extension of the class?

b. Some tentative answers. Such questions certainly point to a number of potential answers that deserve consideration.

(1) Classroom activities are not necessarily infusion. The fact that a career education activity takes place in the classroom does not make it infusion.

(2) Infusion is not the only legitimate approach. Career education activities can be integrated, squeezed into, or just plain added to the curriculum and be as successful, if not more so, than infused activities often are.

(3) Class curriculum and educational objectives are not one and the same. Educational objectives are established in terms of what we want students to know or be able to do. Classroom curriculum is the structural organization we give to the knowledge and skills we think students need in order to reach the education objectives we have established.
(4) Infusion may be an undue recognition of the status quo. Infusion may be a way to avoid the fact that revisions in the total curriculum need to be made. Must students always be taught within the curricular framework we currently have?

(5) The current curriculum cannot accommodate career education through the process of infusion. First of all, much of the curriculum is included in the educational process for reasons beyond the fact that people will spend much of their life working. Attempts to relate career education to many of these other objectives such as citizenship, appreciation of the arts and an understanding of human nature often ends up distorting these objectives as well as missing the boat as far as career education is concerned. Secondly, career education offers a complex set of concepts and skills of its own, and the current curriculum does not offer appropriate touch points for including all of them via the infusion route. This is a point which many advocates of career education, who themselves appear to have a very shallow understanding of the world of work and its complexities, seem to overlook. Finally, to depend upon infusion as the primary delivery system for career education tends to present those concepts and skills which can be infused in a piecemeal method, often destroying a continuity which students need to grasp.

2. Recommendations

After reflecting on the past year's experience and working our way through the points raised above, CAM's staff has made the following recommendations relating to the strategy of infusion.

a. Less reliance on infusion. Infusion should neither be viewed as the best or only way to establish career education in the curriculum. Infusion should not be abandoned as a technique where deemed appropriate, but we doubt that career education is likely to fail even if infusion as a major strategy does.

b. In-service. It would appear that infusion has failed partly because classroom teachers have been asked to relate something to their subject area which they do not understand. As pointed out above, career education is a complex body of knowledge and skills. Only when they have a solid grasp of this complexity will teachers be able to do a good job of infusing it into their curriculum. Even this understanding may not assure that they will do so, but it does appear to be required before infusion can occur. CAM should promote additional in-service programs with as much emphasis on "what career education is" as the "how-to-do" approach.
c. Longer units. Teachers seem more inclined to use materials of a longer length rather than those which require only a short time. For instance, the units in English and the social studies as well as mini-courses have been easier to promote than the sort of materials included in the Infusion Notebook. Consequently, more emphasis should be placed on this type of activity.

d. Audio visual and other commercial materials. In several cases providing attractive audio visual materials or kits, such as the "Discovery" materials developed by Scholastic, have prompted teachers to develop additional material and activities to go with them. With this in mind, additional materials should be sought out and purchased.

VII. Exportation

A. Goal

Many exemplary projects fail to have an impact beyond the target group because little or no attention is devoted to exporting news and information about the project's activities and accomplishments. To make sure this oversight did not occur, a definite commitment to exportation was written into the project's original proposal.

B. Summary of First Year Activities

Although CAM was busy during the first year getting off the ground, a definite exportation effort was made.

1. Publications

A newsletter format was developed, titled the REPORT, and two issues printed and distributed, including rounds one and two of a delphi survey pertaining to basic questions related to the problems of making career education work. These issues of the REPORT also carried an offer to share CAM developed materials. As a result, numerous requests were received and filled.

2. Presentations and Displays

Project staff made or prepared six presentations and displays during the year. These were made before such diverse groups as college workshops, state-sponsored in-service workshops, and the annual conventions of state professional groups.

3. Visits

Nearly a dozen individuals or groups visited all or part of the project and discussed career education with the staff. These groups included classroom teachers, guidance staff and school administrators, as well as state and federal officials.
C. Second Year Activities and Accomplishments

As an established project CAM devoted even greater energy to its exportation efforts during the project's second year. These are described below.

1. Dissemination of Publications

   a. The REPORT. A periodic newsletter, the REPORT, has been used as a primary means of informing other career educators throughout the state of Washington, and in some cases throughout the nation, about CAM's progress. During the past year three issues were printed and approximately 500 copies of each distributed. Each issue has featured a major activity as follows:

      (1) Early Vocational Awareness. The July issue featured the Early Vocational Awareness component of CAM.

      (2) The Delphi. The February issue completed the fourth and final round of the delphi process conducted by CAM and included a summary of the results.

      (3) Work Samples Lab. The May issue explained the development and operation of the Work Samples Lab.

   b. Other Publications. Other specific publications which have been prepared and circulated include the following:

      (1) Infusion Chart. In addition to its distribution within the district, numerous requests from outside the district have been filled. Also, the staff has displayed and distributed them at various state and national conferences.

      (2) Computer Packet. A packet describing the Computerized Career Information System field tested in the district has been provided to a variety of interested parties, particularly after demonstrating the operation of the system.

      (3) Foreign Language Packet. A curriculum packet on careers and foreign language was entered into the E.R.I.C. System. As a result, a letter commending the packet was received from an executive of the Modern Language Association of America.

      (4) Bread and Butterflies. A copy of all supplementary curriculum materials developed for the Bread and Butterflies program by CAM has been forwarded to the following: (1) Kent School District, (2) Bellevue School District, (3) South Kitsap School District, (4) Renton School District, (5) Seattle School District, (6) Channel 9 Television Station, and (7) the Agency for Instructional Television in Bloomington, Indiana. (See Appendix C.)
(5) EVA Music Kit. An Early Vocational Awareness Kit related to music was provided (excluding hardware) to the director of music in the Shoreline Public Schools.

(6) Miscellaneous materials. In addition to the preceding list of publications and materials, CAM has shared, both upon request and at various conventions, a variety of miscellaneous materials.

2. Activities

a. Professional visits and consultations. Throughout the course of the year CAM's staff has had an opportunity to host a number of visitors who are career education staff members of other districts and institutions. In several of these cases time permitted consulting with these visitors regarding their own projects and common problems. The following list, though perhaps not inclusive, illustrates the diversity of these groups.

Dick Lutz and Mark Johnson from the Office of Superintendent of Public Instruction, Gene Bigger of the Coordinating Council for Occupational Education and George Donovan, Highline Community College attended a demonstration of the computerized Career Information System followed by a discussion of its potential relationship to a state consortium applying for a Department of Labor grant.

Ted Werner, Career Education Specialist with the Kent School District, and Bill Cox, CAM's Assistant Director, have consulted on several occasions on problems related to elementary career education.

Carol Brown, counselor from Thomas Jefferson High School in the Federal Way District, visited with the Project Director to discuss guidance activities within CAM.

Rod Leland, counselor at Echo Glen, a state correctional school for young adolescents, visited the Work Samples Lab and conferred with staff regarding career education materials.

Rand Hooban, counselor at Wishkah Valley High School near Aberdeen, Washington, visited to gather information about CAM and career education materials.

Ken McDonald, Vocational Education Coordinator in the Shoreline School District, and an elementary level assistant, visited with CAM staff to review the project and share common concerns.

Dave Winefordner of the Appalachia Educational Laboratory in Charleston, West Virginia, and Lee Foust and Del Shirley of the Communications Media Occupations Cluster project at Corvallis,
Oregon, visited to discuss project efforts in developing a career information system. They were also very interested in sharing information about the computer program.

Ron K. Wilkerson, Assistant to the Superintendent of the Marion IED in Salem, Oregon, brought a group of thirty people for an all day tour of the Highline District. CAM staff explained the project to this group and toured them through several sites.

Larry Braaten, U.S.O.E., visited the project staff, toured the Work Samples Lab and discussed national developments.

Burt Nixon, Director of the Region X Exemplary Project in Blackfoot, Idaho, visited to consult with project staff about the Work Samples Lab and arranged for the Lab Supervisor to come to Idaho and do some developmental work and consultation.

b. Presentations to Professional Groups

(1) Washington Association of School Administrators. The Project Director served as chairman of a panel presentation on career education at a June conference of the Washington Association of School Administrators held in Spokane, Washington. Other panel members include Shirley Coleman, Seattle Public Schools; Dick Lutz, Office of the Superintendent of Public Education; and, Bob Putman, Seattle Trust and Savings Bank. In addition to the presentation, the director passed out a variety of CAM’s materials to the audience of twenty administrators.

(2) Central Washington Class. The Project Director spoke to a Career Education Curriculum class at Central Washington State College during the 1975 summer session, stressing the problems CAM has encountered with the strategy of infusion. Three CWSC faculty members joined the class of sixteen, who were primarily senior high teachers, to hear the presentation.

c. Lay Group Visits and Presentations. Throughout the year project staff have both hosted visits by lay groups and made presentations before meetings of these groups. These have included:

(1) Seahurst Junior High School. The Project Director spent a morning coffee session with a group of parents from Seahurst Junior High School. In the afternoon the group visited the Occupational Skills Center and the Work Samples Lab.

(2) Parent Career Education Committee. A district PTSA committee of parents was established to investigate ways in which parents and the district’s professional staff might work together to achieve
career education goals. The Project Director worked with this group which met regularly throughout the winter months. As a result, the PTSA and CAM have prepared a small pamphlet which will be published jointly during the coming year. The pamphlet attempts to inform parents of why career education is important and suggests several ways in which parents can help their children in the process of career development.

(3) Committee for Quality Education. The Project Director made a presentation on CAM before interested members of the Committee for Quality Education.

(4) Washington State Advisory Council. The Project Director participated in a presentation before the Washington State Advisory Council for Vocational Education, which dealt with the topic of "Career Education -- Definitions and Agency Roles." Other speakers on the program included: Richard Lutz, Supervisor of Career Education, Superintendent of Public Instruction; Harold Heiner, Director of Student Services, State Board for Community Colleges; and Ron Berg, Director of Career Education and Vocational Guidance, Coordinating Council for Occupational Education.

(5) Burien Lions. The Project Director spoke before a luncheon meeting of the Burien Lions on the topic of career education and the potential use of community resources as an extension of the classroom.

D. Conclusions and Recommendations

Although exportation activities often seem like an imposition on an already busy schedule, the project staff believes the commitment made to exportation is an important one. There has been a compensation as well, for the opportunity to meet with other career educators and discuss common problems has undoubtedly had an impact on the quality of CAM's overall effort. In light of these considerations, project staff feels its commitment to exportation should be maintained at the same level throughout the remainder of the project's term.

VIII. Staff Development

A. Goal

The opportunity for professional growth, which a special project can provide, is one of the indirect benefits. These opportunities can be even greater when the project has been designed with a definite commitment to promoting such opportunities. CAM includes such a commitment.
B. Summary of First Year Activities

1. District Staff Development

During the project's first year, efforts to provide staff development for district staff centered around the CAM Representatives. This group of teachers and counselors, one from each building in the district, provided a liaison between the staff at each building and the project staff. Three workshop days were provided for orienting the total group and keeping them up to date in addition to periodical meetings with the elementary, junior high and senior high groups separately.

Other activities included (1) an in-service class, Career Education through Western Washington State College and taught by project staff; (2) several all-day workshops held for various groups throughout the year; and (3) a steady stream of written communications to selected target groups of district staff.

2. Project Staff

Professional growth of the project staff was promoted whenever possible. Primarily this consisted of attending seminars and conferences as well as site visits to other career education projects.

C. Second Year Activities and Accomplishments

Throughout this report numerous staff development activities have been described in relationship to other project components. These shall merely be listed within this section of the report as a means for illustrating the breadth and diversity of staff development efforts. Activities not mentioned elsewhere in the report shall be presented in greater detail.

1. District Staff

a. Previously described activities. Staff development activities described in previous sections of this report include:

   (1) Counselors' In-service Program
   (2) CAM Presentation to the Board
   (3) Job Line
   (4) Teachers' Visits to the Work Samples Lab
   (5) Writing Workshop for Infusion Activities and Materials
   (6) Staff Assistance in Preparing Mini Grants
(7) Administrative Workshop on Community Resources

(8) In-service for the Bread and Butterflies Series

b. Activities Not Previously Described in This Report. Other staff development activities include the following:

(1) Glacier High School Staff Workshop. A one-day workshop was presented for staff at Glacier High School prior to the opening of the school year. The program, planned in conjunction with the counseling staff at Glacier, included a review of CAM's overall program as well as suggestions for incorporating career education activities into the secondary program.

(2) Assistance to Board Member. The Project Director assisted George Meyer, member of the Highline Board of Directors, in preparing a presentation on vocational education which was delivered at the annual conference of the Washington State School Directors Association.

(3) Industrial Arts Coordinator. The Project Director met on several occasions with district's Coordinator of Industrial Arts to review points of articulation between CAM and the industrial arts program.

(4) Position Paper. The Project Director prepared a position paper for the Superintendent which dealt with the potential use of community resources as an extension of the classroom.

(5) Administrative Interns. Two administrative interns at the elementary level chose to develop a career education project as a part of their internship training.

2. Project Staff

a. Conferences, etc. As in year one, professional development of project staff members centered around attendance at conferences. These included the following.

(1) U.S.O.E. Mini Conferences. The Project Director was a participant in one of the U.S.O.E. Mini Conferences held in Washington, D.C. during the months of July and August.

(2) Region X Directors' Meetings. The Project Director attended two Region X Directors' Meetings, one in Seattle in late August, the other at Anchorage, Alaska, in April.
(3) **Career Education Workshop.** The Assistant Director attended a career education workshop sponsored by the Vancouver, Washington, Public Schools, which was held in October.

(4) **Washington State Personnel and Guidance.** The Guidance Specialist attended the annual convention of the Washington State Personnel and Guidance Association, including the section meeting of the Washington Vocational Guidance Association. This October conference was held in Seattle.

(5) **American Vocational Association.** The Project Director attended the annual convention of the American Vocational Association held in New Orleans during the month of December.

(6) **Part C and D Administrators' Conference.** The Assistant Director attended the U.S.O.E. sponsored conference for administrators of Parts C and D Projects. This conference was held in January in Dallas, Texas.

(7) **State Plan Workshop.** The Project Director and Guidance Specialist were participants in a two-day workshop sponsored by the Superintendent of Public Instruction for the purpose of seeking input into a forthcoming state plan for career education.

**b. Other Activities.** Project staff have also participated in several activities which have added to their professional development.

(1) **State Advisory Committee.** The Project Director has continued as an active member of the Washington State Advisory Committee for Vocational Education.

(2) **Channel 9 Advisory Committee.** The Assistant Director has become a member of the Channel 9 Career Education Advisory Committee. Channel 9 is the local educational television station.

(3) **State Plan Writing Team.** The Guidance Specialist participated in a writing team which prepared the rough draft of the Washington State Plan for Career Education prepared by the Office of the Superintendent of Public Instruction.

**D. Conclusions and Recommendations**

Although some staff development activities are aimed at specific objectives, many of them are broad in their desired outcomes and consequently difficult to evaluate. Nevertheless, the long range benefits are often the most important residual effects of a special project. With this in mind, project staff recommends a continued effort in the area of staff development.
## FINANCIAL STATUS REPORT

### 1. NAME AND ADDRESS OF GRANTEE ORGANIZATION
- **Highline Public Schools**
- 15675 Ambaum Blvd. S.W.
- Seattle, Washington 98166

### 4. EMPLOYER IDENTIFICATION NUMBER:
- 9160016314

### 5. GRANTEE ACCOUNT NO. OR IDENTIFYING NO.:
- V361123

### 8. RECIPIENT ACCOUNT NO. OR IDENTIFYING NO.:
- 9160016314

### 10. BASIS OF REPORT:
- Accrued Expenditures

### 11. INDIRECT EXPENSE:
- TYPE OF RATE
  - Provisional
  - Predetermined
  - Final
  - Fixed

<table>
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<tr>
<th>PROGRAMS • FUNCTIONS • ACTIVITIES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Total outlays previously reported</td>
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</tr>
<tr>
<td>b. Total program outlays this period</td>
<td>114,172.10</td>
</tr>
<tr>
<td>c. LESS: Program income credits</td>
<td></td>
</tr>
<tr>
<td>d. Net program outlays this period</td>
<td>39,132.76</td>
</tr>
<tr>
<td>e. Total program outlays to date</td>
<td>153,304.86</td>
</tr>
<tr>
<td>f. LESS: Non-Federal share of program outlays</td>
<td></td>
</tr>
<tr>
<td>g. Total Federal share of program outlays</td>
<td>(7,744.86)</td>
</tr>
<tr>
<td>h. Total unpaid obligations</td>
<td>145,560.00</td>
</tr>
<tr>
<td>i. LESS: Non-Federal share of unpaid obligations</td>
<td></td>
</tr>
<tr>
<td>j. Federal share of unpaid obligations</td>
<td></td>
</tr>
<tr>
<td>k. Total Federal share of outlays and unpaid obligations</td>
<td></td>
</tr>
<tr>
<td>l. Total Federal funds authorized</td>
<td>145,560.00</td>
</tr>
<tr>
<td>m. Unobligated balance of Federal funds</td>
<td>145,560.00</td>
</tr>
</tbody>
</table>

### 13. REMARKS:
- Dr. Ben Yormark
- Director of CAM
- Certification: I certify that to the best of my knowledge and belief this report is correct and complete and that all outlays and unpaid obligations are for the purpose set forth in the grant award document.

