

DOCUMENT RESUME

ED 192 954

RC 012 242

AUTHOR Miller, Barbara, Ed.  
 TITLE Career and Vocational Education for Small Schools: A Guide for Planning and Implementation. Revised.  
 INSTITUTION Oregon State Dept. of Education, Salem. Career and Vocational Education Section.  
 PUB DATE 80  
 NOTE 98p.; For related document, see ED 137 010. Prepared by Small Schools Career Education Developmental Project of Oregon State Department of Education.

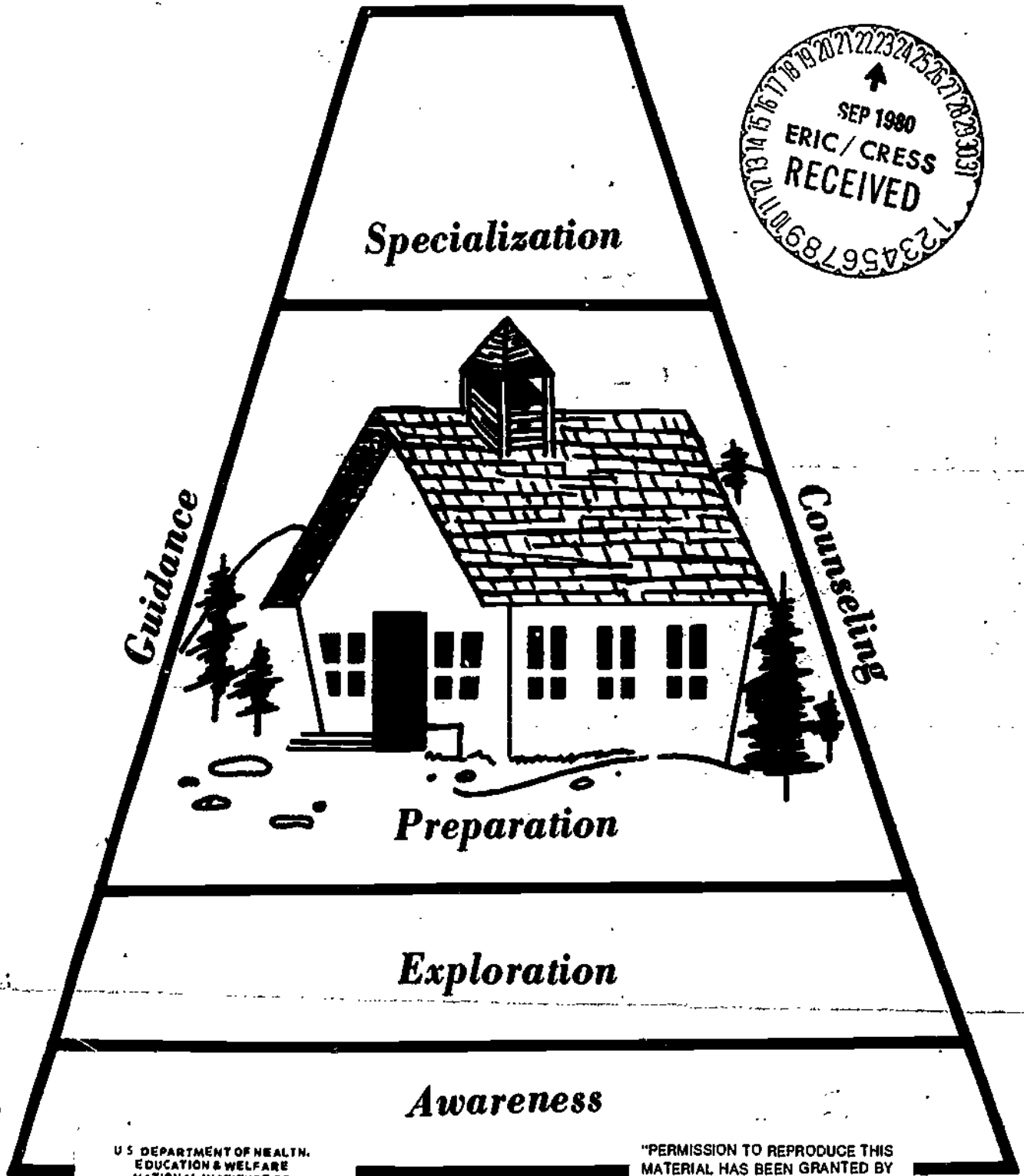
EDRS PRICE MF01/PC04 Plus Postage.  
 DESCRIPTORS Advisory Committees; \*Career Education; Community Involvement; Curriculum Development; \*Elementary Secondary Education; Environmental Education; Home Economics; Industrial Arts; Interdisciplinary Approach; \*Pilot Projects; Program Descriptions; \*Program Development; Program Implementation; \*Small Schools; Student Organizations; Vocational Education  
 IDENTIFIERS Creative Career and Vocational Education Project; \*Oregon; \*Small Schools Career Education Development Project

ABSTRACT Oregon offers this guide to assist educators in establishing career education programs in small schools, K-12. Section 1 gives suggestions for promoting awareness, exploration, and preparation and lists goals for incorporating career educational concepts into all areas of the curriculum. Emphasis is placed on vocational clusters and special programs, home economics, industrial arts, guidance, community involvement, advisory committees, vocational student organizations, and energy education. Section 2 contains an updated report on the results of the pilot project at Amity, Condon, and Lost River. Each school has developed a different approach based on local needs and resources. The Creative Career and Vocational Education Project (1977-1980), funded to assess difficulties in establishing career and vocational programs in schools with an enrollment of 75 or fewer students, is now in progress at 2 high schools (Alsea and Mitchell). Section 3 presents profiles of the current career and vocational programs and activities in Oregon's small schools. The profiles indicate that emphasis is placed on career awareness and exploration in grades K-8 and on development of career related skills and competencies in grades 9-12. High school programs are numerous and varied. Names of contact persons for each school are included, and inquiries and personal visits are encouraged. (CM)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED192954

# CAREER AND VOCATIONAL EDUCATION FOR SMALL SCHOOLS



RC 012242

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

*Dir. Dept. of Ed.*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



CAREER AND VOCATIONAL EDUCATION  
FOR SMALL SCHOOLS:  
A GUIDE FOR PLANNING AND IMPLEMENTATION

prepared by  
SMALL SCHOOLS CAREER EDUCATION DEVELOPMENTAL PROJECT  
1977  
Revised 1980

Oregon Department of Education  
Salem, Oregon 97310

Verne A. Duncan  
State Superintendent of  
Public Instruction

## STATEMENT OF ASSURANCE

### Oregon Department of Education

It is the policy of the Oregon Department of Education that no person be subjected to discrimination on the basis of race, national origin, religion, sex, age, handicap, or marital status in any program, service, or activity for which the Oregon Department of Education is responsible. The Department will comply with the requirements of state and federal law concerning nondiscrimination and will strive by its actions to enhance the dignity and worth of all persons.