### Signature of Authorized Official:
- Ben Yormark
- 8/08/75
The University of Washington's Bureau of School Service and Research (BSSR) has worked with the Highline School District in designing and conducting an evaluation of its Career Alternatives Model (CAM) program for the 1974-75 school year. Due to uncertainties regarding objectives to be covered in the evaluation, the evaluation design was not completed until early January, 1975. This meant that the evaluation was based largely on a post-comparison of control and treatment groups at the several grade levels included in the CAM project. The evaluation was directed to assessing the project influence on the accomplishment of four outcomes or objectives identified in the Draft Guidelines for the Evaluation of Career Education Programs (as prepared by Development Associates, Inc.):

1. The extent to which students who have participated in the project demonstrate an increase in self-awareness in relation to the world of work. (Self-Awareness)

2. The extent to which students who have participated in the project demonstrate an increased awareness of and knowledge about work. (Knowledge)

3. The extent to which students who have participated in the project demonstrate increased competency in career decision-making skills. (Career Decision Making)

4. The extent to which students who participate in the project and who left the project schools were placed in a paid occupation, in further education, or in unpaid work that was consistent with their then current career choice. (Career Placement)
The way in which these four outcomes were treated at each of the major grade sequences is identified in the evaluation matrix of Table 1 and the instruments developed and/or used for each grade sequence and outcome area are explained in the section on "Evaluation Results." This section on evaluation results also includes some consideration of resource allocation to major project components and a discussion of the extent to which CAM has given expanded job preparation opportunities to young people in grades 10-12.

TABLE 1
Evaluation Matrix

<table>
<thead>
<tr>
<th>Outcome Statement</th>
<th>Grade Level</th>
<th>K-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-Awareness</td>
<td>N</td>
<td></td>
<td>D/E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>2. Knowledge of Work</td>
<td>D/E</td>
<td></td>
<td>E</td>
<td>D/E</td>
<td>E</td>
</tr>
<tr>
<td>3. Career Decision-Making</td>
<td>N</td>
<td></td>
<td>N</td>
<td>D/E</td>
<td>E</td>
</tr>
<tr>
<td>4. Career Placement</td>
<td>N</td>
<td></td>
<td>N</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

N — No Evaluation Activities
D — Development and/or Instrument Field Testing
E — Evaluation and Testing of Project Participants

In the final section of this report, the BSSR evaluation team presents a summary of implications for the evaluation results. This section on implications focuses on suggested changes in the evaluation for 1975-76 -- changes needed to provide a more complete statement of program impact.
Evaluation Results

In addition to the outcome areas previously identified, the evaluation design called for identification of resource allocation for major components of the CAM project in 1974-75. At a meeting of Region X Part D project directors in May, 1975, it was decided that the four projects should develop a common reporting format. This reporting format is to separate initial, developmental, and maintenance costs and is designed to incorporate a standard basis for computing the number of students served by the project. Because the cost figures for 1974-75 have not yet been compiled according to this format, we include here only a general breakdown by school level for 1973-74—the first year of the project. A more detailed cost breakdown for 1973-74 is included as Attachment A. An update for 1973-74 and the figures for 1974-75 will be included in the first interim report of the third year.

TABLE 2
1973-74 Project Costs for Highline CAM Project

<table>
<thead>
<tr>
<th>School Level</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (K-3)</td>
<td>$20,405.</td>
<td>14.0</td>
</tr>
<tr>
<td>Intermediate (4-6)</td>
<td>19,845.</td>
<td>13.6</td>
</tr>
<tr>
<td>Junior High (7-9)</td>
<td>32,965</td>
<td>22.5</td>
</tr>
<tr>
<td>Senior High (10-12)</td>
<td>18,200.</td>
<td>12.5</td>
</tr>
<tr>
<td>Other</td>
<td>54,600.</td>
<td>37.4</td>
</tr>
<tr>
<td>Total</td>
<td>$146,015</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Having presented the resource allocation data available at this time, we now turn to the evaluation results related to the major outcome areas. These are presented according to the same grade level groupings as used for the above cost breakdown. Additional sections relating to placement and the expansion of job training opportunities follow these results for the major grade level groupings.

Grade K-3

A number of career education resources are provided by the Highline School District for students in the primary grades. Some of these are directed at the three objectives included in the evaluation plan for grades K-3. For purposes of evaluation, a list of classrooms which had made use of these career oriented resources was compiled. The project staff also compiled a list of those which had not used the available resources. The evaluation staff randomly selected 4 classes out of 21 which had and 4 out of 27 which had not used these additional resources.

Due to limited testing time and the absence of good measuring devices, only the knowledge objective was actually tested. The instrument chosen was the nonverbal form of the Career Knowledge test published by the Evaluative Research Associates. The test consists of three sections: Occupational Similarities, Occupational Differences and Occupational Tools. The 1974 publication date on this instrument precluded its being suggested by the Draft Guidelines mentioned earlier in this report.

The eight teachers from the selected classrooms were instructed in the administration of the Career Knowledge test. The teachers administered the instrument to their own classes. Special answer sheets were developed.
to aid in answering and scoring. The classes were tested during the latter part of May and early June. The completed answer sheets were hand scored. In the scoring of the test, several cases were found in which the student received a high score on both the Occupational Similarities and the Occupational Tools subscales but a score of zero or one on the test of Occupational Differences. These students' scores were eliminated from the analysis of the Occupational Differences scale as they did not appear to understand the instructions. They apparently continued to respond with the answer that was most similar to the key word rather than that which was different.

The classroom was used as the experimental unit. This does not appreciably change the power of the test of significance while providing a better approximation to the assumptions on which the analysis is based. The classes varied somewhat in size but were assumed to be equally weighted for purposes of the analysis.

Table 3 presents the classroom means for the Job Similarities scale. Due to the amount of variability between the classes within each of the two categories, the difference between them was not significantly different from zero. A five percent significance level was used in this case and will be used throughout this entire report.

The data and results for the Occupational Differences and Occupational Tools scales are presented in Tables 4 and 5. As with the first test, these do not represent significant differences between the groups.

A total score for the test was found by summing the subscales. The data and results for the total score are presented in Table 6. As in the
TABLE 3

Classroom Means and Analysis of Variance for Occupational Similarities

<table>
<thead>
<tr>
<th>Means</th>
<th>Classes Using Additional District Resources</th>
<th>Classes Not Using Additional District Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.68</td>
<td>6.85</td>
</tr>
<tr>
<td></td>
<td>7.81</td>
<td>7.40</td>
</tr>
<tr>
<td></td>
<td>7.44</td>
<td>6.83</td>
</tr>
<tr>
<td></td>
<td>7.25</td>
<td>7.44</td>
</tr>
<tr>
<td></td>
<td>7.29 (Avg.)</td>
<td>7.13 (Avg.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.0583</td>
<td>7</td>
<td>0.0544</td>
<td>.33</td>
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<tr>
<td>Treatment</td>
<td>0.0544</td>
<td>1</td>
<td>.0544</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>1.0039</td>
<td>6</td>
<td>.1673</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 4

Classroom Means and Analysis of Variance for Occupational Differences

<table>
<thead>
<tr>
<th>Class Using Additional District Resources</th>
<th>Class Not Using Additional District Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
<td></td>
</tr>
<tr>
<td>8.00</td>
<td>8.01</td>
</tr>
<tr>
<td>8.27</td>
<td>8.28</td>
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<tr>
<td>7.71</td>
<td>7.81</td>
</tr>
<tr>
<td>8.08</td>
<td>8.08</td>
</tr>
<tr>
<td>8.02 (Avg.)</td>
<td>8.04 (Avg.)</td>
</tr>
<tr>
<td><strong>Analysis of Variance</strong></td>
<td></td>
</tr>
<tr>
<td>Source of Variance</td>
<td>Sum of Squares</td>
</tr>
<tr>
<td>Total</td>
<td>.2772</td>
</tr>
<tr>
<td>Treatment</td>
<td>.0018</td>
</tr>
<tr>
<td>Within</td>
<td>.2754</td>
</tr>
</tbody>
</table>
TABLE 5
Classroom Means and Analysis of Variance for Occupational Tools

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
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<td>7</td>
<td>.0171</td>
<td>.11</td>
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<tr>
<td>Treatment</td>
<td>.0171</td>
<td>1</td>
<td>.0171</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>.9642</td>
<td>6</td>
<td>.1607</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 6

Classroom Means and Analysis of Variance for Total Score on Career Knowledge

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>-5.1793</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>.1175</td>
<td>1</td>
<td>.1175</td>
<td>.14</td>
</tr>
<tr>
<td>Within</td>
<td>5.0618</td>
<td>6</td>
<td>.8436</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Means</th>
<th>Classes Using Additional District Resources</th>
<th>Classes Not Using Additional District Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23.08</td>
<td>23.26</td>
</tr>
<tr>
<td></td>
<td>25.23</td>
<td>25.01</td>
</tr>
<tr>
<td></td>
<td>24.22</td>
<td>23.16</td>
</tr>
<tr>
<td></td>
<td>24.50</td>
<td>24.63</td>
</tr>
<tr>
<td></td>
<td>24.26 (Avg.)</td>
<td>24.02 (Avg.)</td>
</tr>
</tbody>
</table>
subscale tests of significance, the differences between the classrooms within the groupings obscures any differences which might have been produced by the use of the district's resources.

Grades 4-6

The programs implemented to produce change in the outcomes designated for grades 4-6 can be broken down into three major areas. The first was the television series Bread and Butterflies along with the multitude of ancillary activities which accompanied the series. While somewhat directed at all three goals, Bread and Butterflies was specifically concerned with the development of a positive attitude toward the world of work. The second major category of activities consisted of any of a number of district-wide resources which the teachers had at their disposal. Included in this set of activities are special kits on occupations, field trips to various businesses and films and film strips. Again the focus of the activities is somewhat directed at all three of the goals. There is some attempt, however, for the second goal to receive the emphasis in that the activities were often designed with the specific intention of conveying some information about the world of work. The third category of activities consisted of CAM related special projects instituted in a single classroom or school. These projects differ widely and tend to be directed at all three of the goals or outcome statements covered in the evaluation design.

TREATMENT GROUPS—The major part of the evaluation concerned the effectiveness of the Bread and Butterflies series and the other district-wide resources, considered individually and in combination. Four groups of sixth grade classes were identified. These consisted of those which were watching Bread and
Butterflies but not using other district-wide resources (YN group); those watching Bread and Butterflies and also using other district-wide resources (YY group); those not watching Bread and Butterflies but using some other district-wide resource (NY group); and those not watching Bread and Butterflies and not using any other district-wide resource (NN). A fifth group was also identified which were those watching Bread and Butterflies and also involved in some specific classroom or building project supported by the CAM program.

Table 7 shows the number of classrooms which were classified into the five previously mentioned groupings. While this table serves to generally identify the frequency of occurrence of each of the five categories of classrooms, the reader should be aware that the classrooms in the several categories differed somewhat in both numbers of students and in organizational format. For example, both mixed grade and team classes were included in the sample. In all such cases, only the 6th grade students were actually tested.

The evaluation consisted of randomly selecting classrooms from each of the five groupings. Four classes were chosen from each group for a total of twenty classrooms.

INSTRUMENTS—Two instruments were used with the 20 sixth grade classes. To test the effects on knowledge of the world of work the Career Education Questionnaire (CEQ) grades 4-6 was used. This test is published by the Minnesota Research Coordinating Unit for Vocational Education and is one of the instruments recommended by Development Associates, Inc; for measuring Outcome #2.
TABLE 7
Total Number of Classrooms
In Each of the Treatment Categories

<table>
<thead>
<tr>
<th>Categories of Classification</th>
<th>Number of Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread &amp; Butterflies</td>
<td>Other District Resources</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The other instrument was developed by the evaluation team to measure differences in the perceived responsibility for career and personal choices. This Perceived Responsibility Scale (PRS) was designed to test for Outcome #1 of the Evaluation Matrix and was specifically oriented toward the material presented in Bread and Butterflies. This latter instrument is found in Attachment B1 and is derived from research on locus of control. A three dimensional model was originally used in the development of the instrument. The three dimensions are: (1) statements referring to positive or neutral outcomes vs. statements referring to negative or failure outcomes; (2) personal responsibility vs. responsibility given to others vs. responsibility attributed to chance or luck; (3) statements in which the reader is the referent (statements usually starting with "I") vs. generalized statements about people.

The three dimensions provide a total of 12 (2x3x2) combinations, e.g., positive outcome with personal responsibility in which the reader is the referent. For each of the twelve cells a number of possible statements were written. The areas to which the content referred were (1) career choice and occupational situations, (2) school work and (3) general statements concerning responsibility. From the item pool, six items for each cell were pretested on 100 sixth grade students. From this pretest the best four items for each of the twelve cells were chosen for the final instrument. At the time of scoring, the third dimension relating to referent was dropped.

PROCEDURE—Testing was done by members of the evaluation team in the regular classroom. All testing was done during the latter part of May and early June. The groups watching Bread and Butterflies were tested toward the end of the period so that they would have maximum exposure to the series which continued
up to the first week of June. The PRS was administered first, followed by the CEQ. Testing was done in one sitting with only a short pause between tests.

The CEQ was scored at the University of Washington Educational Assessment Center. The PRS was keypunched and the scores were obtained from special computer program. In scoring the PRS the items which had the reader as referent and the generalized statements were added together to provide six different scores, each based on eight items. These subscales were then summed over the positive and negative outcome dimension to provide three scales, each based on sixteen items.

RESULTS -- In all of the results reported the classroom is treated as the experimental unit. Thus, the data matrices include five treatments and four experimental units (classrooms) per treatment. This does not appreciably change the power of the analyses while providing a better approximation to the assumptions on which the analyses are based. Further, the means are assumed to be equally weighted.

Table 8 presents the treatment means and the analysis of variance for the CEQ. The overall $F$ is not sufficient to reject the null hypothesis; namely, that there is no difference attributed to the treatments. As is apparent from the means, the level of performance for the groups is very similar with the exception of the special classroom or building projects which scored somewhat lower than the others. The individual classroom means are contained in Attachment B2.

The results of the six subscales of the PRS are contained in Tables 9-14. For each of the subscales the treatment means and analysis of
### TABLE 8

Means and Analysis of Variance for CEQ

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resource</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>31.92</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>31.72</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>31.97</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>31.61</td>
</tr>
<tr>
<td>Special Class Projects</td>
<td></td>
<td>27.82</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>126.998</td>
<td>19</td>
<td>4</td>
<td>2.53</td>
</tr>
<tr>
<td>Treatment</td>
<td>51.205</td>
<td>4</td>
<td>12.80</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>75.793</td>
<td>15</td>
<td>5.05</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 9

Means and Analysis of Variance Relating to Personal Responsibility for Positive Outcomes on PRS

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>6.46</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>6.72</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>6.70</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>6.69</td>
</tr>
<tr>
<td>Special Class Projects</td>
<td></td>
<td>6.38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.468</td>
<td>19</td>
<td>.101</td>
<td>1.43</td>
</tr>
<tr>
<td>Treatment</td>
<td>.406</td>
<td>4</td>
<td>.101</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>1.062</td>
<td>15</td>
<td>.071</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 10

Means and Analysis of Variance Relating to Personal Responsibility for Negative Outcomes on PRS.

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>4.90</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>5.14</td>
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<tr>
<td>No</td>
<td>Yes</td>
<td>5.43</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>5.11</td>
</tr>
</tbody>
</table>

Special Class Projects 4.76

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5.875</td>
<td>19</td>
<td>.260</td>
<td>.81</td>
</tr>
<tr>
<td>Treatment</td>
<td>1.038</td>
<td>4</td>
<td>.322</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>4.837</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 11

Means and Analysis of Variance Relating to Others Responsible for Positive Outcomes on PRS

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>1.87</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>1.88</td>
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<tr>
<td>No</td>
<td>Yes</td>
<td>2.06</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.02</td>
</tr>
</tbody>
</table>

Special Class Projects 2.15

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1.997</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>.234</td>
<td>4</td>
<td>.059</td>
<td>.50</td>
</tr>
<tr>
<td>Within</td>
<td>1.763</td>
<td>15</td>
<td>.118</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 12
Means and Analysis of Variance Relating to Others Responsible for Negative Outcomes on PRS

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>2.20</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>1.77</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>2.13</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.09</td>
</tr>
</tbody>
</table>

Special Class Projects 2.45

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.445</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>.955</td>
<td>4</td>
<td>.239</td>
<td>1.03</td>
</tr>
<tr>
<td>Within</td>
<td>3.490</td>
<td>15</td>
<td>.233</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 13

Means and Analysis of Variance Relating to Luck Responsible for Positive Outcomes on PRS

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>2.75</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>2.61</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>2.68</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.62</td>
</tr>
<tr>
<td>Special Class Projects</td>
<td></td>
<td>3.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2.912</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>.673</td>
<td>4</td>
<td>.166</td>
<td>1.13</td>
</tr>
<tr>
<td>Within</td>
<td>2.239</td>
<td>15</td>
<td>.149</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 14

Means and Analysis of Variance Relating to Luck Responsible for Negative Outcomes on PRS

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>2.20</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>1.98</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>1.99</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.21</td>
</tr>
</tbody>
</table>

Special Class Projects 2.46

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3.230</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>.619</td>
<td>4</td>
<td>.155</td>
<td>.89</td>
</tr>
<tr>
<td>Within</td>
<td>2.611</td>
<td>15</td>
<td>.174</td>
<td></td>
</tr>
</tbody>
</table>
-22-

variance are reported. In all six cases, the analysis of variance did not indicate significant differences between the treatment groups. From an inspection of the means it again appears that the group which had special classroom or building projects was the most discrepant from the others. This finding however is only suggestive as the difference is not significant. The results summed over the negative and positive outcomes are presented in Tables 15-17. Listed are the means for the treatment groups and the analysis of variance. The results are again not significant at the five percent level of significance. Looking at the means it appears that the previous tendency for the group with special classroom or building projects to be somewhat different from the remaining groups carries over when you sum across the desirability of the outcome. In general this nonsignificant tendency has been for the special projects group to be less personally responsible and more inclined to indicate either luck or other people as the responsible party.

Grades 7-9

At the ninth grade level two major activities were evaluated. The first was time spent at the Work Samples Laboratory (WSL) while the second was the use of the Ohio Vocational Interest Survey (OVIS). As both of these treatments are presently in somewhat of a state of flux, it was possible to find ninth grade classes which had been to the WSL and had taken the OVIS; classes that had been to the WSL but had not taken the OVIS; classes that had taken the OVIS but had not been to the WSL and classes that had neither been to the WSL nor taken the OVIS. Two classes from each of these four combinations of WSL and OVIS were chosen. The choice was somewhat restricted since several of the combinations existed in only these few classes and there was a conscious effort to try to equalize the socio-economic and academic ability of the classes.
TABLE 15

Means and Analysis of Variance
for Personal Responsibility on PRS
(summed over positive and negative outcomes)

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>5.68</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>5.93</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>6.07</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>5.90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10.836</td>
<td>19</td>
<td>.641</td>
<td>1.16</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.565</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>8.271</td>
<td>15</td>
<td>.551</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 16

Means and Analysis of Variance for Others Responsible for Outcome on PRS (summed over positive and negative outcomes)

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>2.04</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>1.83</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>2.10</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.06</td>
</tr>
</tbody>
</table>

Special Class Projects 2.30

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9.710</td>
<td>19</td>
<td>.459</td>
<td>.87</td>
</tr>
<tr>
<td>Treatment</td>
<td>1.834</td>
<td>4</td>
<td>.459</td>
<td>.87</td>
</tr>
<tr>
<td>Within</td>
<td>7.876</td>
<td>15</td>
<td>.525</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 17

Means and Analysis of Variance
for Luck as Responsible for Outcomes on PRS
(summed over positive and negative outcomes)

<table>
<thead>
<tr>
<th>Bread &amp; Butterflies</th>
<th>Other Resources</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>2.47</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>2.29</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>2.34</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>2.43</td>
</tr>
</tbody>
</table>

Special Class Projects 2.78

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>D. F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>10.472</td>
<td>19</td>
<td></td>
<td>1.11</td>
</tr>
<tr>
<td>Treatment</td>
<td>2.387</td>
<td>4</td>
<td>0.597</td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td>8.084</td>
<td>15</td>
<td>0.539</td>
<td></td>
</tr>
</tbody>
</table>
INSTRUMENTS—Two instruments were used with the ninth grade students. One of these was a knowledge test which consisted of two parts. One part was Sub-scale C of the Career Development Inventory (CDI) developed by Super and Forrest. To this instrument were added a number of items written by the evaluators. The added items consisted of questions specifically oriented to the Northwest and to the CAM program. The added questions were first field tested on approximately eighty ninth grade students in the Highline District who were not otherwise involved in the evaluation. From a larger item pool a set of 20 items were chosen. These items are included in the final test instrument found in Attachment B3.

The second instrument was also constructed by the evaluators and is found in Attachment B3. This instrument was designed to determine the extent to which the students used the data-people-thing construct in choosing occupational behaviors for hypothetical persons. This data-people-thing (DPT) instrument was different from other published instruments in several ways. While introductions to the items were similar in that the student was told a few characteristics about the person in the item, the background information consisted of keys as to whether the person would best be suited for a job involving data, people, or things, or some combination of these. With each stem were six occupational activities in which the person might engage. These activities were clearly in contrast to the usual items which give specific job titles. Lastly, the student is asked to choose the three activities which he/she believes would be best suited for the person in the item. The inventory is scored using a key where the choices are based on the data-people-thing construct. A high score indicates that
the student used the construct in making the choices for the people in the items and a low score indicates minimal use of the data—people—thing construct.

The two instruments were administered by the evaluation staff in the students' classrooms in all but one school where students were tested in the cafeteria. The DPT instrument preceded the knowledge test. All testing was accomplished in one fifty minute period per class.

The knowledge test was machine scored at the University of Washington Educational Assessment Center. A total score and the two part scores were obtained. The DPT test was hand scored by the evaluation staff.

RESULTS—The data were analyzed using analysis of variance. Since there were only two classes in each of the treatment groups the student rather than the classroom is considered the experimental unit. The five percent level of significance was again used in the analyses.

The results for the DPT instrument are presented in Table 18. The classroom averages differ greatly within a treatment condition and when summed across the two schools, there are no significant differences between the treatment conditions. Indicative of this difference between classes within the same treatment are the two within the group which had the WSL and the OVIS. This treatment group had the highest mean for one class and the next to the lowest mean for the other class. This disparity is perhaps related to differences existing between the various junior high schools within the Highline School District.

The classroom means and the analyses of variance for the total knowledge test are presented in Table 19. The total score did not reflect
TABLE 18

Means and Analysis of Variance for DPT

<table>
<thead>
<tr>
<th>Work Samples Laboratory</th>
<th>Ovis</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>18.79</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>18.21</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>18.24</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>17.72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis of Variance Corrected for Differences in Sample Size</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Variance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>3</td>
<td>.382</td>
<td>1.05</td>
</tr>
<tr>
<td>Schools within Treatment</td>
<td>4</td>
<td>1.056</td>
<td></td>
</tr>
<tr>
<td>Within Schools</td>
<td>179</td>
<td>.365</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 19

Means and Analysis of Variance for Total Knowledge Test

<table>
<thead>
<tr>
<th>Work Samples</th>
<th>Laboratory</th>
<th>Ovis</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>26.56</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td></td>
<td>28.04</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td></td>
<td>25.25</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td></td>
<td>25.66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>3</td>
<td>3.060</td>
<td>.957</td>
</tr>
<tr>
<td>Schools within Treatment</td>
<td>4</td>
<td>5.164</td>
<td></td>
</tr>
<tr>
<td>Within Schools</td>
<td>179</td>
<td>3.199</td>
<td></td>
</tr>
</tbody>
</table>
any significant differences between the treatment conditions. Again, great
differences existed between classes within the same treatment. The mean and
tests of significance for the two parts of the knowledge test show the
same tendency as the total score. These results are presented in Tables
20 and 21.

Grades 10-12

The evaluation effort in grades 10-12 was directed to the self-
awareness, knowledge of work, and career decision-making objectives
(Outcomes #1, 2 and 3 in Evaluation Matrix) measured by the Career
Development Inventory (CDI). It also included development of the follow-up
system (related to Objective #4 of Evaluation Matrix) which is explained in
the next subsection of this summary of evaluation results. The CDI was
developed in 1972 by Super and Forrest and it includes subscales which measure
different components of the objectives as mentioned above. Subscale A
(consisting of the first 33 questions on the CDI instrument) assesses the
extent to which the student has thought about his future career plans. Sub-
scale A (consisting of the first 33 questions on the CDI instrument) assesses
the extent to which the student has thought about his future career plans.
Subscale B (questions 34-61 of the CDI) provides a self-rating of the awareness
of sources of career information and the extent to which these resource
materials have been used. On Subscale C (questions 62-91 of CDI), the
student demonstrates the extent of occupational information and his/her
knowledge of how to integrate personal and occupational information into
educational and vocational decisions. The total CDI scale is an arbitrary
combination of the three scales which, according to the developers, is.
TABLE 20
Means and Analysis of Variance for First Part of Knowledge Test (Developed by Evaluators)

<table>
<thead>
<tr>
<th>Work Samples</th>
<th>Ovis</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>11.870</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>12.761</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>11.453</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>11.675</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>3</td>
<td>.658</td>
<td>.95</td>
</tr>
<tr>
<td>Schools within Treatment</td>
<td>4</td>
<td>.752</td>
<td></td>
</tr>
<tr>
<td>Within Schools</td>
<td>179</td>
<td>.692</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 21
Means and Analysis of Variance for Second Part of Knowledge Test (CDI Items)

<table>
<thead>
<tr>
<th>Work Samples Laboratory</th>
<th>Ovis</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>14.687</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>15.283</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>13.801</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>13.979</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>D.F.</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>3</td>
<td>.928</td>
<td>.72</td>
</tr>
<tr>
<td>Schools within Treatment</td>
<td>4</td>
<td>2.207</td>
<td></td>
</tr>
<tr>
<td>Within Schools</td>
<td>179</td>
<td>1.281</td>
<td></td>
</tr>
</tbody>
</table>
justified by their intercorrelations as vocational maturity measures and by approximately equal numbers of items on each factor scale.

The test developers have supplied a set of norms based on 400 tenth graders in Genessee County, Michigan. The group upon which the norms are based includes representation of urban, suburban, and rural schools; however, the limited geographical base of the norm group and the fact that it is limited to grade 10 should be considered in any norm comparisons made in this report of evaluation results in the Highline School District. In general, any norm comparisons made here should be limited to the group of 25 tenth graders included in Highline's Career Alternatives Model (CAM) sample.

The sample taking the CDI included 369 students in four different high schools. The results are summarized in Table 22. Of the four schools included in the CAM evaluation, all except Foster are participants in the CAM project. Foster was used as a control school for purposes of the evaluation.

Table 22
Sample Means by School on CDI Scales

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Students</th>
<th>Subscale</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Evergreen</td>
<td>35</td>
<td>115.5</td>
<td>276.4</td>
</tr>
<tr>
<td>Foster</td>
<td>42</td>
<td>102.7</td>
<td>231.2</td>
</tr>
<tr>
<td>Glacier</td>
<td>170</td>
<td>105.8</td>
<td>255.8</td>
</tr>
<tr>
<td>Tyee</td>
<td>122</td>
<td>105.3</td>
<td>254.8</td>
</tr>
<tr>
<td>Total</td>
<td>369</td>
<td>106.2</td>
<td>254.6</td>
</tr>
</tbody>
</table>
In Table 22, we note that Foster scored lower than the three CAM treatment schools. A closer check shows that this difference is significant at the .05 level; however, because randomization was not used in sample selection, the extent to which the significant difference is due to CAM treatment is not known. It is at least encouraging that the difference observed between treatment and control schools favors the treatment schools. A pre-post or covariate design might aid in establishing the more direct effect of CAM treatments. In Table 23, we see a comparison of the 25 tenth graders in the CAM project with the tenth grade norms established by CDI.

Table 23

Percentile Scores for CAM Tenth Graders on CDI

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Tenth Grade CAM Students</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>107.3</td>
<td>58</td>
</tr>
<tr>
<td>B</td>
<td>264.2</td>
<td>70</td>
</tr>
<tr>
<td>C</td>
<td>19.1</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>390.6</td>
<td>66</td>
</tr>
</tbody>
</table>
developers. Note that CAM tenth graders scored at the 66th percentile overall on the CDI. While the possibility exists that this higher performance by CAM students is due to something other than project treatment (e.g., a generally higher ability student in CAM project schools or bias in the selection of students into the several project components), it is again encouraging that CAM students scored well on all three subscales when compared with the norms supplied by the test developers. CAM students seem to make particularly high scores on Subscale B which measures the awareness and use of resources for career decision making.

In Table 24, we note that the female subsample outperformed the males on all three subscales of the CDI. In Table 25, we find a comparison of several special treatment groups within the CAM project. When compared with the Foster High School control group, the students participating in specific CAM components did very well. Of all the special CAM treatments, the computer guidance seems to have the greatest impact on CDI scores. The summary data of Table 25 shows that even when compared with all CAM students (excluding the Foster control group), the two computer guidance groups do extremely well. The group of 16 students spending more than one hour on the computer guidance system had a total mean score of 436.7 as contrasted with 382.3 for all CAM students not having any involvement with computer guidance. Other special treatment groups have higher CDI scores than the Foster High School control group but their CDI scores differ only slightly from those in other treatment groups. Any effort to establish the specific effect of these several special CAM treatments will require a carefully controlled experimental design. The data collected in 1974-75 is primarily intended for use as a baseline for a more controlled evaluation design in 1975-76.
Table 24
Sample Means by Sex on CDI

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of Students</th>
<th>Subscale</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Male</td>
<td>161</td>
<td>105.2</td>
<td>247.8</td>
</tr>
<tr>
<td>Female</td>
<td>208</td>
<td>106.9</td>
<td>259.9</td>
</tr>
<tr>
<td>Total</td>
<td>369</td>
<td>106.2</td>
<td>254.6</td>
</tr>
</tbody>
</table>

Table 25
Sample Means for Special Treatment Groups on CDI Scales

<table>
<thead>
<tr>
<th>CAM Treatment Group</th>
<th>Number of Students</th>
<th>Subscale</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Computer Guidance (up to 1 hour)</td>
<td>66</td>
<td>112.4</td>
<td>265.2</td>
</tr>
<tr>
<td>Computer Guidance (more than 1 hour)</td>
<td>16</td>
<td>121.4</td>
<td>295.3</td>
</tr>
<tr>
<td>Career English</td>
<td>57</td>
<td>104.8</td>
<td>252.7</td>
</tr>
<tr>
<td>Health Class Infusion</td>
<td>145</td>
<td>106.8</td>
<td>256.7</td>
</tr>
<tr>
<td>OVIS</td>
<td>222</td>
<td>106.4</td>
<td>256.8</td>
</tr>
<tr>
<td>No CAM Treatment (Foster High School Group)</td>
<td>42</td>
<td>102.7</td>
<td>231.2</td>
</tr>
<tr>
<td>All CAM Students (excluding Foster control group)</td>
<td>327</td>
<td>106.6</td>
<td>257.6</td>
</tr>
</tbody>
</table>
Career Placement at the Secondary Level

Up to this point, there has been no discussion of the evaluation activities associated with career placement (the fourth outcome statement in the evaluation matrix). The activity during this second project year was entirely developmental and was intended to be coordinated with ongoing district efforts to improve the follow-up of all high school graduates. Before explaining the specifics of the system developed over this past year, it seems reasonable to summarize certain placement data collected in recent years.

Past data come from several sources. At the Occupational Skills Center, the responsibilities of placement rests with the teacher. Placement has been as high as seventy percent in selected programs. In the five high schools the responsibility is diffused and results in a less successful record. Over the years, it has developed a pattern of a third of the graduates going to work, a third of the graduates continuing their schooling, and the final third representing a combination of marriage, military, unemployed and unknown. Although the high school placement rate is less than that of the Skills Center, in comparison to a state average of only ten percent placement, the Highline experience appears strong.

In thinking of improving on past follow-up studies, a number of problems must be considered. One deals with the Federal requirement that a follow-up be conducted on each graduation class as early as October of the year of graduation. It is difficult on a national level to determine an optimum time span for follow-up, but it appears that this period of four months is unrealistically short, at least if it is to be used as the only measure of success.