## CONTENTS

FOREWORD . . . . .	vii
ACKNOWLEDGMENTS . . . . .	viii

### PART 1. INTRODUCTION AND IMPLEMENTATION

CAREER AND VOCATIONAL EDUCATION FOR SMALL SCHOOLS . . . . .	1
Career Awareness . . . . .	4
Career Exploration . . . . .	5
Career Preparation . . . . .	5
Career and Vocational Requirements for Graduation. . . . .	5
IMPLEMENTATION . . . . .	7
Curriculum . . . . .	8
Awareness . . . . .	10
Exploration . . . . .	10
Vocational Clusters . . . . .	11
Special Vocational Programs . . . . .	11
Home Economics . . . . .	12
Industrial Arts . . . . .	14
Interdisciplinary Approach to Career Education . . . . .	15
Individualized Instruction . . . . .	15
Guidance . . . . .	16
Community . . . . .	18
Advisory Committees . . . . .	19
Vocational Student Organizations . . . . .	19
Safety Considerations . . . . .	20
Energy Education . . . . .	20
Evaluation and Assessment . . . . .	21
Summary . . . . .	21

### PART 2. PROJECTS FUNDED FOR SMALL SCHOOLS

SMALL SCHOOLS CAREER EDUCATION DEVELOPMENTAL PROJECT . . . . .	23
Amity School District . . . . .	23
Condon School District . . . . .	26
Lost River High School . . . . .	28
CREATIVE CAREER AND VOCATIONAL EDUCATION PROJECT . . . . .	30
Aelsea High School . . . . .	30
Mitchell High School . . . . .	31

CONTENTS, Continued

PART 3. CAREER AND VOCATIONAL EDUCATION PROFILES

CAREER AND VOCATIONAL EDUCATION PROFILES . . . . .	33
CAREER AWARENESS AND CAREER EXPLORATION	
<u>Careers and Budget, Enterprise Elementary School . . . . .</u>	34
<u>Career Awareness and Exploration, John Day Grade School . . . . .</u>	34
<u>Janitorial Service, Juntura Elementary School . . . . .</u>	35
<u>Career Awareness, Mill City Elementary School . . . . .</u>	35
<u>The Mental Health of the Student (Self Image), St. Mary's Public School, Mt. Angel . . . . .</u>	36
<u>Infusion, North Plains Elementary School . . . . .</u>	37
<u>Survival, Parkersville Elementary School . . . . .</u>	37
<u>Career Awareness, Riverdale Elementary School . . . . .</u>	38
<u>Career Awareness and Exploration, St. Paul Elementary School . . . . .</u>	38
<u>Elementary Industrial Arts Approach to Career Awareness, Union Education Service District . . . . .</u>	38
<u>Career Exploration, Vale Middle School . . . . .</u>	39
<u>Career Education Day, Victor Point Elementary School . . . . .</u>	40
CAREER EXPLORATION AT THE HIGH SCHOOL	
<u>Career Exploration the Small School Way, Adrian, Harper and Jordan Valley High Schools . . . . .</u>	41
<u>Careers, Detroit High School . . . . .</u>	41
<u>Business Cruise, Elgin High School . . . . .</u>	42
<u>New Options, Elgin High School . . . . .</u>	42
<u>Vocational Education Cruise, Elgin High School . . . . .</u>	43
CAREER GUIDANCE	
<u>Integrated Career Guidance, Dayton Junior-Senior High School . . . . .</u>	44
BUSINESS	
<u>Self-Paced Office Training, Colton High School . . . . .</u>	45
<u>Clerical Cluster, Detroit High School . . . . .</u>	45
<u>Office Simulation, Elgin High School . . . . .</u>	46
<u>Office Occupations, Elkton High School . . . . .</u>	46
<u>Office Aide, Monument High School . . . . .</u>	47
<u>Business Occupations Skill Center, North Douglas High School . . . . .</u>	47
<u>Individualized Business Laboratory, Rainier High School . . . . .</u>	48
<u>Office Simulation, Union High School . . . . .</u>	49
CONSTRUCTION	
<u>Construction Cluster, Sheridan High School . . . . .</u>	50
COOPERATIVE WORK EXPERIENCE	
<u>Banks Youth Career Opportunities Program, Banks High School . . . . .</u>	50
<u>Cooperative Work Experience, Gilchrist High School . . . . .</u>	51
<u>Work Experience, Monument High School . . . . .</u>	51

CONTENTS, Continued

<b>DISTRIBUTIVE EDUCATION--MARKETING</b>	
<u>Marketing, Riddle High School</u> . . . . .	52
<b>DIVERSIFIED OCCUPATIONS</b>	
<u>Diversified Occupations, Joseph High School</u> . . . . .	52
<u>Diversified Occupations, Lowell High School</u> . . . . .	53
<b>ENERGY</b>	
<u>Energy Efficient Construction, Creswell High School</u> . . . . .	53
<u>Basic Electricity/Solar, Scio High School</u> . . . . .	54
<u>Solar Heated House Construction, Vale High School</u> . . . . .	54
<b>FOODSERVICE</b>	
<u>Foodservice, Harrisburg High School</u> . . . . .	55
<b>FORESTRY</b>	
<u>Forest Products, Chiloquin High School</u> . . . . .	55
<u>Forest Products, Long Creek High School</u> . . . . .	56
<u>Forestry I and II, Vernonia High School</u> . . . . .	56
<u>Forest Products, Willamina High School</u> . . . . .	56
<b>GRAPHICS</b>	
<u>Offset Lithography, Wahtonka High School, The Dalles</u> . . . . .	57
<b>HEALTH OCCUPATIONS</b>	
<u>Medical Careers, Taft High School</u> . . . . .	58
<b>HOME ECONOMICS</b>	
<u>Pre-Parenting Training, Elgin High School</u> . . . . .	58
<u>Home Economics, Survive and Thrive, Monument High School</u> . . . . .	59
<u>Occupational Versatility Homemaking, Heppner Junior High     and Elementary School</u> . . . . .	59
<b>INDUSTRIAL ARTS</b>	
<u>Industrial Arts, Elgin High School</u> . . . . .	60
<u>Project Welding, Elgin High School</u> . . . . .	60
<u>Woodworking, Griswold High School, Helix</u> . . . . .	61
<b>INDUSTRIAL MECHANICS</b>	
<u>Small Engines, Monument High School</u> . . . . .	61
<u>Industrial Mechanics Cluster I &amp; II, North Bend High School</u> . . . . .	62
<u>Industrial Mechanics, Yamhill-Carlton High School</u> . . . . .	62
<b>MANUFACTURING TECHNOLOGY</b>	
<u>Manufacturing Technology, McKenzie River High School</u> . . . . .	63

CONTENTS, Continued

SERVICE OCCUPATIONS

Service Occupations, Taft High School . . . . . 63

VOCATIONAL AGRICULTURE

Vocational Agriculture, Adrian High School . . . . . 64  
Ag Mechanics, Crane Union High School . . . . . 64  
Vocational Agriculture, Elgin High School . . . . . 65  
Vocational Agriculture, Wallowa High School . . . . . 66  
Horticulture, Eddyville High School . . . . . 66

SHARED SERVICES

Area Vocational Center, Clatsop Education Service District . . . . . 67  
Six-District Cooperative Individualized Instruction Project,  
Coos Education Service District . . . . . 68  
Ken Cook Program, Gilliam & Wheeler Education Service Districts . . 69  
Umatilla-Morrow Instructional Materials/Equipment Sharing,  
Umatilla Education Service District . . . . . 70  
Sixco Project, Baker, Grant, Harney, Malheur, Union and  
Wallowa Counties . . . . . 71

APPENDIXES

Appendix A - Small Schools Position Paper . . . . . 73  
Appendix B - Goal for Vocational Education . . . . . 74  
Oregon State Board of Education Policies for  
Vocational Education . . . . . 75  
Appendix C - Regional Career & Vocational Education Coordinators . . . 77  
Appendix D - ODE Career & Vocational Education Personnel . . . . . 78  
Appendix E - Industrial Arts Guidelines . . . . . 79  
Appendix F - Bibliography . . . . . 80



## FOREWORD

When Oregon began its emphasis on career education in 1969, very few small schools had any "vocational" offerings besides business classes, home economics, industrial arts and agriculture. There were some exemplary programs at such high schools as Bonanza, Elgin, Mohawk, McKenzie, and others. An area Vocational Center begun in Clatsop County included small schools, along with the larger districts in the county.

Now, with the adoption of the new state standards, it is required that vocational education be offered by all high schools and that students complete one-half unit of career development for graduation.

The question has been raised whether or not small schools will be able to comply with this requirement. It may take imagination and extra effort, but it can be done.

On May 28, 1978, the State Board of Education adopted the Small Schools Position Paper which states, "The State Board of Education supports each community's right to fulfill its obligation to provide a quality education that operates within the framework of the minimum standards. . . ." (See page 73.) It further states that the Department of Education" . . . will provide assistance to small schools in developing and maintaining a quality education . . ."

This book is one form of assistance to you in the small schools. We hope this publication will be of help to you, the practitioner, in your quest for continued improvement.

## ACKNOWLEDGMENTS

We extend our appreciation to the following people for their assistance in making this publication possible:

Don Myers and his offset lithography class at Wahtonka High School who designed the attractive cover and printed both issues of this book

The many people in the schools who contributed write-ups for Part 2, Projects Funded for Small Schools, and Part 3, Profiles

The Developmental Assistance Team comprised of representatives from the three sites of the Small Schools Career Education Developmental Project and others from schools with exemplary programs who developed the first publication by this name in 1977:

Priscilla Adams  
Art Campbell  
Arnim Freeman  
James Gordon  
John Lundberg  
Larry Martin  
Les Martin  
Vince McGrath

Department of Education staff members and the Regional Career and Vocational Education Coordinators who identified programs and prepared or checked copy

Don Miller, Small Schools Specialist, Department of Education, for his constant help and support

Barbara Miller, editor.

Project Coordinator: Howard Brock, Specialist, Career and Vocational Education, Oregon Department of Education

## Part 1 INTRODUCTION AND IMPLEMENTATION

CAREER AND VOCATIONAL EDUCATION FOR SMALL SCHOOLS . . . . .	1
Career Awareness . . . . .	4
Career Exploration . . . . .	5
Career Preparation . . . . .	5
Career and Vocational Requirements for Graduation . . . . .	5
IMPLEMENTATION . . . . .	7
Curriculum . . . . .	8
Awareness . . . . .	10
Exploration . . . . .	10
Vocational Clusters . . . . .	11
Special Vocational Programs . . . . .	11
Home Economics . . . . .	12
Industrial Arts . . . . .	14
Interdisciplinary Approach to Career Education . . . . .	15
Individualized Instruction . . . . .	15
Guidance . . . . .	16
Community . . . . .	18
Advisory Committees . . . . .	19
Vocational Student Organizations . . . . .	19
Safety Considerations . . . . .	20
Energy Education . . . . .	20
Evaluation and Assessment . . . . .	21
Summary . . . . .	21

## CAREER AND VOCATIONAL EDUCATION FOR SMALL SCHOOLS

There is no question that career and vocational education programs for small schools are of prime importance. The Small Schools Needs Assessment completed November 1973 by the Small Schools Task Force, appointed by the Oregon Department of Education, surveyed 215 school districts and 29 parochial high schools. Teachers, administrators, and school board chairpersons were contacted, and their responses separated into classifications: all respondents, superintendents, secondary principals, elementary principals, secondary teachers, elementary teachers, school board chairpersons, small elementary districts and parochial schools. Of the 27 specific needs listed on the questionnaire, only one appeared among the top ten priorities in every category--"To establish practical career education programs, K-12."

The Task Force recognized that small schools have many needs which are not necessarily different from those of larger schools, but are more difficult to resolve because of the frequent lack of specialized personnel, limited resources and, in many cases, remoteness.

A "small" school was defined by the Task Force as having a maximum average daily membership (ADM) of 1,000 for the district or high school attendance area, K-12; the 31 unified districts without an operating high school; and the small elementary districts and union high districts with 350 or fewer ADM. Nearly two-thirds of Oregon's school districts fall into this definition, representing 1,000 school board members, 3,453 certificated persons and 54,834 students.

The Career and Vocational Education Section worked with eight experimental schools to develop the first career clusters in our state. The first formal assistance in developing career education plans specifically for small schools was the 1970 summer institute, "Career Education for Small Schools," co-sponsored by the Department of Education and the Oregon Small Schools Program.

In February 1971, over 700 people attended one-day regional conferences in Baker, Helix, Boardman, Portland, Riddle, Salem, and Harrisburg. Each of these meetings featured: Chuck Dymond, Regional Career Education Coordinator for Clatsop and Tillamook Counties, speakers from industry, and student panels to provide input and stimulate the small schools' direction.

Although each conference had a different speaker from industry, what these speakers had to say was very much the same. They represented lumber mills, agriculture, forest service, manufacturing, food processing, atomic energy, and construction. They stressed that entry level skills might vary (from no training to college graduation, depending on the business), but certain qualities should be present in all employees.

- **GOOD ATTITUDE** Employers look for enthusiasm, ambition, diligence. They don't want workers who feel that business owes them a living, whether they produce or not.
- **INITIATIVE** Employees with goals are more productive. Statistics show that they may change occupations as many as five times during their lives; their goals will probably change, too.
- **RESPONSIBILITY** Valued employees admit it when they make mistakes. They are willing to assume responsibility in their work and in their personal lives.
- **KNOWLEDGE OF BASIC SKILLS** Workers must have basic skills in communication (writing, reading, listening) and arithmetic to comprehend informational material and follow instructions. They should be able to separate fact from opinion.
- **DEPENDABILITY** Employers want people with good work habits; punctuality, a minimum number of absences, and the ability to work without direct supervision.
- **ADAPTABILITY AND WILLINGNESS TO LEARN** Actual industry practices may vary from theory; therefore, it is imperative for employees to be aware of changing situations, be receptive to new ideas, and understand there is more than one way to perform tasks. New employees enter a new culture, complete with new vocabulary, facilities, and techniques.
- **ACCURACY** Successful employees are precise. They inspect their own work and assume responsibility for quality products.
- **GOOD SAFETY HABITS** Good safety habits are just plain practical for employees, both on the job and in their personal lives.
- **AWARENESS** Young people entering the work force should be aware of the world around them, as well as their own occupations.
- **GOOD APPEARANCE** Unskilled workers as well as professionals should be particular about their appearance and how they present themselves to others.
- **LOYALTY** Employers and supervisors value employee loyalty.
- **ABILITY TO GET ALONG WITH PEOPLE** The majority of problems in business and in other aspects of life are "people problems;" therefore, employees who can work well with others are vitally needed.
- **EDUCATION** Employees who know more than just the job for which they are trained will "get ahead" faster. To prepare for their careers, then, students should pursue a well-balanced curriculum which includes

the basics, humanities, other disciplines, as well as specific career preparation offerings.

- **ADEQUATE PREPARATION** People must determine the education, training, and physical characteristics required for the work they seek, whether the jobs are unskilled, skilled, technical, or professional.
- **KNOWLEDGE OF THE FREE ENTERPRISE SYSTEM** Industry would like their employees to know about the free enterprise system and its importance in the initial and continuing development of our country. It is a perishable commodity and should not be taken for granted. New ideas are developed and researched in industry. There is nothing wrong with profit; working people help create profit and benefit from it.

The speakers frequently mentioned that although today's students are smarter, they are generally not as well prepared for work.

If those speakers were appearing today, they would also emphasize the need for energy awareness and conservation, both on the job and in the employees' personal lives.

*Regardless of the size of your school, skills for most career requirements can be taught in your present curriculum. As many vocational offerings as possible should be available to your students depending on their interest and your district's resources and constraints.*

Employers' viewpoints support the philosophy of career and vocational education advocated by the Oregon Department of Education. The individual must learn to function effectively in the identified life roles: learner, individual, producer, citizen, consumer, and family member.