The follow-up system initiated this year adds several dimensions that should improve the district's knowledge as to placement. Major characteristics of the system are as follows:
1. Questionnaire to all seniors to allow comparison between placement of vocational and non-vocational students. (Vocational students as used here refers to those involved in two or three hour block vocationally certified programs).

2. Longevity dimension - asks seniors their plans in May of their graduating year and follow-up a year later in May to determine the reliability of the plans described a year earlier as to work and further schooling.

The original data on the Class of 1975 has been gathered. The instrument is attached as Attachment C. The conclusions await the second questionnaire next May. A select profile of this year's graduates from all five Highline high schools follows:

**Major plans for 1975-76.**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate employment</td>
<td>17.2</td>
<td>22.0</td>
</tr>
<tr>
<td>Continue full-time education</td>
<td>33.8</td>
<td>36.1</td>
</tr>
<tr>
<td>Full-time employment and part-time education</td>
<td>12.6</td>
<td>8.4</td>
</tr>
<tr>
<td>Part-time employment and part-time education</td>
<td>19.6</td>
<td>22.9</td>
</tr>
<tr>
<td>Military</td>
<td>9.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Marriage</td>
<td>.4</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Decision as to when the above plans were made:**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>This past year</td>
<td>52.7</td>
<td>49.6</td>
</tr>
<tr>
<td>Since in high school</td>
<td>29.1</td>
<td>30.5</td>
</tr>
<tr>
<td>In junior high</td>
<td>10.5</td>
<td>8.0</td>
</tr>
<tr>
<td>In elementary</td>
<td>7.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

**Plans for 1975-76 reflect immediate employment** (Option 1)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a job already</td>
<td>32.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Plan to continue with present part-time job</td>
<td>9.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Have a part-time job, looking for something better</td>
<td>17.4</td>
<td>18.4</td>
</tr>
<tr>
<td>Doing some serious job hunting</td>
<td>11.7</td>
<td>15.7</td>
</tr>
<tr>
<td>Start looking after graduation</td>
<td>9.4</td>
<td>13.0</td>
</tr>
<tr>
<td>Need a long vacation, then start looking</td>
<td>6.4</td>
<td>7.5</td>
</tr>
<tr>
<td>No plans and not sure how to start</td>
<td>.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**Plans for 1975-76 reflect full-time education** (Option 2)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community college</td>
<td>43.9</td>
<td>48.1</td>
</tr>
<tr>
<td>Four-year institutions</td>
<td>31.1</td>
<td>35.0</td>
</tr>
<tr>
<td>Voc-tech institutions</td>
<td>11.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Private training school</td>
<td>2.6</td>
<td>3.8</td>
</tr>
</tbody>
</table>
Expansion of Job Preparation Opportunities

The work statement established for evaluation of Part D—Exemplary Projects requested an account of the expansion of job opportunities in the participating school districts. Overall, the Highline District generated 823,750 total vocational hours in 1974-75. A brief breakdown of these total hours over the past three years is shown in Table 26.

Table 26

Vocational Hours in Highline School District

<table>
<thead>
<tr>
<th>Program Area</th>
<th>1972-73</th>
<th>1973-74</th>
<th>1974-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Skills Center</td>
<td>123,120</td>
<td>126,900</td>
<td>129,600</td>
</tr>
<tr>
<td>Senior High School</td>
<td>466,423</td>
<td>459,450</td>
<td>556,020</td>
</tr>
<tr>
<td>Junior High School</td>
<td>--</td>
<td>--</td>
<td>117,360</td>
</tr>
<tr>
<td>Woodside (Spec. Ed)</td>
<td>--</td>
<td>--</td>
<td>20,750</td>
</tr>
<tr>
<td>Total</td>
<td>589,543</td>
<td>586,350</td>
<td>823,750</td>
</tr>
</tbody>
</table>

For a more comprehensive distribution of these vocational hours (by schools and subject areas), see Attachment D. The significant increase of total hours in 1974-75 can be attributed largely to two sources: (1) the establishment of a junior high vocational program; and (2) the addition of Home and Family Life classes to the high school curriculum. Although the totals of other high school vocational classes fluctuate somewhat from school-to-school, their overall numbers indicate a district-wide stability over the three-year
period. In the occupational skills center, Foods has shown the most significant
decrease (over 50%), while Hydraulics hours have rapidly increased. The voca-
tional hours in the Highline District over the past two years have increased
40 percent in spite of an overall decline in student population.

Implications of Evaluation Results

In general, the evaluation results presented in the previous section
indicate that the CAM program failed to effect substantial gains for CAM
students in the outcome areas forming the basis for the 1974-75 evaluation.
In those few cases where groups of CAM students did significantly better than
those not associated with CAM programs; e.g., the computer-guidance groups at
the high school level, the extent to which differences can be fully attributed
to CAM treatments is unknown due to the absence of randomized assignment to
groups. At the junior high level, a more powerful evaluation design might have
led to a stronger test for differences attributed to such treatments as the
Work Samples Laboratory or the Ohio Vocational Interest Survey. As it turned
out, the students involved in the Work Samples Laboratory had slightly higher
scores than those not participating; however, none of the differences were
sufficiently large to be significant at the five percent level.

Based on the results of this first year of evaluation with CAM
students, the evaluation staff feels that tighter controls should be designed
in next year's evaluation plan. There is absolutely no guarantee that such
controls will lead to differences favoring CAM students, but it is more likely
that such differences will be identified if they in fact exist. The suggested
control measure is some kind of covariate on cognitive ability prior to the
treatment period. Whether the covariate is to be one of the tests used in the
ongoing test administration of the Highline District or a special test administered

123
early in the 1975-76 school year by the CAM program must be decided very soon and as part of planning the evaluation for 1975-76. By way of summary, other suggestions to be discussed as part of this planning process for 1975-76 are as follows:

1) The evaluation for 1975-76 should focus directly on specific CAM components (e.g., Bread and Butterflies, Work Samples Laboratory, and Computer Guidance), and the evaluation design should provide controls as needed to isolate the effects of these specific components.

2) The project staff and the evaluation team should continue to examine alternative instruments designed to measure growth in various career education outcome areas. Certain of the instruments used this past year may not have been appropriately suited to the CAM program and others like the CEQ used for grade six seemed to have an inordinate number of ambiguous questions. Even the instruments developed this year specifically for selected CAM components should be viewed carefully prior to their use in 1975-76.

3) The number of different students actually tested in 1975-76 should probably be reduced in favor of applying more selection and pre-test controls to those participating in specific CAM components and related control groups. It might also be desirable to test both short- and long-range retention of career outcomes related to certain of the components. In general, it will be desirable to involve fewer students in the evaluation design but to do more testing with that select group.
Hopefully, these several suggestions for the 1975-76 school year will permit more definite conclusions relating to the impact of the CAM project in the Highline School District. The failure to demonstrate anything more than modest gains for CAM students this past year is no doubt disappointing to the project staff; however, the evaluation has provided some useful baseline data for the local project and perhaps for those reviewing the data on a regional and national level. The evaluation team expressed its thanks to the Highline CAM staff for the many hours of effort they have given to planning and reviewing evaluation plans and for their assistance in selecting the samples for testing. Without this assistance, the evaluation could not have been accomplished. It is our hope that a revised evaluation plan for 1975-76 and one which follows the suggestions listed on page 41, can adequately isolate the impact of the CAM project. This is certainly the goal as we proceed with plans for the coming school year.
Objectives

1. To utilize consistent assumption among the Region X Part D projects in order that meaningful comparisons can be made.

2. To facilitate exportation by isolating initial, developmental and maintenance costs.

Model

Year 1 - 1973-74

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<th>Item</th>
<th>Budget</th>
<th>Developmental &amp; Initial Costs</th>
<th>Primary</th>
<th>MAINTENANCE COSTS</th>
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<td>Sr. Hi.</td>
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<td>$20,405</td>
<td>$19,845$32,965</td>
<td>$18,200</td>
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Divide number of students served

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<th>Equal per pupil Costs</th>
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<tr>
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<td>D. $2.00</td>
<td>$2.00</td>
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<tr>
<td></td>
<td>L. $2.50</td>
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|                       | $36.50  | $32.97  |
|                       | $20.40  | $19.85  |
|                       | $18.20  | $9.15   |

126
Assumptions

1. Developmental costs will include only appropriate personnel costs.

2. Developmental costs are defined as one time costs.

3. Initial costs will include only equipment with an expected life of at least five years and a unit cost of $100.00 or more.

4. Over time it is expected that the per pupil costs of the Development and Initial Costs column will decrease.

5. Over time it is expected that the per pupil costs of the Maintenance Costs column will remain relatively stable.

6. The divisor in computing per pupil costs at grade levels should reflect the number of students who have participated during the reporting period.

7. Reporting period - two years of project to be updated at end of project.
On the following pages are sentences which might describe you or what you believe. Read each sentence and then decide whether you think that the sentence is true or false. Circle T if you decide that the sentence is true, and circle F if you decide that the sentence is false. Be sure to respond to every sentence.
1. T   F  If I decide to do something, I can usually get it done.
2. T   F  Teachers get angry at students for no good reason.
3. T   F  I believe in luck.
4. T   F  People who get fired from jobs are the ones who deserve it the most.
5. T   F  I often do things just to please someone else.
6. T   F  Some people will never succeed no matter how hard they try.
7. T   F  The only way to get good grades is to study hard.
8. T   F  Other people are always getting me into trouble.
9. T   F  The difference between an A and a B on a test is usually a few lucky guesses.
10. T   F  I have been unable to buy things that I wanted when I did not plan ahead and save for them.
11. T   F  Teachers are responsible for making sure that students learn.
12. T   F  Usually I have no idea why I receive a low grade on an assignment.
13. T   F  I am responsible for the things that happen to me.
14. T   F  Kids get into trouble at school because of other students.
15. T   F  I am amazed at how often things seem to be controlled by fate.
16. T   F  People who cannot find a good job have simply not tried hard enough to find one.
17. T   F  Other people usually decide what is best for me.
18. T   F  Getting a traffic ticket is mostly a matter of bad luck.
19. T   F  What you get out of school depends upon what you put into it.
20. T   F  I don't get as far as I would like to on some projects because other people slow me down.
21. T   F  There's no use in planning because plans are usually changed by unexpected events.
22. T   F  I seldom try to find excuses to explain my mistakes.
<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
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<td>42. T</td>
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<td>43. T</td>
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</table>

- It is impossible to be a success without the help of others.
- Trouble often finds me without my doing anything.
- The grades that I get in class show how hard I study.
- Athletic teams often lose games because of poor calls by the umpire.
- Luck has been very important in my life.
- If you lose a contest, it is because you did not try hard enough.
- I depend on the teacher to tell me when I am doing a good job.
- Getting in trouble once in a while is something that just can’t be helped.
- People get job promotions when they have earned them.
- Other people are the greatest cause of my problems.
- On most jobs it takes a lot of luck to get everything done on time.
- If I play around too much in school, I probably will never get a good job.
- To get a promotion on a job you need to know the right people.
- Most of the time I can’t help doing the things that get me in trouble.
- If I really tried hard, I could probably become a class officer.
- It is almost impossible to get ahead if you don’t know the right people.
- What is going to happen in my future is pretty much already determined.
- Most people are responsible for their own problems.
- I don’t have much control over what happens to me.
- Some people just aren’t lucky when it comes to finding a job.
- Students who win class elections are the ones who work the hardest.
True  False
44.  T   F   If I don't understand something in class, it's usually because the teacher wasn't clear enough.
45.  T   F   Finding an interesting job is mainly a matter of luck.
46.  T   F   If I don't do well on a test, it is because I did not study hard enough.
47.  T   F   Pay raises are given to the workers that the boss likes the most.
48.  T   F   Bad luck explains a lot of my misfortunes.
49.  T   F   What I do now will determine what I do when I grow up.
50.  T   F   Poor grades go to the students the teacher doesn't like.
51.  T   F   My grades are determined by lucky guesses as much as by knowledge.
52.  T   F   The people who lose elections for class office are not as qualified as those who win.
53.  T   F   I usually agree with decisions made by adults.
54.  T   F   Students who fail tests are just bad guessers.
55.  T   F   Good luck is never as important as hard work.
56.  T   F   I get blamed for lots of things that really aren't my fault.
57.  T   F   Successful people have simply had better luck than unsuccessful people.
58.  T   F   When I get into trouble, I know pretty well what it is that I did wrong.
59.  T   F   It is easy to get good grades if the teacher likes you.
60.  T   F   If I am late for dinner, it is usually not my fault.
61.  T   F   I can accomplish the things I want to if I work hard.
62.  T   F   No matter how hard you try some people won't like you.
63.  T   F   Many things happen to me that I don't know how to control.
64.  T   F   Teachers give failing grades to those students who don't work hard enough.
65.  T   F   Decisions by other people will determine my future.
<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
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### Individual Classroom Means for CBQ

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<th>Means</th>
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This booklet contains questions about jobs, the job market, and career planning. Some questions ask about career facts; some ask about job requirements and skills; and others ask you to judge students' abilities, interests, and future job plans. Give the best answers you can.

All answers are to be marked on the two answer sheets provided. Make no marks in the booklet. You must use a number two pencil for answering the questions. Ask for a pencil if you do not have one.

The booklet is divided into four parts. For Part 1, you are to mark your answers on the first answer sheet. Find the number of the question on the answer sheet and circle the letters which correspond to your choices.

For Part 2, Part 3, and Part 4, you are to mark your answers on the second answer sheet. Find the number of the question on the answer sheet and mark the space which corresponds to the letter of your answer. Completely erase any changed answers or other marks on the answer sheet.

Answer all questions. If you are unsure of an answer, guess. There is no time limit, but work as rapidly as you can.

You do not have to place your name on the booklet or answer sheets. You will be told what information to place on each answer sheet.

The questions begin on the next page.
PART 1. Below you are given descriptions of persons. Read the description of each person and then select three job activities which you think that person might enjoy and be successful in. Circle your choices on the answer sheet for Part 1. Remember to circle three choices for each person described.

1. Leroy's best subject in school has always been English. He does exceptionally well in writing adventure stories, and several of his stories have been chosen for the school newspaper. On weekends and during the summer months, Leroy often goes hiking and camping in the mountains. He wants to get a full-time job immediately after graduation from high school. He might like a job which involves:
   A. operating a newspaper printing machine
   B. compiling information on historical sites for a travel guide
   C. maintaining records for a labor union committee
   D. taking care of dogs and cats while the owners are on vacation
   E. checking magazine articles for errors before they are published
   F. selling magazines to people in their homes

2. Stella took two shop courses in school this year which she enjoyed very much. At home, she has been learning to work with many of her father's tools and has begun to build shelves and a desk for her bedroom. She wants to spend about one year in a vocational school after high school. Her future job might involve:
   A. drawing blueprints for building construction
   B. selling shop equipment to training schools
   C. designing original floral arrangements
   D. operating a ferris wheel at an amusement park
   E. welding sheet metal in an auto body shop
   F. servicing and repairing office machinery

3. Brenda enjoys many different kinds of sports, but basketball and swimming are her favorites. Last summer she obtained a swimming senior lifesaving certificate, and she hopes to work as a lifeguard at a community pool next summer. Brenda's school grades are average, but she finds studying difficult. After high school, she wants to find a full-time job. Her job might involve:
   A. ordering stock for a sports equipment store
   B. greeting guests at a resort hotel
   C. assisting a scientist in studying the body chemistry of athletes
   D. teaching young children how to play tennis
   E. compiling lists of addresses for an advertising campaign
   F. conducting sightseeing tours of the city
4. Lonnie is a good student, and he does exceptionally well in mathematics. He is not a very outgoing person, but he seems to work well in groups. In his free time, he participates in a ham radio club, and he built and operates his own ham radio at home. Lonnie definitely plans to get a college education. His future job might involve:

A. selling stereo equipment
B. evaluating new auto transmissions
C. working with a telecommunications design team
D. giving radio news broadcasts
E. directing a television screenplay
F. developing programs for computers

5. Charles is a rather shy person who does not talk much in school or participate in any after-school activities. At home, he prefers to work with his father's tools making things out of wood. He recently made his mother a jewelry box and his father a pipe holder. Charles is interested in some type of vocational training after high school. His future job might involve:

A. opening and forwarding mail to the proper offices
B. upholstering furniture
C. answering people's questions at an information booth
D. cutting metal with a torch
E. demonstrating the use of a new office machine
F. maintaining the boiler in an apartment building

6. Robert is presently the captain of the school football team. In his spare time, he likes to work at the community center as a volunteer athletic supervisor. Robert has above average grades in most courses, but he has some difficulty with mathematics and science. He plans to go to college before seeking a full-time job. His future job might involve:

A. filling drug prescriptions for patients in a hospital
B. drawing designs for city playgrounds
C. selling advertisements for a newspaper
D. teaching youngsters how to get along with one another
E. analyzing the results of public opinion polls
F. promoting social activities on a luxury liner

7. Rhonda has difficulty with school work, but her teachers and fellow students find her dependable and hardworking. For several months she has had a job as a helper in the school cafeteria. Her work includes serving food to students in the cafeteria line and cleaning tables at the end of the lunch hour. Rhonda enjoys this job because she gets to see lots of people at lunchtime. Her future job might involve:

A. operating a clothes pressing machine at a laundry
B. typing transcripts of court trials
C. delivering meals to hospital patients
D. collecting money from cars at a toll bridge
E. writing reports on highway accidents for the police department
F. selling lawn and garden supplies at a hardware store
8. Virginia is a very talkative, outgoing person. She is the oldest girl in a family of six children and frequently has responsibility for caring for her younger brothers and sisters. At school, she is active in a number of clubs, and this year she starred in the school play. Her grades are above average, and she wants to complete college. Her future job might involve:

A. editing reports for a television news broadcast
B. writing an elementary reading book for young children
C. supervising the secretarial staff in a large law firm
D. giving the weather report on a radio station
E. teaching English to foreign-speaking persons
F. designing sets for stage plays

9. Joan is an above-average student whose favorite subject has always been mathematics. Joan's father owns a small camera shop, and Joan likes working part-time for her father each summer, placing orders for cameras and camera equipment and selling cameras to customers. She wants to get some type of business training after high school, but she is not interested in four years of college. Her future job might involve:

A. planting bushes and trees at a nursery
B. keeping sales records for an electronics firm
C. repairing audio-visual equipment
D. managing a bicycle sales store
E. developing photographs for a portrait studio
F. purchasing materials for a construction company

10. Don is a very active person. He plays all kinds of sports, and he also keeps himself in good physical shape by working out in the gym several afternoons each week. After graduating from high school, Don wants to get a full-time job. He does not know exactly what kind of job he wants, but he is sure that he does not want an office-type job. He might like a job which involves:

A. cutting limbs off trees
B. operating a cash register
C. loading and unloading barges
D. pouring concrete
E. repairing small appliances
F. recording truck weights at a highway weighing station

All of the questions which follow are to be answered on the second answer sheet.

PART 2 Choose the one best answer to each question. Mark the letter of your answer on the answer sheet.

1. A longshoreman might be expected to do which of the following?

A. give advice on hairstyles
B. sell beachfront property
C. lift and carry heavy boxes
D. measure the length of lumber
E. operate a steamboat
2. A **computer programmer** needs to know how to do which of the following?
   - A. repair tape recorders
   - B. give artificial respiration
   - C. read mathematical symbols
   - D. replace broken windows
   - E. operate a television camera

3. A **real estate salesman** is best described by which of the following?
   - A. performs best under the direct supervision of others
   - B. likes to work with his hands
   - C. has good depth perception
   - D. is not afraid of heights
   - E. does not mind working on weekends

4. A **surveyor** is best described by which of the following?
   - A. enjoys classical music
   - B. is able to perform well under stress
   - C. does not mind large crowds of people
   - D. prefers to work evenings and nights
   - E. likes outdoor activities

5. A **bookkeeper** might be expected to do which of the following?
   - A. check for overdue library books
   - B. write book reviews
   - C. keep records of business transactions
   - D. arrange books in alphabetical order
   - E. operate a printing press

6. A **stock clerk** in a supermarket might be expected to do which of the following?
   - A. determine prices of items
   - B. dispense paychecks
   - C. cut and package meat
   - D. arrange employees' work schedules
   - E. shelf merchandise

7. A **lens grinder** might be expected to do which of the following?
   - A. adjust a television camera
   - B. work with precision tools
   - C. operate a concrete mixer
   - D. conduct eye examinations
   - E. advise people about stock market investments

8. Which of the following best describes the working hours of an **insurance salesman**?
   - A. irregular hours and weekends
   - B. regular hours five days a week
   - C. only nights
   - D. mostly mornings
   - E. only on weekends
9. A person who has a talent for public speaking might be successful in which occupation?
   A....trial lawyer
   B..nurse
   C....family doctor
   D..mathematician
   E....shoe salesman

10. Which of the following gives information about advanced education and training facilities throughout Washington State?
    A....Mapping Your Education
    B..Northwest Quarterly
    C....Chamber of Commerce Weekly
    D..Dictionary of Occupational Titles
    E....Seattle Times

11. What technological advancement has most influenced the job market in the last ten years?
    A....television
    B..microwave heating devices
    C....widespread use of computers
    D..steam-powered engines

12. If supertankers bringing oil from Alaska were allowed to unload their oil cargo in the Puget Sound area, the most direct effect on the local job market might be:
    A....increase in tourism and related industries
    B..decreased banking and other financial operations
    C....decreased need for doctors, lawyers, and other professional people
    D..increased need for construction workers and other blue-collar workers

13. High rates of unemployment are likely to occur during a period of:
    A....economic stability
    B..warfare
    C....economic expansion
    D..inflation
    E....recession

14. Which of the following represents a current trend in the job market?
    A....increase in the number of women in professional jobs
    B..longer work weeks
    C....greater reliance on individuals rather than machines
    D..decreased need for professional service jobs
15. Which of the following represents a current trend in the job market?

A. increase in middle-level technician jobs
B. retirement at a later age
C. increase in agriculture-related jobs
D. increase in assembly-line jobs

16. For each group below, select the line which best shows how a person may advance within an occupational field without additional formal education or training.

A. store cashier becomes store manager
B. nurse's aide becomes head nurse
C. dog groomer becomes veterinarian
D. welder becomes aeronautical engineer

17. A. reservation agent becomes airline pilot
B. school custodian becomes principal
C. lawyer becomes judge
D. short-order cook becomes dietitian

18. A. TV repairman becomes TV producer
B. swimming instructor becomes oceanographer
C. hospital orderly becomes surgeon
D. parts assembler becomes plant foreman

19. In each group below, choose the industry or occupational field which is not likely to be found in the Puget Sound area.

A. ranching
B. recreation
C. fishing
D. forestry

20. A. automobile assembly
B. pulpmills
C. shipbuilding
D. aerospace

21. Which one of the following is the best source of information about job duties and opportunities?

A. The Encyclopedia Britannica
B. World Almanac
C. Scholastic Magazine
D. The Occupational Index
E. The Occupational Outlook Handbook
22. Which one of the following would be most useful for detailed information about getting into college?

A. The World Book Encyclopedia
B. Webster's Collegiate Dictionary
C. Lovejoy's College Guide
D. Reader's Digest
E. The Education Index

23. Which one of the following pairs of occupations involves the same level of training and responsibility?

A. Tailor, Sales Clerk
B. Engineer, Banker
C. Tailor, Engineer
D. Banker, Sales Clerk

24. The occupational fields expected to grow most rapidly during the next ten years are:

A. Professional and service
B. Sales and crafts
C. Crafts and clerical
D. Labor and sales

25. Between 1910 and 1970, the industry employing the greatest number of workers changed from:

A. Agriculture to wholesale and retail trade
B. Manufacturing to agriculture
C. Wholesale and retail trade to manufacturing
D. Agriculture to manufacturing

26. In the 9th and 10th grades, plans about jobs and occupations should:

A. be clear
B. not rule out any possibilities
C. keep open the best possibilities
D. not be something to think about

27. Decisions about high school courses can have an effect on:

A. the kind of diploma one gets
B. the kind of training or education one can get after high school
C. later occupational choices
D. how much one likes school
E. all of these
28. Decisions about jobs should take into account:
   A....strengths, or what one is good at learning and doing.
   B..what one likes to do
   C....the kind of person one is
   D..the chances for getting ahead in that kind of job
   E....all of these

29: One of the things that great artists, musicians, and professional athletes have in common is the desire to:
   A....make money
   B..have large audiences
   C....be the best there is at what they do
   D..teach others to do what they do

30. Mary thinks she might like to become a computer programmer, but she knows little about computer programming. She is going to the library to find out more about it. The most important thing for Mary to know now is:
   A....what the work is, what she would do in it,
   B..what the pay is
   C....what the hours of work are
   D..where she can get the right training

31. Jane likes her high school biology and general science courses best. She likes to do her schoolwork alone so she can concentrate. When she begins to think about her future occupation, she should consider:
   A....Nurse
   B..Accountant
   C...Medical Laboratory Technician
   D..Elementary School Teacher

32. Peter is the best speaker on the school debating team. The school yearbook describes him as "our golden-tongued orator--a real nice guy who can listen as well as talk--he could sell refrigerators to the Eskimos." Peter will probably graduate in the bottom half of his class, although his test scores show that he is very bright. His only good grades (mostly B's) are in business subjects. His poorest grades are in English and social studies (mostly C's).

Peter's desire to become a trial lawyer is not very realistic because:
   A....with his grades he will have difficulty getting into a four year liberal arts college
   B..he has poor grades in the subjects that are most important for law
   C....there is much more to being a lawyer than being good at public speaking
   D..all of the above are good reasons for thinking that Peter will have a hard time becoming a trial lawyer
33. The facts about Peter suggest that he should think about becoming:

A...an accountant
B...a salesman
C...an actor
D...a school counselor
E...a lawyer

34. Ernie took some tests which show that he might be good at clerical work. Ernie says, "I just can't see myself sitting behind a desk for the rest of my life. I'm the kind of guy who likes variety. I think being a traveling salesman would suit me fine." He should:

A...disregard the tests and do what he wants to do
B...do what the tests say since they know better than he does what he would be good at
C...look for a job which will let him use his clerical abilities but not keep him pinned to a desk
D...ask to be tested with another test since the results of the first one are probably wrong

35. Joe is very good with his hands and there isn't anybody in his class who has more mechanical aptitude. He is also good at art. His best subject at school is math. Joe likes all of these things.

What should Joe do? Should he:

A...look for an occupation in which he can use as many of his interests and abilities as possible?
B...pick an occupation which uses math since there is a better future in that than in art or in working with his hands?
C...decide which of these activities he is best at, or likes the most, and then pick an occupation which uses that kind of activity?
D...put off deciding about his future and wait until he loses interest in some of these activities?

36. Betty gets very good science grades but this isn't her favorite subject. The subject she likes best is art even though her grades in it are only average. Betty is most likely to do well in her future occupation if she:

A...forgets about her interest in art since she is so much better in science
B...doesn't worry about the fact that she isn't very good at art, because if you like something you can become good at it
C...looks for an occupation which uses both art and science, but more science than art
D...looks for an occupation which involves both science and art, but more art than science
37. Bob says he really doesn't care what kind of work he gets into once he leaves school as long as it is working with people. If this is all Bob cares about he is likely to make a bad choice because:

A....this kind of work usually requires a college degree  
B....employers usually hire girls for such work  
C....people look down on men who work with people because such work is usually done by girls  
D....occupations in which one works with people can be very different from each other in the abilities and interests which are needed.

PART 3 Occupations are different in the amount of education required for employment. Match the occupation in Column A with the amount of education usually required (Column B) by making the letter of the correct answer on the answer sheet:

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>Education</td>
</tr>
<tr>
<td>38. Stenographer</td>
<td>A. High School Graduation</td>
</tr>
<tr>
<td>39. Dental Technician</td>
<td>B. Apprenticeship Training</td>
</tr>
<tr>
<td>40. Family Doctor (Physician)</td>
<td>C. Technical School or Community College (2 year)</td>
</tr>
<tr>
<td>41. Mail Carrier</td>
<td>D. College Degree (4 year)</td>
</tr>
<tr>
<td>42. Plumber</td>
<td>E. Professional Degree Beyond College</td>
</tr>
<tr>
<td>43. Computer Operator</td>
<td></td>
</tr>
<tr>
<td>44. Bank Clerk</td>
<td></td>
</tr>
<tr>
<td>45. Social Worker</td>
<td></td>
</tr>
</tbody>
</table>

PART 4 Many occupations use special tools. Below is a list of special tools or equipment and a list of occupations. Match the occupation in Column A with its equipment (Column B) by marking the letter of the correct answer on the answer sheet.

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>Equipment</td>
</tr>
<tr>
<td>46. Electrician</td>
<td>A. Manikin</td>
</tr>
<tr>
<td>47. Bookkeeper</td>
<td>B. Ammeter</td>
</tr>
<tr>
<td>48. Bricklayer</td>
<td>C. Centrifuge</td>
</tr>
<tr>
<td>49. Dressmaker</td>
<td>D. Trowel</td>
</tr>
<tr>
<td>50. Medical Technician</td>
<td>E. Ledger</td>
</tr>
</tbody>
</table>

11
Dear Senior:

Within a very short time you will be a graduate of the Highline Schools — Congratulations!!

We would appreciate your assistance in completing the following questionnaire as to your plans and your views on how well your experiences carried out the school district's educational goals.

We would like to contact you again next May to get your feelings after leaving high school for a year. Please give us an address where we may reach you directly or by forwarding.

Thank you for your help.

Gene Craig
Assistant Supt. for Instruction

Name ___________________________ School ___________________________

1976 Address ___________________________ Zip: ___________________________

Number of years you attended Highline Schools: (Please circle)

1 2 3 4 5 6 7 8 9 10 11 12

Please check the appropriate statement.

I. General Information

A. After graduation from high school my major plans for the next year are for: (Check only one.)

   1. Immediate employment
   2. Continue full-time education
   3. Full-time employment and part-time education
   4. Part-time employment and part-time education
   5. Military service
   6. Marriage
   7. Other (explain)

B. These plans are something I decided on:

   1. This past year
   2. Since I've been in high school
   3. While I was in junior high
   4. While I was in elementary school

C. Who was most influential in helping you make your decision for the next year?

   1. Nobody
   2. Parents
   3. Friends
   4. Teacher
   5. Counselor
   6. Other (explain)

II. A look back — (Please circle appropriate number)

Goals have been identified by the Highline community that have provided the direction and framework for the educational program you are completing. Would you evaluate the schools effectiveness in helping you?

**Intellectual Skills Goal**

Did your school experiences---

1. Teach you how to study?
2. Make you feel competent in expressing your thoughts?
3. Help you develop handwriting that others can read easily?
4. Teach you how to write and spell?
5. Prepare you with enough math skills to get along in the everyday world?
6. Prepare you with a basic understanding of the scientific world?
7. Prepare you to read?