On August 17, 1979, the State Board of Education adopted a planning statement for improving vocational education. It states, in part:

"If a high school is to be comprehensive, vocational education must be available to all students. Most high schools today, however, tend to emphasize college preparation. In contrast, the community colleges offer a balanced curriculum of occupational training, general educational skills and electives. The high schools' curriculum, like the community colleges', should balance basic skills training and electives with vocational education."

The statement also defines career and vocational education and shows their relationship.

"Career and vocational education programs serve learners from childhood through retirement. These programs offer opportunities to learn about occupations in relation to the individuals' interests and abilities. They provide preparation for entry-level employment, and build the foundation for more advanced training. Career and vocational

education programs meet the needs of the disadvantaged, handicapped, those with limited English speaking abilities, and other special groups."

"Vocational education provides training for skilled, technical and paraprofessional work. Individuals are prepared for gainful employment and occupational advancement. Programs are designed around an occupational area or a cluster of related occupations. Post-secondary vocational education is offered at the community colleges, as well as by private vocational schools, apprenticeship programs, the military, four-year colleges and universities, and business and industry."

"Career education, by comparison, involves all segments of the educational program. Students develop attitudes, knowledge and skills and learn to make effective choices that will enable them to perform successfully in their chosen careers. Career education, in effect, can improve all educational programs by providing a bridge between schooling and students' future work and career development."

(See Goal for Vocational Education and Oregon State Board of Education Policies for Vocational Education, pages 74-76.)

Career and vocational education--awareness, exploration, and preparation--are life-long pursuits, but special periods of emphasis may smooth the process.

#### Career Awareness

In a career-focused curriculum, career awareness is not a separate subject, but is developed in each classroom within the traditional subject matter areas. The scope of the subject is changed somewhat to incorporate consideration of the many occupations related to that topic. For instance, on a regular science field trip, add the dimension of career by discussing what occupations would need to know these things about science. Also, the dignity of work is stressed by examining contributions to society of a variety of occupations. Children are encouraged to examine personal needs and preferences in relation to various occupations and actively participate in

- Making decisions that relate to their own career development
- Discovering their occupational aptitudes and interests
- Identifying the way(s) they learn best
- Expressing their self-awareness as it relates to career development, occupational interest, and the role of the producer

### Career Exploration

Career exploration provides an increasing depth of experiences. Self-review of interests, aptitudes, attitudes, and abilities relating to the many careers available is assisted by the use of such instruments as the Ohio Vocational Interest Survey (OVIS), the General Aptitude Test Battery (GATB) with interest Check List, the Kuder Interest Tests. To maximize benefits from the career exploration phase, there should be orientation and in-depth, on-site exploratory experiences in representative occupations. Exposure must be sufficient to provide insights into the total cluster of related occupations as a possible means of livelihood. All students should be exposed to as many clusters as possible to provide the framework for selection of a single or special cluster program as preparation progresses for skills training.

Guidance and counseling services are a must throughout the career selection process, especially during the exploration phase. Development of decision-making skills and sound career planning can give definite direction to the remaining years of formal schooling, even though plans made at this stage are tentative.

### Career Preparation

Career preparation focuses on learning skills for a chosen career area. Students are assisted to

- Apply their experience to solve daily problems
- Develop leadership skills through participation in a vocational student organization (if applicable)
- Develop acceptable job attitudes
- Participate in a work experience program
- Develop skills and knowledge necessary for entry-level employment or advanced career training

### Career and Vocational Requirements for Graduation

Newly adopted standards require for the 1983-84 school year completion of 21 units of credit. Students must have one-half unit of Career Development and one unit of Applied Arts, Fine Arts or Foreign Language, or a combination of the three.

Career Development is the exploration of personal interests and abilities relating to career selection and the development of tentative career goals.



School districts are required to provide students with elective educational opportunities sufficient to satisfy graduation requirements and which include applied arts, fine arts, foreign language and vocational education.

## IMPLEMENTATION

State adopted standards require that by the end of the 1981-82 school year "every district shall implement plans for career education grades K/1 through twelve with goals for each instructional program and, where applicable, goals for support programs."

The process of initiating a career education program is no different from any other, except that it can and should involve every aspect of the curriculum.

A successful career education program is a unified, well thought-out effort involving the superintendent, board of education, teachers, designated career program coordinator, representatives from the community, and students. Suggestions for getting started are to

- Designate a person to be responsible for developing the program and provide the necessary release time
- Publicly express a commitment to career education
- Establish a steering committee made up of representatives of the school and community
- Develop the philosophical basis and general emphasis of the career education endeavor for your particular district
- Conduct needs assessments of the school, students, and community served by your school
- Establish the long- and short-range goals of the program
- Identify any obstacles which may impede the implementation process and devise a means of removing or working around them
- Establish the product objectives and state them in terms which will assure accountability for the program, including objectives for: overall program, both process and product; career awareness; career exploration; career and vocational preparation; and community
- Develop a comprehensive evaluation design

In designing the program and its objectives, the administrator or the career coordinator should systematically involve teachers, principals, counselors, students, parents, the board of education, and members of the community. Often in a small school, a teacher interested in career education who knows the community and has a good rapport with the entire staff is designated to coordinate the program.

Goals and objectives should be fully explained to all of the district staff--administrators, teachers, aides, secretaries, cooks, custodians, bus drivers, etc. Students must be well informed about changes in the program and how they will be affected. *Well informed staff members and students can be your biggest asset in selling a new program; if they are misinformed or uninformed, they can be your biggest liability.*

Teachers and administrators involved directly in the program should have adequate inservice and preparation time. They should be given the opportunity to visit similar programs in other schools, and specialists should be brought in to assist them. Input for revising, expanding, and amending program objectives should be encouraged. Utilize people with experience in career education program development.

As in any other program, start on a small, sound basis and expand. Begin with the teachers who are interested and enthusiastic, and let them serve as examples to others who are not as easily convinced.

Both physical and academic provisions must be made for disadvantaged and handicapped students so they can participate as fully as possible in the career education program.

### Curriculum

Career education concepts must be incorporated into all areas of the curriculum, with particular attention to the academic, as well as the vocational. Focus on the career implications of all academic areas of instruction. Regardless of the approach you use, career education curriculum activities should be student-centered, lively, varied and should contribute to career development and decision-making abilities of students. Here are some suggested activities:

- Interviews
- Skits
- Theme writing
- Bulletin boards
- Debates
- General discussion
- Small group discussion
- Individual or group study
- Movies, filmstrips, slides, overhead and/or opaque projections
- Committee work
- Oral reports
- Newspaper articles
- Field trips
- Collection of want ads
- Writing want ads
- Employment Security Commission job lists
- Exhibits

Collection of materials  
Observations  
Role playing  
Resource people  
Brainstorming  
Games  
Research projects  
Demonstrations  
Illustrations  
Lists of occupations  
Radio and TV programs  
Projects  
Chalktalks  
Panel discussions  
Making files  
Tests  
Problem-solving activities  
Preparation of charts and graphs  
Window displays  
Writing letters  
Assigned reading  
Thought problems  
Preparation and presentation of speeches  
Notebooks  
Scrapbooks  
Lectures  
Simulated work activities  
Preparation of personal resume

The concepts of awareness, orientation, exploration, and development of curriculum materials should apply to all grade levels--kindergarten through post-secondary and adult education. Curriculum development takes time and money; immediate fiscal impact will be felt to provide

- Released time for teachers to plan and develop curriculum
- Remuneration for teachers to work during the summer
- Smaller class loads
- Individualized instruction opportunities
- Equipment and supplies
- Printing of the new curriculum materials developed
- Continuous curriculum revision for students as they move through the program

An excellent source of career education information for small schools is the Cashmere, Washington, Career Education Project. Their approach is somewhat different from Oregon's, focusing on the eight elements of career education developed by the Comprehensive Career Education Model, Center for Vocational Education, Ohio State University. The elements represent a framework that can be used to infuse career education concepts into existing curriculum in all disciplines and grade levels. Cashmere has developed curriculum guides and a how-to-do-it guide for implementing career education in rural schools. (See a listing of available materials in the Bibliography, page 80.)

### Awareness

There are many ways to weave career awareness into the traditional subject areas of reading, language arts, social studies, science, mathematics, art, music, physical education, health, etc.

Start children's awareness by having them look at themselves and their families, then people they recognize in the community. Direct their thinking to the world of work in relation to this frame of reference.

Design activities and learning experiences to help students attain the outcomes set forth by the Department of Education publication, Implementing Career Awareness in the Elementary School, and through Career Awareness/Exploration Curriculum Kits.

### Exploration

The essential elements of a career-exploration program are listed on the following page, and it is recommended that students gain experience in each of the areas. To provide less than this will result in students' not being adequately prepared to begin the occupational preparatory process:

- Basic knowledge of economics as it affects work and living
- Self-understanding of occupational interests and aptitudes
- Decision-making as it applies to career selection and preparation
- Basic knowledge of the occupational clustering process and the available clusters
- Understanding of and first-hand experience with the basic knowledge and skills common to each cluster
- Observation of and participation in on-site work experiences in occupations that are representative of the clusters or job families within the students' areas of interest

At this stage of educational development, most of the resulting knowledge and skills will serve a dual role: that of providing information and "know how" for immediate and long-range occupational or avocational application, and more importantly, introducing students to job requirements and compensations as one aspect of the occupational selection process. This information, when coupled with the expanded insight into their interests and aptitudes, and an increased understanding of the economics of work and leisure activities, will assist students in selecting those careers in which they are most likely to find success and personal satisfaction.

### Vocational Clusters

Oregon guidelines for establishing a vocational cluster require that 10,000 people be employed in the related occupations and the need for an additional 2,000 workers is projected in the next five years. The following are Oregon's approved clusters:

- Accounting
- Agriculture
- Clerical
- Construction
- Electricity - Electronics
- Foodservice
- Forest Products
- Graphics
- Health Occupations
- Industrial Mechanics
- Marketing
- Metals
- Service Occupations
- Secretarial
- Diversified Occupations
- Drafting
- Home Economics Related
  - Child Care
  - Clothing
  - Institutional and Home Management
- Special Vocational Programs (described below)

### Special Vocational Programs

State approved cluster programs are considered a number one priority in vocational preparatory program development. Many small schools, however, find that clusters are not possible for them. In order to provide schools with the opportunity to develop programs for their students, an alternative has been approved by the Department of Education, Special Vocational Programs.

Alternative choices within the Special Vocational Programs are: (1) determine the skills common to two or more occupations from one or more identified cluster areas and develop these as a vocational preparatory program, or (2) determine the skills of an individual occupation common to the local community or identified to be a statewide manpower need and develop these as a vocational preparatory program.

Early in the districts planning for a special vocational program, contact a regional career and vocational education coordinator or a Department of Education vocational program specialist for assistance.

These elements are highly encouraged for each program:

- Cooperative work experience
- Appropriate vocational student organizations
- Program assessment based on the most appropriate preparatory assessment instruments
- Five-year plan to provide direction

The requirements for an approved, reimbursable special vocational program are

- Meet for ten instructional hours per week, two credit hours, or the equivalent
- Have an advisory committee as an integral part of the program
- A vocationally certificated instructor in the primary occupation being taught
- Reimbursement based only on preparatory experiences
- Students reported on the SERVE form the same as any other vocationally reimbursed program (identification will be "special vocational program" followed by the area[s] of primary preparation)
- Request for approval for a special reimbursable vocational program supported by the district's rationale and data showing the need for the program

#### Home Economics

To play a role in career education, home economics in small schools must develop programs which are workable regardless of the problems of limited equipment and staff in school, as well as limited out-of-school

resources and training stations. The most practical means of furthering career education in home economics is through exploratory units which provide experience in many areas and in-depth exploration in specific interest areas. Simulated job experiences may be the only alternative in a small school where there is little opportunity for training stations. An occupational versatility program is one way to provide a more comprehensive approach to explore all areas of home economics. (See page 58.)

A small school usually does not have facilities or staff to provide preparation and training in all home economics oriented occupations. A cooperative effort among several small schools could be made to share responsibility for preparation. For example, each school may specialize and develop a strong program in the areas of clothing services, child care, foodservices, or hospitality services. Students from the other schools could be transported to the specialized programs of their choice for the career preparation phase. Simulated experiences in lieu of out-of-school training stations might include training for child care aides in the elementary school, foodservices in the school cafeteria, and a dressmaking service through a clothing program set up as a business.

Home economics teachers may cover the following components in order to further career and vocational education in their small schools

- World of work

- Good attitudes toward work
- Legal aspect of work
- Formalities of getting work
- Opportunities available through home economics related skills

- Self-concept of work

- Personal strengths and weaknesses
- Personal job preferences

- Grooming and health

- Proper posture and grooming for work
- Proper health habits for good mental and physical health at work

- Dual role of women--wage earner and homemaker

- Acquaintance with the dual role of women
- Awareness of the changing role of women
- Management problems of women who work

- Home economics oriented occupations

- Clothing services and related areas
- Child care services



Hospitality services  
Foodservices  
Companion to the elderly  
Homemaker's assistant

- Means of implementing exploratory programs

Guests who work in each area  
Field trips to work sites  
Demonstration of skills

### Industrial Arts

The industrial arts curriculum in a small school should be based on the current and anticipated needs of students. The school should determine where and how the students will be spending their adult lives so the curriculum can be designed for both career and other needs--family and avocational. For some small schools, a quality industrial arts program could be the extent of the vocational offerings. (See page 79 for possible use of basic vocational grant monies for industrial arts.) Components include:

- A long-range plan, based on student long-range needs

The plan developed should state the present level of the program and the desired future level, considering needed resources and realistic possibilities of acquiring them. A safety plan should be prepared, containing all elements of student safety, as part of the long-range plan.

- An adequate facility, up-to-date equipment, and good quality supplies
- A curriculum encompassing as many of the industrial arts areas as practical: materials and processes, mechanics, visual communications and electricity, etc.
- A broad exploratory experience and in-depth instruction compatible with students' current and future needs, the facilities, instructor, and community
- Planned course statements for all offerings, stating course content, goals, learner outcomes, and student evaluative procedures, incorporating elements of the state graduation requirements
- Occupational versatility--individualized instruction--recommended if a diversified program is to be offered

Individual packets, assignment sheets, audiotapes, and other AV materials offer broad learning experiences. Student-managed learning develops desirable career and personal traits.

- Interdisciplinary activities capitalizing on the talents of the staff

Elements of industrial arts can and should exist in other subjects of the school curriculum, such as measurements in math, electricity in science, and crafts in home economics.

- Complementary career education programs that make awareness and exploratory opportunities available to younger students; prevent duplication, repetition, and lost motion; and maximize the economy of money, effort and resources.
- A planned program for inservice and updating professional skills for the industrial arts instructor whose skill directly affects the students' progress
- Involvement of community resource people to broaden the scope of the program and create desirable relationships between the school and the community
- An opportunity to experience real life employment in various areas of the industrial arts program through a diversified occupations or work experience program
- A periodic, planned evaluation (assessment) to determine if the program is meeting planned goals and student needs, including both on-site evaluation and survey of present and past students in the industrial arts program

#### Interdisciplinary Approach to Career Education

Our success in establishing awareness programs can be correlated with the versatility of elementary teachers and the use of established curriculum as the teaching vehicle. Evidence that academic courses and programs are just as valuable for career exploration and preparation as vocational can be seen in the schools which have been able to kindle the interest and commitment of the entire staff. This interdisciplinary concept of educating our young people for their careers should not be lost when they leave the elementary school, but should be continued throughout their formal education.