<table>
<thead>
<tr>
<th></th>
<th>No relation to schools</th>
<th>Highly Effective</th>
<th>Effective</th>
<th>Mediocre</th>
<th>Poorly Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>0</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

What subject(s) experiences, or grade level was particularly significant in your dealing with the above goal? 145
### Human Needs Goal

**Did your school experiences—**

<table>
<thead>
<tr>
<th>No relation to schools</th>
<th>Highly Effectve</th>
<th>Effectve</th>
<th>Mediocre</th>
<th>Poorly Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help you to understand yourself?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Teach you to understand the behavior of others?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Help you to accept a rapidly changing society?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Help you to define personal values?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Help you to get along with other people?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Help you in developing leisure time activities?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

### Career Planning Goal

**Did your school experiences—**

<table>
<thead>
<tr>
<th>No relation to schools</th>
<th>Highly Effectve</th>
<th>Effectve</th>
<th>Mediocre</th>
<th>Poorly Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help you develop a job skill related to the world of work?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Help you develop career plans based on your own interests, values, and attitudes?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Make you aware of post-high school training institutions that will help you further your career planning?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Help you to know how to apply for work?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

### Civic Rights and Responsibility Goal

**Did your school experiences—**

<table>
<thead>
<tr>
<th>No relation to schools</th>
<th>Highly Effectve</th>
<th>Effectve</th>
<th>Mediocre</th>
<th>Poorly Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Give you a basic understanding of this country's political and economic system?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Encourage you toward wanting to be an active voter?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Help you in understanding the issues in the world today?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Give you a sufficient understanding of the proper use of our material and human resources?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Give you a sufficient understanding of this country's minority concerns?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

### III. A look ahead—

**A.** In making a self-analysis do you see your strongest aptitude and interest in working with—(choose one)

1. Data (such as computer technician, typist, science-related, working with information)
2. People (person contact, such as teacher, sales work, supervisor)
3. Things (such as a mechanic, artist, assembler, working with tools and objects)

Choose a column

**B. Employment**

1. Which of the following best describe your situation?
   - I have a job already
   - Plan to continue with my present part-time job
   - Have a part-time job, but looking for something better
   - Doing some serious looking, but no job yet
   - Will start looking after graduation
   - Need a long vacation first, then I'll start looking
   - No plans and not sure how to start
   - Other (explain)

2. Do you feel you have a pretty good idea of what type of work you would like to do for the next 3 to 5 years? Yes No

**C. Education or training**

1. Do you plan to attend:
   - Community college
   - Four year institution
   - Vocational-technical institute
   - Private training school
   - Other (explain)

2. What will be your program emphasis? (choose one)
   - Agriculture
   - Behavioral Sciences (Psychology, etc.)
   - Business and Commerce
   - Education
   - Engineering
   - Health Occupations
   - Industrial Crafts (Welding, etc.)
   - Law, Law Enforcement
   - Liberal Arts (Literature, etc.)
   - Mathematics and Science
   - Technician Training
   - Other (explain)
## Vocational Hours Summary

### 1973 - 1975

<table>
<thead>
<tr>
<th>School &amp; Subjects</th>
<th>1972-73</th>
<th>1973-74</th>
<th>1974-75</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>O.S.C.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breakfast</td>
<td>--</td>
<td>--</td>
<td>9,720</td>
<td>9,720</td>
</tr>
<tr>
<td>Clothing</td>
<td>10,260</td>
<td>8,640</td>
<td>7,560</td>
<td>26,460</td>
</tr>
<tr>
<td>Dental Assist.</td>
<td>--</td>
<td>11,340</td>
<td>15,660</td>
<td>27,000</td>
</tr>
<tr>
<td>Foods</td>
<td>36,180</td>
<td>30,780</td>
<td>14,580</td>
<td>81,540</td>
</tr>
<tr>
<td>Hydraulics</td>
<td>--</td>
<td>3,780</td>
<td>11,340</td>
<td>15,120</td>
</tr>
<tr>
<td>Marine Tech.</td>
<td>17,820</td>
<td>14,580</td>
<td>20,520</td>
<td>52,920</td>
</tr>
<tr>
<td>Med. Assist.</td>
<td>17,820</td>
<td>18,900</td>
<td>10,260</td>
<td>46,980</td>
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<tr>
<td>Plastics</td>
<td>19,980</td>
<td>22,140</td>
<td>21,600</td>
<td>63,720</td>
</tr>
<tr>
<td>Vis. Comm.</td>
<td>21,060</td>
<td>16,740</td>
<td>18,360</td>
<td>56,160</td>
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<tr>
<td></td>
<td>123,120</td>
<td>126,900</td>
<td>129,600</td>
<td>379,620</td>
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<tr>
<td><strong>Evergreen</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.E.</td>
<td>8,550</td>
<td>14,580</td>
<td>10,800</td>
<td>33,930</td>
</tr>
<tr>
<td>Bus. Ed.</td>
<td>81,900</td>
<td>62,640</td>
<td>61,740</td>
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<tr>
<td>Service Sta.</td>
<td>6,480</td>
<td>16,200</td>
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<td>Divers. Ccc.</td>
<td>24,255</td>
<td>30,780</td>
<td>22,580</td>
<td>77,715</td>
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<tr>
<td>Home &amp; Fam. Life</td>
<td>--</td>
<td>--</td>
<td>19,800</td>
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</tr>
<tr>
<td></td>
<td>121,185</td>
<td>124,200</td>
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<td>369,450</td>
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<tr>
<td><strong>Glacier</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>D.E.</td>
<td>8,640</td>
<td>9,540</td>
<td>12,420</td>
<td>30,600</td>
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<tr>
<td>Bus. Ed.</td>
<td>47,340</td>
<td>39,600</td>
<td>43,020</td>
<td>129,960</td>
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<tr>
<td>FEAST</td>
<td>7,920</td>
<td>8,100</td>
<td>7,560</td>
<td>23,580</td>
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<tr>
<td>Automotive</td>
<td>5,760</td>
<td>11,880</td>
<td>12,600</td>
<td>30,240</td>
</tr>
<tr>
<td>Home &amp; Fam. Life</td>
<td>--</td>
<td>--</td>
<td>10,710</td>
<td>10,710</td>
</tr>
<tr>
<td></td>
<td>69,660</td>
<td>69,120</td>
<td>86,310</td>
<td>225,090</td>
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<tr>
<td><strong>Highline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>D.E.</td>
<td>28,610</td>
<td>38,700</td>
<td>37,080</td>
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<td>66,780</td>
<td>58,950</td>
<td>72,540</td>
<td>198,270</td>
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<td>Electronics</td>
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<td>--</td>
<td>8,640</td>
<td>8,640</td>
</tr>
<tr>
<td>Home &amp; Fam. Life</td>
<td>--</td>
<td>--</td>
<td>13,320</td>
<td>13,320</td>
</tr>
<tr>
<td></td>
<td>95,390</td>
<td>103,590</td>
<td>125,640</td>
<td>324,620</td>
</tr>
<tr>
<td><strong>Mt. Rainier</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>D.E.</td>
<td>22,976</td>
<td>19,800</td>
<td>15,840</td>
<td>58,616</td>
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<td>73,980</td>
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<td>Divers. Occ.</td>
<td>5,580</td>
<td>5,940</td>
<td>8,640</td>
<td>20,160</td>
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<tr>
<td>Home &amp; Fam. Life</td>
<td>--</td>
<td>--</td>
<td>29,700</td>
<td>29,700</td>
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<tr>
<td></td>
<td>103,076</td>
<td>99,720</td>
<td>116,820</td>
<td>339,776</td>
</tr>
</tbody>
</table>

147
### Vocational Hours Summary, 1973-1975

<table>
<thead>
<tr>
<th>School &amp; Subjects</th>
<th>1972-73</th>
<th>1973-74</th>
<th>1974-75</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tye</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.E.</td>
<td>13,572</td>
<td>16,200</td>
<td>15,120</td>
<td>44,892</td>
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<tr>
<td>Bus. Ed.</td>
<td>54,900</td>
<td>40,680</td>
<td>55,440</td>
<td>151,020</td>
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<td>Horticulture</td>
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<td>11,160</td>
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<td>589,543</td>
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8/15/75/ta
A Comparison between the Students' Objectives Developed for the Highline School District's Career Alternatives Model and those prepared for the U.S.O.E. by Development Associates

In this comparison the objectives prepared by Development Associates are used to provide the framework. CAM objectives related to these objectives are identified by number as follows:

Roman numeral - Goal Statement
First. arabic numeral - grade level
Following arabic numerals - specific objective
1. Students will demonstrate increased self-awareness: in relationship to the world of work.

   A. Students will be able to describe their own current abilities and limitations. II 3-1, II 12-2
   B. Students will be able to describe their own current interests and values. I 3-3, II 12-3
   C. Students will display positive attitudes toward themselves. II 9-3
   D. Students will recognize that social, economic, educational, and cultural forces influence their development. II 6-1

II. Students will demonstrate increased competency in basic academic/vocational skills: as they relate to employability. I 9-3

   A. Students will be able to demonstrate generally useful numerical skills. IV 3-1, IV 6-1
   B. Students will be able to demonstrate generally useful communication skills.
   C. Students will be able to demonstrate generally useful information processing skills. IV 3-2-3
   D. Students will be able to demonstrate generally useful decision-making skills. IV 6-2
   E. Students will be able to demonstrate generally useful interpersonal skills.

III. Students will demonstrate increased awareness of work values and possess a desire to engage in paid and/or unpaid work: III 6-1-2

   A. Students will recognize the bases of various work values. II 6-2, III 3-1-3, III 12-2
   B. Students will possess positive attitudes towards paid and unpaid work. III 3-2, III 6-3, III 9-1-3, III 12-1

IV. Students will demonstrate increased awareness of and knowledge about work:

   A. Students will know the major duties and required abilities of different types of paid and unpaid work. I 3-1, I 6-1-2-3
   B. Students will know differences in work conditions and life styles associated with different types of paid and unpaid work. I 3-2
C. Students will know entry requirements for major types of paid and unpaid work. 1 9-2, 11 6-3

D. Students will know the impact of social and technological change on paid and unpaid work. 1 9-3, 1 12-1.

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

V. Students will demonstrate increased competency in career decision-making skills:

A. Students will be able to associate their own abilities and limitations with possible success in present or future paid and unpaid work.

B. Students will be able to relate their personal interests and values. 11 3-3

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

D. Students will be able to determine the potential for future advancement/personal growth in work of their choosing. 11 12-2-3

E. Students will know the steps to be taken and the factors to be considered in career planning. 11 9-1-2

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

VI. 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. IV 6-3

C. Students will have a positive attitude towards the concept of quality in relation to a work task. IV 9-1

D. Students will have a positive attitude towards conservation of environmental and human resources in accomplishing work tasks. IV 9-3

E. Students will have a positive attitude towards 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. II 12-1, III 9-2, III J2-3
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. V 12-3

B. Students will be able to demonstrate skills required in applying for and accepting work. IV 9-2, IV 12-2-3

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. IV 12-1

IX. Students will be aware of means available for continued education once they have left the formal educational system: V 9-1

A. Students will be able to identify sources of additional education in major types of paid and unpaid work. V 9-2-3, V 12-1-2

B. Students will be able to identify means to support additional education for themselves in major types of paid and unpaid work.
<table>
<thead>
<tr>
<th>Month</th>
<th>E.V.A.</th>
<th>Work</th>
<th>Value</th>
<th>Skills</th>
<th>Placement</th>
<th>Infusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Compile summer writing projects.</td>
<td>Renew 1st year efforts</td>
<td>Initiate</td>
<td>Review position paper developed in 1st year.</td>
<td>Meet with placement committee</td>
<td>Initiate career information center at Evergreen and Glacier High Schools. Review objectives for small group tours. Develop request form.</td>
</tr>
<tr>
<td>Month</td>
<td>E.V.A.</td>
<td>Work</td>
<td>Value</td>
<td>Skills</td>
<td>Placement</td>
<td>Infusion</td>
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<tr>
<td>Dec</td>
<td>CAM rep meeting</td>
<td>Disseminate 1 and 2</td>
<td>Complete Kit 3 and 4</td>
<td></td>
<td></td>
<td>Report field trip information</td>
</tr>
<tr>
<td>Jan</td>
<td>CAM rep meeting</td>
<td>Initiate 2 new work samples</td>
<td>Plan 1975-1976 skill preparation offerings</td>
<td>Identify changes in placement which have occurred</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>CAM rep meeting</td>
<td>Disseminate 3 and 4</td>
<td></td>
<td>Develop plan for accomplishing objectives</td>
<td></td>
<td></td>
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<tr>
<td>Mar</td>
<td>CAM rep meeting</td>
<td>Meet with 1975-76 principals and counselors</td>
<td>Complete kit 5 and 6</td>
<td></td>
<td>Disseminate successful samples of infusion Package and disseminate successful field trip ideas</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>Field test 5 and 6</td>
<td></td>
<td>Develop schedule for observation</td>
<td></td>
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<tr>
<td>May</td>
<td>Advisory committee</td>
<td>Outline new work samples</td>
<td>Advisory committee</td>
<td>Advisory committee</td>
<td></td>
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<tr>
<td>June</td>
<td>Complete Pre-post data</td>
<td>Compile data from participants</td>
<td></td>
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<tr>
<td>Month</td>
<td>Guidance</td>
<td>Management</td>
<td>Exportation</td>
<td>Evaluation</td>
<td>In-Service</td>
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<tr>
<td>July</td>
<td>Review 1st year critique and initiate revisions</td>
<td></td>
<td></td>
<td>Choose 3rd party evaluator for 2nd year.</td>
<td></td>
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<tr>
<td>Aug</td>
<td>Meeting and guidance committee: Develop action plan and objectives.</td>
<td>Principals advisory committee</td>
<td></td>
<td>Sign contract/ Materials work shop for teachers and principals, CAM reps meetings</td>
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<tr>
<td>Sept.</td>
<td></td>
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<td>Develop evaluation plan: Collect baseline data.</td>
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<tr>
<td>Oct</td>
<td>Form parent advisory committee to examine role of parent assistance of school</td>
<td>Develop participant log to measure accomplishment.</td>
<td></td>
<td>Begin Career Education Class/ Western Tech 494 through Initiate In-Service program</td>
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<tr>
<td>Dec</td>
<td>Attend American Vocational Assoc. meeting</td>
<td>Reports to: USOE, Reporter to state and national</td>
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<td>Brief accomplishment report</td>
<td></td>
<td></td>
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<tr>
<td>Jan</td>
<td>Parent committee</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Feb</td>
<td></td>
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155 2
<table>
<thead>
<tr>
<th>Month</th>
<th>Guidance</th>
<th>Management</th>
<th>Exportation</th>
<th>Evaluation</th>
<th>In-Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar</td>
<td>Write &quot;parent suggestions&quot; pamphlet with committee</td>
<td></td>
<td>Brief accomplishment report</td>
<td>In-service day emphasis-Major Thrusts.</td>
<td>1. demo materials 2. tours 3. work sample try out for counselors</td>
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<tr>
<td>Apr</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td>Collect terminal data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Reporter to state and national</td>
<td>Reports</td>
<td>Reports</td>
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ACTIVITY PACKET

This packet contains copies of suggested student worksheets, original activities prepared by teachers in the Highline School District, and related career education material which is locally available.
Extra Activities

This packet contains primarily student worksheets adapted from the Bread & Butterflies guide. In addition, a few extra activities are included as suggestions. These extra activities have been included first.

1. This activity will provide the student with many decisions and a chance to show his organization ability as well as his ability to work with a group. Let a student volunteer to act as "teacher" for a thirty to forty-five minute block of time. Let the volunteer decide what he or she wants to teach and make a written plan as to how they plan to accomplish the goal they have set. Have the student check the plans with you to see they are appropriate and well thought out. The teacher then takes the place of the student and actually does the assignment and participates in the discussion as the student might have done. In turn, the student presents his material and discussion, gives the assignment, maintains order, corrects the assignment and does as the teacher would have done. A lot of insight into your own teaching can be revealed if the student does many of the things you do -- it's fun -- give it a try.

2. Students might enjoy writing and demonstrating for the class how to perform a certain task. Have each student decide what he would like to demonstrate -- some examples might be tying flies, sewing on a button, planting a seed, or doing a certain art project. Then have each child write step by step how to accomplish his task. He is then to gather the materials necessary and perform the demonstration for his classmates. The written instructions and illustrations, if appropriate, could be combined into a book to share with other classes in your school.
Would could make you change your mind about Tommy's decision? Please write what you would do if:

1. Joey had said $40 instead of $20?

2. Mom said it was up to you, but she wished that you would go with Joey?

3. Father said you ought to stay in town, but the final decision had to be yours?

4. You really had fun with Joey and liked him a lot?

5. One of the guys threatened to beat you up if you went with Joey?

6. Joey's grandmother was unable to get any help and really needed you?

7. Joey's grandmother promised you'd be in charge of other kids she would hire to help?

Look at your answers. How can your choices tell you something about what is important to you? How can you find out more about your values?
Fill out this time chart showing all the things you did from the time you left school until you went to bed. Beside each activity list all the other choices of activities you could have done instead.

How much time were you free to chose what you wanted to do?

Will your choices increase or decrease as you get older?

Think of the last dollar you spent. How else could you have used it?

In the last argument you had, how else could you have reacted?
Think about the values that were important to Tommy — being fair to his friend, being liked by others, earning money, etc. What did Tommy value most?

Write your definition of a "value?"

List twelve things that you consider important (that you value). Break your list into three categories: most important, fairly important, least important. Put the list in a safe place. A week from today look at your list. What changes would you make? Why does a person's values change?

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Fairly Important</th>
<th>Least Important</th>
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<tr>
<td>1.</td>
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<td>2.</td>
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<td>4.</td>
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</table>
Think about Tommy's goals -- (to buy a horse, to make a friend). What is your definition?

What is a goal you could work toward this week?

What will you have to do to reach that goal?

What is a goal you might be able to achieve this summer?

What will you have to do to reach that goal?

What are your future goals?

Are you working toward them now?  How?
COMMUNITY RESOURCE REQUEST

Name ____________________________  School ____________________________
Curricular Area ____________________  Level ____________________________
Topic ______________________________

I would like to schedule a:

____ small group tour
____ resource speaker

Number of students to be involved __________

Preferred dates __________________________

Career components to be emphasized. (See CAM Rep.):

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________

Approved by ________________________________ (Principal).

For additional information, call Fran Harrison 2338.
Appendix "D"

Post Field Trip Activities

Suggestions:

1. Display the photographs taken on the field trip. Students should write their own captions.

2. Replay the recorded interviews. Discuss. Were the answers to the interview questions different than the students might have predicted.

3. Discuss and display the student observation sheets.

4. Role playing of the jobs observed.

5. Simulation of certain jobs in the classroom. Activities relating to carpentry, cooking, printing, assembly line work, and others, can provide interesting experiences.