#### Individualized Instruction

The definition of individualized instruction prepared by the Oregon Small Schools Program Individualized Instruction Advisory Team in 1972 follows:

"Individualized instruction is a way of organizing schooling which recognizes that each individual has his/her own particular background, interests, limitations, needs, learning rate, abilities. It accepts the importance of cooperation and interaction within a group, and

stresses the value of the fulfillment of the individual in his/her continuous progress through the curriculum."

This can be achieved in career and vocational education by providing individual packets, assignment sheets, multimedia teaching and learning opportunities, and small group or large group instruction. Students assume the responsibility for their own learning, rather than depending upon the teacher to direct them.

### Guidance

Guidance services, which include counseling, are essential to career education at all levels. Some schools are fortunate enough to have a full-time or half-time counselor to manage the guidance program. Others share guidance services on a countywide basis. Several schools are using the group guide system. Whether or not you have a counselor to provide specialized services, the classroom teacher is the prime agent in guiding students, no matter what size the school. All schools must have a guidance program covering the seven areas established in the Standards for Public Schools.\* A comprehensive career guidance program would include objectives and activities for each of those areas.

Guidance services should include

- Placement and follow-up activities
- Assistance to students as they relate their personal capabilities to career opportunities
- Provision for a variety of both cognitive and affective means to help students understand themselves and others, the interdependence of relationships in all areas of our society, the value of work and the role of choice
- Systematic and continuous assistance to students as they seek to learn more about themselves and their career choices and what these choices mean to the student--what is important to me, what is possible for me, and what is probable for me
- Assistance to students in implementing their personal choices
- A closer working relationship with governmental, social service, business, and other community agencies involved in career education

If you have a counselor, here are some suggested activities to enhance a career education program.

\*OAR 581-22-702(1)(a)(A)-(G)

- Make available career materials for students and teachers, free from biases based on age, sex, handicap, race, national origin, or religion
- Assist teachers in developing career guidance materials for their classrooms
- Assist in coordination of appropriate field trips and/or obtain resource people to visit the classroom
- Conduct group guidance concerning various aspects of careers

Choosing a career

What to look for in a career search

How to find a job and keep it

Developing Understanding through Self and Others (DUSO), grades 1-4

Toward Affective Development (TAD), grades 4-6

Self Understanding Through Occupational Exploration (SUTOE), JOB-0,  
or other career guidance materials

- Provide an appropriate testing program for career education, including: achievement testing, interest inventories, and aptitude testing
- Assist the classroom teacher in career exploration activities
- Counsel individuals toward an appropriate career choice, considering interest, ability, aptitude and manpower predictions
- Assist in the development of inservice programs about career guidance practices
- Assist in program planning, implementation, and evaluation
- Assist in follow-up studies of the career guidance program

In districts where counselors are not available to manage the guidance program, guidance can be provided by

- Assigning appropriate teacher time to assist students in career decision-making
- Using a "Group Guide System," teachers are assigned a number of students to assist in career decision-making (the advisor usually stays with the students all through high school).
- Providing as many guidance activities as possible within the time and space allowed
- Permitting selected staff members to attend counselor workshops and courses to add to their guidance skills

- Referring students to sources outside the school district for the counseling services (ESDs, Mental Health Division, Employment Service, or other community agencies)

### Community

Community commitment to the career and vocational education program is a vital factor to success. If the community is included in the planning, implementation, and evaluation of the total program, they will feel ownership and be supportive. They can become a part of the educational process by participating in the learning-teaching process, and by extending the school into the community to provide learning experiences not otherwise available.

Small schools, particularly, must seek every resource possible to provide a well-rounded career education program. There are many means to formally organize community people into an active role in the educational program. A few schools, such as Colton, have a full-time employee for this very purpose, but even if you don't have a community coordinator, you, too, can include your community in a practical, beneficial way. Formulate a plan to involve

- Leaders in business, industry, labor, service, and governmental agencies
- Leaders of minority, disadvantaged, and handicapped groups
- Representatives of newspaper, radio, television and local magazines
- Leaders of fraternal and service organizations
- Leaders in community service
- Representatives of all levels of work--unskilled, semi-skilled, skilled, professional
- Women
- Leaders from other educational agencies in the community
- Representative parents
- Representative students
- Senior citizens

### Advisory Committees

One way to include the community is through the use of advisory committees. The advisory committee should be a small, workable group of citizens with a reputation for proficiency and knowledge within the area in which you seek advice. Its only committee authority is the weight of advice. If allowed to function in a truly advisory capacity, it will convey vitality, renewal, and challenge to the curriculum.

All schools are required to have an advisory committee for each approved vocational program and a district advisory council to approve expenditures of federal funds for vocational basic grants. The advisory council is comprised of a cross section of the whole community, including at least three people from business, labor and industry, and any others the school wishes to designate.

For career and vocational education, be sure to include representatives on the advisory committee who are representative in order to get the true picture. Encourage membership by some who might disagree with your own ideas, if their disagreement is based on sound reasoning. A token or rubber stamp advisory committee is of questionable value.

Starting an advisory committee requires a careful study and screening of the persons asked to serve. Certainly, your administrator, fellow teachers, and school board will have suggestions for possible members. Program orientation, while necessary, should be done only as committee members request or indicate a need for it.

Good starting topics include

- Methods of determining the skill or needs of what is to be taught
- Follow-up and evaluation of graduates to see how well the program is attaining its goals
- Areas or problems of immediate concern--what can the committee do to help you, the program, and the school do a better job

### Vocational Student Organizations

Vocational student organizations should develop leadership qualities, cooperation, citizenship, and participation in home, school, and community activities. These formal and informal out-of-school associations can provide valuable learning experiences and enhance self-esteem. The organizations are student-centered, featuring leadership opportunities. Although teachers serve as advisers, vocational student organization success depends upon student participation, defined goals, and plenty of activity.

Many of the organizations are statewide and nationwide, and organizational assistance usually is available to the schools. (See Vocational Student Organizations, page 85.) Reimbursable vocational student organizations are

- Distributive Education Clubs of America (OECA)
- Future Business Leaders of American (FBLA)
- Future Farmers of America (FFA)
- Future Homemakers of America (FHA)
- Home Economics Related Occupations (HERO)
- Vocational Industrial Clubs of America (VICA)

#### Safety Considerations

School districts are responsible for the management of a current, comprehensive emergency plan and safety policy program to assure compliance with all local, state, and federal laws relating to safety standards. In addition to safe working conditions, career education programs should provide safety instruction for students and adults as part of their curriculum offering.

#### Energy Education

The dependence on and availability of energy will affect our lives continually. An important role of education is to provide citizens with the skills and knowledge to cope. Vocational education must teach skills for existing and emerging occupational areas.

The State Board of Education has adopted an energy policy to "encourage high school and post-secondary training for careers in the energy industry." One of the Department of Education's goals is "to provide skilled workers in energy related fields through vocational/technical training and upgrading programs."

The Department of Education offers the following list of activities to strengthen energy training to meet state policy and goals

- Modify course goals to reflect energy skills and knowledge
- Identify and implement conservation skills and knowledge appropriate to each instructional program
- Encourage inclusion of information and experimentation in new and emerging alternative energy sources

- Implement energy inservice to upgrade vocational teachers and enable them to provide quality energy-related instruction
- Utilize community resources which provide energy-related work experience
- Develop a long-range plan for equipment and facility replacement that reflects energy efficiency
- Maintain equipment at an optimum energy efficiency level
- Develop a local energy advisory committee in the district to assist with the planning for equipment, facility and curriculum needs

#### Evaluation and Assessment

Both process and product evaluations of a program are essential. Career education is ongoing from kindergarten through post-secondary and adult levels, and evaluation to determine its success or needed revision cannot wait until the first students exit the program and attempt to seek full employment or additional preparation.