6. Art ideas are almost unlimited:
   - puppetry
   - murals
   - drawings
   - dioramas
   - mobiles
   - sequence picture charts
   - cartoons

7. Writing experiences include:
   - cartoon captions
   - reports
   - poems
   - plays
   - stories
   - sequential steps
   - thank you letters

   Create a booklet about the jobs observed. Include illustrations, captions, cartoons, and stories about the job. The booklet cover could be created by the children. Book binding is available if you wish to make more permanent copies for the classroom or school library.

8. Further information about the jobs can be gained from books, films, and filmstrips. Many are in your school library or can be obtained from E.R.A.C.
Name ___________________________ Date ____________

Name of job ________________________

Circle the word or words in each group that fits the things this worker does.

**Group 1  Information**

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<td>write</td>
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<td>record</td>
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**Group 2  People**

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<tbody>
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<td>talk to</td>
<td>boss</td>
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<td>lead</td>
<td>tell'</td>
<td>help</td>
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<tr>
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<td>serve</td>
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**Group 3  Things**

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<td>lift</td>
<td>inspect</td>
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<tr>
<td>build</td>
<td>set up</td>
<td>check</td>
</tr>
<tr>
<td>operate</td>
<td>hold</td>
<td>fix</td>
</tr>
<tr>
<td>clean</td>
<td>invent</td>
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</tbody>
</table>
Student Observation Sheet

Your name _____________________________

Where did you go? _______________________

When did you go? _________________________

How many jobs did you see? ____________

Name the jobs: ___________ __________

_________________ ____________

_________________ ____________

Choose your favorite job. Draw a picture
of it.

Does this worker use tools? ____________
(Yes, No)

If "yes" draw a picture of the tools.

Would you like to do this job? ____________
(Yes, No)
Work Sampling as Exploration

The Highline School District has established several goals for the career education program. With "Awareness" delegated to the elementary school years, and "Training and Placement" placed at the senior high level, junior high bridges the gap with the goal of EXPLORATION.

To explore implies the ability to locate as well as to classify pertinent information. The "Career Exploration Lab" was developed to assist the students in two ways:

1. Provide participatory experiences to give equal exposure to the different categories of work, and

2. Teach the necessary tools of vocabulary and organizational framework needed for the student to evaluate his or her interests, abilities, and values relating to a variety of occupational goals.

The particular tool chosen to communicate this information is that of "work sampling."

"Work Samples" refers to a system of occupational explorations based on involvement in, and reaction to, simulated work tasks.

A "work sample" is a sample of work as performed by real workers in paid employment. The work sample attempts to duplicate the tools, methods, and working conditions of the actual job situation. It is a "hands-on" approach to demonstrating the realities of the work world.

The application of work sampling as an exploratory tool is innovative. (Work sampling has been used since the 1930s as a means of evaluation preparatory to job training or placement.) Students react positively to this new application of an old technique. As one student said, "It gave me an idea what work is like."

The Career Lab brings together a variety of work samples for student exploration. The rest of the REPORT describes underlying theory as well as practical aspects of the lab program.

EXPLORATION - NOT CLOSURE - IS THE KEY TO JUNIOR HIGH SCHOOL STUDENTS' EXPOSURE TO THE WORLD OF WORK. MOST STUDENTS HAVE HAD SUCH A LIMITED AWARENESS OF JOB POSSIBILITIES THAT ANY CHOICE BETWEEN THOSE POSSIBILITIES WOULD BE PREMATURE...AND POSSIBLY INACCURATE.

Following CAM's procedure each career education component will serve as the focal point of one issue of the REPORT. This issue features the Career Exploration Lab.
CAM focuses on the Worker

The Career Exploration Lab describes the world of work from a worker-centered point of view. Most programs approach jobs through "clusters" in which jobs are connected by a common thread of economic process or product. For example, air traffic controller, stewardess, truck driver and mechanic are supposedly related because they all are transportation workers. From a worker-centered approach, however, there is little similarity in these jobs. And it is, after all, from a view of themselves as potential workers that students must come to understand the world of work if they are going to make appropriate decisions about jobs. From this rationale, CAM decided that one of the most relevant things that could be done for students was to give them a thorough grounding in the concept that jobs can be compared on the basis of how the worker must relate to either DATA, PEOPLE, or THINGS. Work samples illustrating these categories form the basic structure of the Lab. Other worker-trait characteristics (as developed by the Department of Labor) are also introduced and related to the DATA-PEOPLE-THINGS structure.

The Career Lab, by providing hands-on activities, permits the student to operate in the familiar world of concrete experience. But each activity has been planned to lead the student toward a working understanding of the DATA-PEOPLE-THINGS construct.

Lab Reflects Local Labor Market

Two related facts influenced the decision to develop locally pertinent job materials:

1. The King County labor market does not conform to the standard American labor market.

2. Most Highline graduates will remain in the South King County area.

Two additional facts determined the emphasis of the materials:

1. Most commercially prepared materials are aimed at college-bound students.

2. Most Highline graduates will not attend a 4-year college.

For the above reasons, CAM has tried to develop materials which meet the students' future work patterns and the labor market in which they will be seeking employment.

Why Ninth Graders?

During the 1974-75 school year, 1000 ninth graders from four junior highs will have had the opportunity to visit the lab. Some people ask, "Why talk to ninth graders (instead of high school seniors)?"

Students in junior high do not have to make decisions about the kind of job they want to hold as an adult. But during the next few years, their horizons will expand rapidly as they gain new experiences. Now is a good time to learn how to make comparisons between jobs.

Meanwhile, students will be deciding on:

1. Summer jobs.

2. High School class experiences.

3. Plans to attend the Occupational Skills Center or other Vocational Education Program.

Any of those decisions can open or close doors on the student's future choice of jobs. Learning a useful classification system at this age can help the student to extract the most possible from each new experience in the coming years.
WHAT'S GOING ON?

What do students actually do during the two days that they are at the lab? After an introduction to the lab's purpose and terminology, students begin the work sampling process. Most of the two days is spent sampling the nine major categories of work described in the adjacent article.

Each work sample takes forty-five minutes to complete. Students rotate between work samples, completing all three work samples in each area (DATA or PEOPLE or THINGS) before moving on to the next major area. During the forty-five minutes allocated to each work sample, the student (1) will get an introduction to that category of work, (2) will see slides of Seattle-area workers whose job fits within that particular category, and (3) will have the opportunity to try out a sample of work from that category.

Other "attractions" experienced during the two days include:

1. Extensive opportunities to browse through career materials.
2. Availability of lab supervisor's expertise in locating sources of information.
3. Self-chosen tour of one of the vocational training programs in the Occupational Skills Center.
4. Measurement of ability to meet physical requirements for jobs.
5. Introduction to other factors which will affect job choice, including Values, Temperaments, and the Labor Market.
6. Exposure to a wide variety of career choices and to community sources of further career information through the medium of the Counselor Film, "The World of Work."

WE TEACH STUDENTS THE QUESTIONS THEY SHOULD BE ASKING ABOUT JOBS, AND HOW TO FIND THEIR OWN ANSWERS.

Third Party Evaluation

The Lab has been developed on the assumption that students who can view jobs in terms of the Data-People-Things construct, as well as other worker-trait characteristics, will be better prepared to understand the relationship between specific jobs and personal preferences, aptitudes, etc. Consequently, evaluation of the Lab's impact on participating students has been designed to measure the students' abilities to apply the Data-People-Things construct when presented with brief hypothetical cases.

This evaluation is being conducted by a team from the Bureau of School Services, an agency of the University of Washington, as a part of CAM's total evaluation plan.

Initial results will be available soon and will be presented in a future edition of the REPORT as well as incorporated in CAM's second annual report to the USOE.
A VISITOR'S VIEW

Getting Directions for DATA activity

- Carrels
- Work Tables

Testing Interest in THINGS

Taping PEOPLE Interactions
NINE 'HANDS-ON' EXPERIENCES
DEMONSTRATE HOW TO LOOK AT JOBS

DATA TASKS (work with ideas, words, numbers, etc.)

Complex level--INVENT/ANALYZE
Definition: Puts information together to make new combinations.
Work Sample: Employment Interviewer.

Medium level--RECALL/COMPUTE
Definition: Collects or manipulates already known information.
Work Sample: Grocery checker, Car Rental Agent.

Low level--COPY/COMPARE
Definition: Transcribes information or inspects for quality.
Work Sample: Mail Sorter.

THINGS TASKS (work with machines, hand-tools, or with the hands)

Complex level--UNDERSTAND MACHINES/PRECISION WORK
Definition: Understands possibilities for machines or products. Great latitude in choosing method.
Work Sample: Template Maker

Medium level--OPERATE/MANIPULATE
Definition: Controls operation, but method is standard.
Work Sample: (Stereo Speaker) Assembler.

Low level--FEED/HANDLE
Definition: Becomes adjunct to machine or to process.
Work Sample: Furniture Mover.

PEOPLE TASKS (interacts with a variety of people)

Complex level--UNDERSTAND/SUPERVISE
Definition: Understands other person's needs, works within the framework of those needs.
Work Sample: Front-line Supervisor.

Medium level--PERSUADE
Definition: Senses other person's wishes, manipulates other person through those wishes.
Work Sample: Manufacturer's Sales Representative.

Low level--TRANSMIT/SERVE
Definition: Follows orders or answers questions.
Work Sample: Waiter/Waitress.

THINGS TASKS (work with machines, hand-tools, or with the hands)

Complex level--UNDERSTAND MACHINES/PRECISION WORK
Definition: Understands possibilities for machines or products. Great latitude in choosing method.
Work Sample: Template Maker

Medium level--OPERATE/MANIPULATE
Definition: Controls operation, but method is standard.
Work Sample: (Stereo Speaker) Assembler.

Low level--FEED/HANDLE
Definition: Becomes adjunct to machine or to process.
Work Sample: Furniture Mover.

ALL MATERIALS DEVELOPED BY CAM ARE WORKER-CENTERED. A CONSCIOUS ATTEMPT TO MINIMIZE RACIAL OR SEXUAL STEREOTYPING WAS MADE SINCE FEW JOBS REQUIRE SUCH DISTINCTIONS.
The Career Exploration Lab operates four days per week, with the capacity for 36 students. The lab has 12 students coming Monday and Thursday, and the other 18 coming Wednesday and Thursday, so 36 students theoretically could attend the lab each school year. Due to scheduling problems caused by make-up sessions, vacation days, and maintenance problems, and required start-up times, the practical capacity of the lab is probably limited to 110 students.

Student scheduling is done by the home school. Two methods have been used to assign dates. Last year, Chinook Junior High sent students alphabetically. This year, schools have opted to send students by Washington State history classes, a method which permits more in-class tie-ins.

Students are bussed between the lab and their home schools. Arriving at the lab at 8:45, students return to school by 2:10, at which time they attend their last period class.

Because the videotaping area is isolated, two adults are required to operate the program. The Lab Supervisor and the Lab Assistant guide the students through the varied activities. The Lab Assistant is responsible for the videotaping operation.

The Lab Supervisor instructs the students in the basic philosophy of the lab, answers individual's questions, and coordinates the various activities. Helaina Kennedy, who developed the Work Samples Lab and currently supervises its operation, has a Master of Science degree in Vocational Rehabilitation.

**$ BUDGET $**

**Initial Outlay**

- 14 Caranate slides, cassette machine $4300
- 12 "Playback" models $300 each
- 12 "Record" models $300 each
- Videotape Recorder, Camera, Music, etc. $3300
- 12 Custom made Carrels $200 each
- Lab Tables $300
- Film and Processing $200
- Work Samples, Material, and Props $600
- Total $7915

**Other Related Expenditures**

- Information Center, Large Group Activities
  - "World of Work" film $210
  - 2 Hitachi filmstrip cassette machines $270
  - Worker-Centered filmstrips, tape $430
  - Tape recorder $50
  - 16 mm projector and cart $500
  - Filmstrip projector and cart $300
  - Screen $225
  - Chairs $300
  - Pamphlet display racks $470
  - Storage racks $140
- Total $7594.94

**Annual Operating Costs**

- Personnel ($9210.24 total cost if CETA aide not available)
  - Lab Supervisor $6994.94 (6 hr/day x 4 days/week x $7.36/hr x 36 wks) $6994.94
  - Lab Assistant $2815.20 (6 hr/day x 4 days/week x $3.00/hr x 36 wks) $2815.20
- Repair and Maintenance $600.00
- Total $7594.94
Comments

The great majority of students enjoyed the lab experience. Frequent comments included:

"I think your lab is neat."
"It is nice to see the pictures than to just be handed a book, and told, 'Read.'"
"Very interesting. Thanks a lot."

Other students, however, expressed negative feelings:

"Sitting got boring."
"I didn't like the way you work on something, and then when you were done, you just took it apart."

Perhaps some students shouldn't come to the lab:

"I will not be able to use the information, it was unnecessary." (Note: This student will inherit his parents' business.)

Some students offered constructive criticism:

"You could use more information about:
... animal work
... airplane pilots
... stewardesses
... interior decorators"

"I think the whole course was too fast; I think 3-5 days would not be enough."

The real test of the lab's effectiveness will come when the students are seeking jobs a few years hence. Several comments suggest that the interim will be spent exploring alternatives. Two students said:

"The lab gives you a headstart on what you would like to study. It also gives you ideas on other things you might like to do, but never thought those jobs existed."
"They opened new doors to me."

Home School Activities

Because the CAM staff believes that the worker-centered approach is the one most easily assimilated by students, considerable effort has been given to locating similarly-oriented career materials. In order for the lab experience to have more than a "flash-in-the-pot" significance, a variety of worker-centered materials have been placed in the junior high schools. Following is a brief summary of some of these materials and related activities.

1. The Ohio Vocational Interest Survey (OVIS) was administered to 8th and 9th graders during February 1974. This standardized test is based on the Data-People-Things construct and familiarizes students with the vocabulary and the worker-centered orientation.

2. Seventy-five Hoffman filmstrips are rotated between the five target junior high schools. Each 2-minute long filmstrip provides basic worker-centered information about one career.

3. One junior high school is field-testing a worker-centered history unit about careers in Washington State, past and present.

4. Two pilot projects being field-tested in the district also utilize the worker-centered approach. One project is the Computerized Career Information System (CCIS) developed under a grant from the Coordinating Council for Occupational Education (CCOE). The CCIS was programmed by James Marble, Assistant Dean at Clark College and will be the subject of a future issue of the REPORT.

The WORK book, developed to encourage independent student career explorations after attendance at the lab, is the second experimental project.
CAM WANTS TO SHARE

As an exemplary project, CAM is most eager to share its experience with others interested in career education, including the materials it has developed. If you are interested in any of these materials, use the request form below and mail to CAM:

Career Alternatives Model
Highline Public Schools
15675 Ambaum Blvd. SW
Seattle, Washington 98166

☐ the WORK book - a student's guide for independent career exploration.
☐ Sample "Job Sheets" - each job sheet providing basic career information about one particular job available in the Puget Sound area. Format, adaptable to local labor market needs.
☐ Manual "How to Photograph Jobs" - a guide to taking interesting job photographs. Pertinent for professionals and for students.
☐ Student's Activity Packet for Photographing jobs - a student's guide to the manual listed above (complete with photography assignments).

Please send the items checked below to:

Name ____________________________
Title ____________________________
District __________________________
Address __________________________________________

Highline Public Schools
Career Alternatives Model
15675 Ambaum Blvd. S.W.
Seattle, Washington 98166

(stamp)
### Definitions of Data-People-Things Categories

#### DATA

- **INVENT**
  - Puts information together to make new combinations.

#### PEOPLE

- **UNDERSTAND**
  - Understands other person's needs and works within the framework of those needs.

#### THINGS

- **UNDERSTAND MACHINES**
  - Understands possibilities for machines or products. Has great latitude in choosing method and tools.

#### Hi

- **RECALL**
  - Collects information already learned or manipulates it in standard ways.

#### Med

- **COPY**
  - Transcribes information or inspects to check for equality.

#### Low

- **PERSUADE**
  - Senses other peoples' wishes and uses those wishes to persuade those people to do what the worker wants them to do.

- **SERVE or TRANSMIT INFORMATION**
  - Does not need to understand other people's motivations, but follows their orders or answers their questions.

- **OPERATE**
  - Gets machine to do a variety of things, but method is generally standard.

- **FEED or HANDLE**
  - Becomes adjunct to machine to process. Does not determine machine's progress.