#### Summary

The important elements of a career education program

- Include adequate, articulated instruction in career awareness, exploration, and specific preparation
- Reflect the activities, opinions, and demands of business and industry
- Use the interdisciplinary approach
- Meet the state standards for graduation requirements
- Allow each student to develop career interests and abilities
- Receive a written commitment by the board.
- Have a long-range plan
- Secure strong administrative support
- Form representative, active advisory committees
- Provide an opportunity for work experience
- Offer adequate guidance and counseling



- Promote vocational student organizations
- Have a good safety policy program and include safety instruction in the curriculum
- Teach energy and conservation skills for existing and emerging occupations
- Be constantly evaluating, assessing, and revising the program

Career awareness, exploration, and preparation are vital in setting and reaching satisfying career goals. Telling our youth to base their decisions on how much money they will make is a mistake. We need to help them find the kind of work they want to do. Show students as many opportunities as possible for career choices. No matter how hard you try, if students are not interested, they will not accomplish much. Stretch your imagination!

*Whether we plan it or not, we are, in essence, giving our students career education in our schools. If we do not have a positive program, we may be allowing them to learn such poor study and work habits that they will never be successful in their careers.*

## Part 2 DEVELOPMENTAL PROJECT

SMALL SCHOOLS CAREER EDUCATION DEVELOPMENTAL PROJECT . . . . .	23
Amity School District . . . . .	23
Condon School District . . . . .	26
Lost River High School . . . . .	28
CREATIVE CAREER AND VOCATIONAL EDUCATION PROJECT . . . . .	30
Aisea High School . . . . .	30
Mitchell High School . . . . .	31

## PROJECTS FUNDED FOR SMALL SCHOOLS

### Small Schools Career Education Developmental Project

The Small Schools Career Education Developmental Project was funded by the Department of Education for three years, 1974 - 1977. All of the "small" schools were invited to submit proposals. The letter stated, "The purpose of the small schools model developmental site is to work closely with the Department of Education to develop and implement ways of furthering career education in Oregon's small schools. As developmental sites, the schools selected should develop to advanced models in a relatively short time, and then share ideas with interested persons."

Three schools were selected on the basis of the proposals submitted, administrative leadership, and location--Amity, Condon and Lost River. Each site developed a different career and vocational education approach, tailored to the needs and resources of the district. The schools hosted many visitors and made presentations about their programs. Visitors are welcome, but should make arrangements prior to their visits.

An updated report on the project's results follows:

Amity School District 4J  
District Enrollment 605

Yamhill County

Amity is a small, rural farming district six miles south of McMinnville on Highway 99W. The farming consists of field crops, row crops and some livestock. There are two outlying feeder elementary schools, one elementary school in town, and the high school. Amity is within the Chemeketa Community College District.

The career and vocational education program is built into the curriculum guides, established in the scheduling procedures, and is part of the Amity High School graduation requirements.

The program is made up of the following components

#### CAREER AWARENESS

Awareness Advisory Committee  
Cadre-trained instructor in career awareness  
"Career Carrousel"--activities and concepts of career awareness

#### CAREER EXPLORATION

Career Exploration Advisory Committee  
Economics curriculum for eighth grade, "The Real World of Work"  
Modified SUTOE curriculum for seventh grade, "Who Am I?"  
Eighth grade Occupational Versatility  
Ninth grade Occupational Cruise into four clusters: Agriculture,  
Home Economics, Business, Construction  
Ninth grade Cruise Exploratory (CX) English

#### VOCATIONAL PROGRAMS--CLUSTERS

Home Economics: Foodservice, Child Care Services, and Clothing  
Services  
Business: Accounting, Clerical, Secretarial  
Vocational Agriculture

#### COOPERATIVE WORK EXPERIENCE

Agriculture and related occupations  
Business  
Cadet Teaching  
Construction  
Foodservice  
Special Education

#### ADVISORY COMMITTEES

Awareness  
Exploration  
Agriculture  
Business  
Home Economics

#### SPECIAL CAREER/VOCATIONAL CLASSES

EMR "special education" students mainstreamed into vocational programs  
where possible, i.e., occupational versatility

#### LONG-RANGE PLAN

Developed through input from staff, administration, and advisory  
committees; currently being updated

## CAREER GUIDANCE

A functioning advisor-advisee program  
Career Information Service - Needle Sort  
Career Information Service - Inservice Program  
Ohio Vocational Interest Survey (OVIS) - grades 8 and 11  
Armed Services Vocational Aptitude Battery - grades 9 and 11  
Student Needs Assessment - all secondary  
Graduate follow-up - SERVE and Guidance

## INSERVICE PROGRAMS

Cadre trained in career awareness  
Career education administrators  
Career education exploratory (CX) English  
Career education concepts

## INTERDISCIPLINARY

Cruise English Program  
Agriculture  
Home Economics  
Business

## VOCATIONAL STUDENT ORGANIZATIONS

Future Business Leaders of America (FBLA)  
Future Farmers of America (FFA)  
Future Homemakers of America (FHA)  
Future Teachers of America (FTA)

The greatest change brought about in the district as a result of this project involvement is that nearly all of the staff have taken on the task of assisting youth with career-related information and making a sincere effort to sit down and meet with students one to one to discuss the students' personal concerns in career planning. This contact with students is vital to the success of any educational program.

What is being done differently? Without tampering with the academic emphasis, career education has been expanded to provide greater opportunities for all students, not just the privileged few who might go on to college. Career and vocational education demonstrates greater respect for the potential of youth than has been shown in the past.

Visitors to the district are certainly welcome; please make an appointment and request the information needed to make your visit as beneficial as possible. The Career Fair which offers presentations about more than 60 occupations to students in grades 7-12 is especially interesting to attend.

It is Amity's hope that more small schools can take advantage of the progress made in the developmental sites by planning visits which may lead to ideas being transported to other districts for implementation.

Materials are available on request. Contact Amity High School Principal George Lanning for additional information or to arrange a visit.

Mr. Lanning comments, "There has been a considerable change in the staff over the past few years so all the items that were developed are not currently being used. There has also been less emphasis placed on career education related activities over the last few years.

"There were, however, many positive things that were developed and are still functioning in our school system today. Some of these include:

Advisor-Advisee Program

CX English

Active Career Awareness, Exploration, Vocational Agriculture, Business and Home Economics Advisory Committees

Occupational Versatility, grades 8-12

Freshmen Cruise"

Condon Administrative District 25  
District Enrollment 248

Gilliam County

Condon is a town of fewer than 1,000 residents, nestled in the wheat and cattle country of Eastern Oregon. It is located 38 miles south of the Columbia River in Gilliam County. The district consists of two schools-- a grade school, K-8 with 160 students, and a 9-12 high school with 88 students.

The project emphasis was teacher involvement in the classroom, along with guidance and counseling services. A record keeping system for classroom activities which emphasize career education was developed in conjunction with a system of teacher evaluation in career education emphasis.

Students at Condon High School are required to take one quarter (nine weeks) of "career planning," and the remaining three quarters must be work experience in relevant sites, according to their career choices. If no such site is available, career credit is given for appropriate classroom work in preparation for the chosen career.