The Data-People-Things code is based on the following:

1. Every job requires the worker to function in relation to Data, People and Things (DPT) in varying degrees.
2. The DPT code is an average of jobs in all parts of the country.
3. The DPT level of a job is based on the highest degree of involvement of the worker. Lower level functions may be part of the job also.
4. Only major activities (those which constitute 10% or more of the worker's time) are used when determining DPT level.
5. Codes describe the minimum job requirements; they do not describe an individual worker's potential.
### Highline Public Schools

**OFFICE OF VOCATIONAL EDUCATION**

November 22, 1974

#### FOLLOWUP FOR 1973-74 GRADUATES BY PERCENT

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COMPLETIONS IN VOCATIONAL EDUCATION FOR SCHOOL YEAR 1973-74

KING HIGHLINE
EVERGREEN SENIOR HIGH SCHOOL
17/401/3099

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**Signature**

11/14/74

**Date**

11/14/74
### Completers in Vocational Education for School Year 1973-74

**KING HIGHLINE GLACIER SENIOR HIGH SCHOOL**
17/4C1/3334

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**DATE**

11/14/74

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## AULIDAU

**TIA, ALAU**

**-UR SCRUM.**

---

**1ST YEAR OFFICE.**

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### HIGHLINE

**HIGH SCHOOL.**

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### NATIONAL EDUCATION FOR SCHOOL YEAR 1973-74

**FORM P-377 (8/74)**

**DUE SPI-NOV. 15, 1974**

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### INSTRUCTIONS ON REVERSE BEFORE COMPLETING

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**DUE DATE**: Nov. 15, 1974

**Signature**: 11/14/74
**SUPERINTENDENT OF PUBLIC INSTRUCTION**

**COMPLETIONS IN VOCATIONAL EDUCATION FOR SCHOOL YEAR 1973-74.**

**PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING**

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Form P-377 (8/74)
Due SPI - Nov. 15, 1974

11/14/74
Date

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**Notes**

- Please read instructions on reverse before completing.

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Tyee Senior High School

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<td>179999V</td>
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<td>171901V</td>
<td>Visual Communications (2 yr. prog)</td>
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**TOTAL** 275 3 12 10 4 35 16 26 4

Includes six (6) in Navy
| (1) Number of completions | (2) Left prior to normal completion, time with marketable skills | (3) Number of status unknown | (4) Number known in active military | (5) No. known continuing school full time (a) Vocational Technical (b) Community College (c) 4-Year College (d) Other (6) Other reasons not available for employment (7) Number known full time in or trained for related occup. (8) Number known full time in other occup. (9) Number known to be unemployed (10) Number known to be unemployed |
|---------------------------|---------------------------------------------------------------|----------------------------|----------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Sewing                    | 20                                                            | 0                          | 4                                | 0                                             | 3                                             | 0                                             | 4                                             | 2                                             | 5                                             | 2                                             | 0                                             | 0                                             |
| Assistant                 | 33                                                            | 0                          | 2                                | 0                                             | 1                                             | 4                                             | 3                                             | 2                                             | 0                                             | 17                                            | 3                                             | 1                                             | 0                                             |
| Foods (incl. Breakfast)  | 75                                                            | 0                          | 1                                | 6                                             | 0                                             | 5                                             | 0                                             | 6                                             | 1                                             | 34                                            | 16                                            | 1                                             | 1                                             |
| Industrial Mechanics (2nd Semester) | 18                                  | 0                          | 1                                | 0                                             | 0                                             | 0                                             | 0                                             | 8                                             | 0                                             | 1                                             | 6                                             | 1                                             | 1                                             |
| Technology                | 34                                                            | 0                          | 0                                | 2                                             | 0                                             | 6                                             | 4                                             | 4                                             | 0                                             | 8*                                            | 8                                             | 1                                             | 1                                             |
| Assistant                 | 46                                                            | 0                          | 2                                | 0                                             | 1                                             | 10                                            | 9                                             | 0                                             | 1                                             | 16                                            | 4                                             | 0                                             | 3                                             |
| Plastics                  | 36                                                            | 0                          | 2                                | 2                                             | 1                                             | 4                                             | 0                                             | 1                                             | 0                                             | 10                                            | 9                                             | 2                                             | 5                                             |
| Communications (2 yr. prog) | 13                                  | 3                          | 0                                | 0                                             | 1                                             | 3                                             | 0                                             | 1                                             | 0                                             | 6                                             | 3                                             | 0                                             | 2                                             |
| **TOTAL**                 | **275**                                                       | **3**                      | **12**                           | **10**                                        | **4**                                         | **35**                                        | **16**                                        | **26**                                        | **4**                                         | **97**                                        | **51**                                        | **6**                                        | **17**                                        |
Summary report of Job Skills Workshops -

The criteria for the junior and senior high schools in the Highline School District was to implement a program designed to fit the job skills needs for students at each particular school. This brief report defines the type of program each school adopted from the King County Job Skills Workshop packet. In addition, the percentage of time spent in department-head meetings at each school, the time spent putting each program into service, time spent in in-service school primary and secondary meetings, school sponsored workshops and field trips, and finally, time spent on preparation of materials for each workshop and the revision of the Jobline Booklet for the Highline School District.

Report submitted by Helen Nalipo and Bill Tarbet, Job Hunting Specialists
Department of Special Education
Highline School District #401
Junior High Schools-

Puget Sound Jr. High School

the ninth grade history department chose a three-day workshop covering: (1) orientation to the world of work, (2) how and where to look for a job, and (3) the job application.

Time spent: 50% over a month and a half period.

Glendale Jr. High School

seventh, eighth, ninth graders meet in the school cafeteria for a two-day workshop with students from their English classes learning: (1) how and where to look for a job, and (2) the job application.

Time spent: 30% over a month and a half period.

Chinook Jr. High School

the ninth grade English department selected a three-day workshop covering: (1) orientation to the world of work, (2) how and where to look for a job, and (3) the job application.

Time spent: 50% over a two and a half month period.

High Schools-

Tyee High School

the English department selected the Sophomore, Junior, and Senior literature classes for their program. For Sophomores and Juniors: (1) orientation to the world of work, (2) how and where to look for a job, (3) the job application; whereas Seniors had: (1) how and where to look for a job, (2) the job application, and (3) the job interview.

Time spent: 50% over a two and a half month period.

Mt. Rainier High School

the entire Sophomore English classes were selected for the three-day workshop: (1) orientation to the world of work, (2) how and where to look for a job, and (3) the job application.

Time spent: 50% over a month period.
Glacier High School

Sophomore and Junior English classes were selected for the three-day workshop, with the exception of one Career English class (junior) with a four day workshop. Three-day workshop: (1) orientation to the world of work, (2) how and where to look for a job, (3) the job application. With the one class on the fourth day, the job interview.

Time spent: 50% over a two and a half month period.

An overall break-down of the percentage of time spent at all the tasks required in the job-hunting specialist position are as follows:

Special Education Department Meetings ......................... 10%
Department-head meetings individual schools .................... 40%
Preparations and demonstrations of Job Skill Workshops .......... 35%
In-service primary and secondary counselor meetings ............ 7%
In-service field trips .................................................. 2%
In-service sponsored Workshop training ............................ 1%
Revision of the Jobline Booklet for Highline School District ..... 5%

In conclusion, the Job Skills Workshops were overwhelming successes in both the junior high schools and the senior high schools; the student and teacher response and participation was excellent. Incidentally many of the students got jobs following the demonstrations in their schools.
How Can Schools Use
Community Resources?

CARL N. POOLE*

Many advocates of educational reform are calling for increased use of community personnel, facilities, and institutions by educators as a means of making academic subjects more relevant to the students' everyday experiences. Community experiences, many claim, are necessary to provide students with the skills and knowledge required for self-sufficiency and independence in an adult world. Among the most articulate advocates of community involvement are career educators and social scientists who see the role of education as not just preparation for more education, but as preparation for one's life roles as citizen, family member, worker, and fulfilled individual.

There is no doubt in my mind that community involvement in the educational process offers many benefits to both educator and learner, and that community involvement should be encouraged by each school district to the maximum extent possible. However, school administrators need to explore more fully the responsibilities and obligations the use of community resources imposes upon them. There are several specific requirements district administrators must cope with as their curriculum planners design new instructional programs which call for the use of community resources in the classroom and out in the community. This article will seek to explore two of these requirements.

The first requirement is for the development of better techniques for the effective use of community resources by classroom teachers.

Even though many teachers regularly invite community personnel into their classrooms, and take their students on tours and field trips, little in-depth expertise exists on how to utilize nonschool personnel in an instructional role. We believe that the instructional programs implemented by nondegree personnel in the armed services and industry demonstrate an ability to instruct. What we believe is needed is a technique to channel this ability in a productive direction?

The second requirement is for the design and operation of a community resource delivery system which can secure the personnel, facilities, and activities required by the new instructional programs and anticipated by the teaching staff.

Each local school district (or consortium of school districts in a multidistrict community) will need to individualize its delivery system to meet the needs of its own curriculum and instructional programs.

The first step in designing a delivery system is to research both the school system and the community-at-large to find answers to these five questions:

1. What types of resources, from which sectors of the community, in which occupations, at which grade levels, for which subjects, and in what time frame, will community resources be required to support new and existing instructional programs?

* Carl N. Poole, Director, Community Resources for Career Education, Portland, Oregon

April 1975
Schools Use Community Resources?

2. What are the present practices, abilities, and interests of classroom teachers to plan for, secure, and utilize community resources?

3. What capabilities do the economic, political, and cultural sectors of the community possess to provide the variety and volume of resources required to support the school's instructional programs?

4. What are the present interests, abilities, and willingness of community organizations and individuals in providing resources on a voluntary, contributed basis?

5. What logistical and administrative requirements must be satisfied in order to identify, select, recruit, train, and schedule community resources in a manner that is compatible with both the needs of the schools and the capability and willingness of the community to respond?

During our three years’ experience working with educators and communities, we have identified these nine components which we believe are essential for the successful utilization of community resources:

Needs Projection Procedures. Teachers and building administrators must be provided with a planning process to help them plan and project (preferably on an annual basis) the variety and volume of community resources needed to support their instructional programs and enrollment.

Community Resources Inventory. Each year the school district should conduct an inventory and recruitment program to identify, the resources defined by the needs projection procedures. This inventory and recruitment program should allow each participating community organization to volunteer its fair share of the required resources in the same way it now budgets its financial contributions to local charities.

Resource Data Bank. A community resources information storage and retrieval system (data bank) is needed to provide ready access to information on each resource facility, item of equipment, person, training...
Smaller communities can use a manual (file card) data bank, but the larger communities require a computerized system capable of storing hundreds-of-thousands of resource entries.

Request Procedures. Teachers will need a simple request procedure if they are to be encouraged to secure resources. In the delivery systems we have designed and installed in Portland and Salem (Oregon) and Anchorage (Alaska), it takes less than ten days for a teacher's request to be processed and a confirmation notice to be sent to the teacher. In many instances, requests are confirmed and the confirmation notice is received by the teacher in the following day's mail.

Centralized Scheduling. A centralized resource contact, scheduling, and confirmation system has proven the best way to protect the community from multiple and duplicating contacts. Prior to the installation of a centralized scheduling system in Portland, one employer complained: "Our firm represents only twenty percent of the industry in our field, but we have sixty percent of the public visibility, and we are receiving over ninety percent of the requests for community resources."

Staff In-service. In-service training for school personnel is required in three areas: (a) what types of community resources are available, (b) how to plan for the use of these resources as instructional tools, and (c) how to secure these resources through the central scheduling system.

Orientation of Community Resources. Community resource organizations and their personnel need to be educated on the role and function of community resources, and trained in the techniques of achieving the instructional goals identified by the teacher. Unless this education and training are provided, there is danger the community will make their presentations public relations rather than instructional in nature. Another factor revealed by our field testing is that many community resources do not feel they are capable of achieving educational objectives. In another instance, a major employer refused to allow its employees to participate below the high school level on the grounds that working adults cannot communicate with elementary and intermediate students.

Performance Evaluations. Evaluation criteria and procedures must be defined, and evaluations should be made of each community resource person and activity. This evaluation should form the foundation for improving teacher planning and resource presentation techniques.

System Revision and Maintenance. Each district must install its community resource delivery system with the foreknowledge that revision is inevitable. The delivery system must be viewed as a process rather than a product. Annual revisions will be required in order to meet changing educational priorities and changing social and economic conditions.

Although the retraining of teachers to use community resources and the design and operation of a community resource delivery system will require school personnel and dollars, the ultimate saving to the taxpayers in dollars and human resources makes it a bargain for both the school system and its community. For, neither our schools nor our communities can longer afford to allow hundreds-of-thousands of young people to exit our schools each year ill-prepared and ill-equipped for the responsibilities of adulthood. And, if a community and its schools agree on the absolute requirement for joint community-schools responsibility for and participation in, the education of their young people, then the full potential of community resource utilization will be realized.
Dear Senior:

Within a very short time you will be a graduate of the Highline Schools -- Congratulations!!

We would appreciate your assistance in completing the following questionnaire as to your plans and your views on how well your experiences carried out the school district's educational goals.

We would like to contact you again next May to get your feeling after leaving high school for a year. Please give us an address where we may reach you directly or by forwarding.

Thank you for your help.

Gene Craig
Assistant Supt. for Instruction

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<table>
<thead>
<tr>
<th>Name</th>
<th>School</th>
<th>Male</th>
<th>Female</th>
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</table>

1976 Address: ________________________ Zip: __________

Number of years you attended Highline Schools: (Please circle)

1 2 3 4 5 6 7 8 9 10 11 12

Please check the appropriate statement.

1. General Information
   A. After graduation from high school my major plans for the next year are for:  
      (Check only one.)

   B. These plans are something I decided on:

   C. Who was most influential in helping you make your decision for the next year?

II. A look back -- (Please circle appropriate number)

Goals have been identified by the Highline community that have provided the direction and framework for the educational program you are completing. Would you evaluate the school's effectiveness in helping you?

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<th>Intellectual Skills Goal</th>
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<th>Highly effective</th>
<th>Effective</th>
<th>Mediocre</th>
<th>Poorly done</th>
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<td>Did your school experiences--</td>
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<tr>
<td>1. Teach you how to study?</td>
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<td>2. Make you feel competent in expressing your thoughts?</td>
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<td>3. Help you develop handwriting that others can read easily?</td>
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<tr>
<td>4. Teach you how to write and spell?</td>
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<td>5. Prepare you with enough math skills to get along in the everyday world?</td>
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<td>6. Prepare you with a basic understanding of the scientific world?</td>
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<tr>
<td>7. Prepare you to read?</td>
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</tbody>
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What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?
Hurflan Needs Goal

Did your school experiences—
1. Help you to understand yourself? 
   No relation  Highly Effective  Effective  Mediocre  Poorly Done
2. Teach you to understand the behavior of others?
3. Help you to accept a rapidly changing society?
4. Help you to define personal values?
5. Help you to get along with other people?
6. Help you in developing leisure time activities?

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

Career Planning Goal

Did your school experiences—
1. Help you develop a job skill related to the world of work?
2. Help you develop career plans based on your own interests, values, and attitudes?
3. Make you aware of post-high school training institutions that will help you further your career planning?
4. Help you to know how to apply for work?

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

Civic Rights and Responsibility Goal

Did your school experiences—
1. Give you a basic understanding of this country’s political and economic system?
2. Encourage you toward wanting to be an active voter?
3. Help you in understanding the issues in the world today?
4. Give you a sufficient understanding of the proper use of our material and human resources?
5. Give you a sufficient understanding of this country’s minority concerns?

What subject(s), experiences, or grade level was particularly significant in your dealing with the above goal?

III. A look ahead—

A. In making a self-analysis do you see your strongest aptitude and interest in working with—(choose one)  
   1. Data (such as computer, technician, typist, science-related, working with information)
   2. People (person contact, such as teacher, sales work, supervisor)
   3. Things (such as a mechanic, artist, assembler, working with tools and objects)

Choose a column

B. Employment

1. Which of the following best describes your situation?
   1. I have a job already
   2. Plan to continue with my present part-time job
   3. Have a part-time job, but looking for something better
   4. Doing some serious looking, but no job yet
   5. Will start looking after graduation
   6. Need a long vacation first, then I’ll start looking
   7. No plans and not sure how to start
   8. Other (explain)

2. Do you feel you have a pretty good idea of what type of work you would like to do for the next 3 to 5 years?  
   Yes  No

C. Education or training

1. Do you plan to attend:
   1. Community college
   2. Four year Institution
   3. Vocational-technical institute
   4. Private training school
   5. Other (explain)

2. What will be your program emphasis? (choose one)
   1. Agriculture
   2. Behavioral Sciences (Psychology, etc.)
   3. Business and Commerce
   4. Education
   5. Engineering
   6. Health Occupations
   7. Industrial Crafts (Welding, etc.)
   8. Law, Law Enforcement
   9. Liberal Arts (Literature, etc.)
   10. Mathematics and Science
   11. Technician Training
   12. Other (explain)