The career and vocational education program contains the following

#### CAREER AWARENESS

Career goals formulated for grades 1-9  
Activities woven into regular classroom study

#### CAREER EXPLORATION

Home Economics and Industrial Arts--required for grade 8  
Career Planning--required for grade 9  
Home Economics  
Industrial Arts  
Vocational Agriculture

#### VOCATIONAL PROGRAMS

Agriculture  
Business

#### ADVISORY COMMITTEES

Agriculture

#### DIVERSIFIED OCCUPATIONS WORK EXPERIENCE

Instructor assigned part-time to supervise students  
No classroom instruction offered

#### LONG-RANGE PLAN

District is in the process of updating and developing a new five-year plan

#### CAREER GUIDANCE

A functioning guide-guidee program  
A half-time counselor for the district  
Career Information Resource Center in the Library

#### INSERVICE PROGRAMS

Teachers may visit career and vocational education programs in other school districts

#### INTERDISCIPLINARY

Used only on individual basis for slow learners

#### VOCATIONAL STUDENT ORGANIZATIONS

Future Farmers of America (FFA)

Although Condon has attempted to integrate career education into all levels, K-12, there is still a great deal of work to be done. Many of the accomplishments have been subtle and are not noticeable to the visitor.

Visitors are welcome at the Career Information Resource Center located in the library. It contains over 500 cross-indexed articles from the Occupational Outlook Quarterly and Career World magazine. The center also contains a comprehensive open file system with over 1200 pamphlets and brochures which are available for check out. SRA file system numbers are used in the open file and subject card index. The resources in the Center are coordinated with a career guidance and testing program. Students are instructed in the use of the DOT (Dictionary of Occupational Titles) as it pertains to the ASVAB, USTES and CIS (needle sort). A system has been developed for updating and continually enlarging the career information holdings.

Contact person for additional information on the Career Information Resource Center is Juanita Shearer. For the Condon School District Career Education Goals, the quarter system schedule, and other related materials, contact Michael Keown, high school administrative assistant.

Mr. Keown stated, "The career education program at Condon High School is operational with students using the career file, college and vocational materials individually under the guidance of educational media personnel. Some staff members continue assignments of career reports and there is some use of outside work experiences. Because of staff turnover in the vocational area, except for business, time will be required to acquaint new staff with the facilities and program."

---

Lost River High School  
School Enrollment 193

Klamath County School District

Lost River High School, now in its tenth year, is an open concept building located 20 miles southeast of Klamath Falls between Merrill and Malin near the California border. It is basically a farming/ranching community. The school is part of the Klamath County School District which has 15 elementary schools, 2 junior high schools, and 5 high schools in the countywide area, instructing approximately 7,500 students. Lost River is the result of the merging of two high schools in Merrill and Malin in 1970.

Since its beginning, Lost River has had a good vocational program which is becoming stronger as new programs are developed. When it became a model site in 1973, five staff members and the principal worked actively to develop a career-oriented program to reach the entire student body. The four traditionally vocational disciplines--vocational agriculture, industrial arts, business education and home economics--assumed the major responsibility for achieving a strong program.



All tenth graders explore the world of work through "Where To," a one semester career guidance class. The course is designed to provide hands-on experiences to help channel students' interests and evaluate their aptitudes for future course work in one particular area. The course also serves as an introduction to the school's regular vocational courses and cluster programs. Hopefully, the students will select courses of study in areas which will prepare them for job entry skills when they graduate.

A community resource development program releases vocational teachers to spend a few days doing actual work in their disciplines with local employers. The instructors gain on-the-job training which can be transmitted to the students, presenting a more practical relationship between actual employment and students' preparation.

The components of Lost River's career and vocational education program are as follows:

#### CAREER AWARENESS

Responsibility of the County School Administrative District, but not a part of this project  
Eighth graders preview visit to high school career and vocational classes

#### CAREER EXPLORATION

"Where To" - grade 10  
Industrial Arts (woods, metals, mechanical) - grades 9-12  
Home Economics - grades 9-12  
Business Education  
Vocational Agriculture

#### VOCATIONAL CLUSTERS

Agriculture  
Steno-Clerical

#### ADVISORY COMMITTEES

Vocational Agriculture - school level  
Business Education - district level  
General Advisory Council - district level

#### LONG-RANGE PLAN

Long-range plan in the process of being updated

#### GUIDANCE AND COUNSELING

Individual counseling with students by vocational teachers

## INSERVICE PRDGRAMS

Community resource development program for vocational teachers  
Career education concepts for entire high school faculty planned

## INTERDISCIPLINARY

"Where To"  
Inservice for all faculty members

## VOCATIONAL STUDENT ORGANIZATIONS

Future Farmers of America (FFA)

There have been several turnovers in staff during this project and since, delaying Lost River's total career and vocational education program planning and implementation. Lost River is making a new start, proving that a program can continue to develop effectively in spite of changes in leadership and emphasis. Paul Mallonee, career and vocational education coordinator for the district is contact person.

### Creative Career and Vocational Education Project

The Career Education Developmental Project was considered to be successful. Discovering the things that worked and those that didn't provided patterns for future programs in small schools.

Concern persisted about difficulties faced by high schools with 75 or fewer enrollment in establishing career and vocational programs, so the Department of Education provided a small amount of money to fund the Creative Career and Vocational Education Project, 1977-1980. It was originally planned to fund just one site, but the two project applications received--Alsea and Mitchell--represented two entirely different approaches. The selection committee decided to fund both the Alsea High School Business Open Lab and Mitchell High School's Special Vocational Program in Metals and Mechanics. The project is now in its third and final year.

---

Alsea High School  
School Enrollment 75

Alsea School District 7J  
District Enrollment 225

### Business Open Lab

Alsea is a small logging community of about 600. It is located 25 miles southwest of Corvallis and 40 miles from the coast.

An open lab in a small school gives students a wider selection of class offerings. It is flexible enough to have a student in open lab while another class is going on. It is set up so that a student can take it for

a day or two or for the whole year. It provides vocational competencies to all students, not just those enrolled in business. Student body officers can come in for training in accounting and typing. Students from journalism and "Kingfisher" classes can come in to practice skills. It is hoped that students from other areas such as diversified occupations and forestry will begin to use the lab, also. Students may earn more than one credit in a year if they do extra credits. Students can pick up in-depth training in business.

The lab offers individualized programs in record keeping, bookkeeping, data processing, business math and machines, and typing.

In setting up an open lab, the first step is settling on a comfortable format. After that, the number of courses that can be added is endless. Start with one or two, and build on that. Alesia is in the process of adding courses and updating the current ones. Acquisition of a minicomputer and preparation of simulation packages for each of the courses in the open lab are planned.

Instructor Jim Hagler is contact person. He is excited about the open lab and the opportunity to offer new courses to the students. It was a great help for him to visit other schools with open labs to gain ideas. He now extends an invitation to others to visit his lab or to contact him with their questions.

---

Mitchell High School  
School Enrollment 35

Mitchell School District 55  
District Enrollment 92

### Metals and Mechanics

Mitchell School District, located in Wheeler County, is rural and isolated. Historically, less than 15 percent of Mitchell students complete high school or continue their education after high school graduation. This indicated a strong need to develop a program which would teach vocational skills to high school students and adults in the community.

An EDA grant of \$186,921.13 provided an outstanding shop building in 1977. Monies received from the Creative Career and Vocational Education project were used for inservice and consultation for the instructors and administrator, and to buy tools and supplies.

Approximately 30 students have participated in the program, including two who are handicapped. Adults in the community attend evening classes. Two part-time teachers provide the instruction, and the four secondary teachers incorporate aspects of career and vocational education into their regular classes.

The general goals of both the metals and mechanics areas are to teach marketable job skills. Several students who completed the program have already found jobs in mechanics and welding. Also, there has been success among the adults. Of the four women who enrolled in an introductory welding class, one uses skills gained in her daily work, another constructed decorative works which she has sold, and a third plans to have a showing of her art works.

The school has found, for their purposes, that experienced instructors who have spent a lifetime in their industries provide a more realistic program for teaching job skills.

No written materials have been developed in the project, but many products have been constructed to supply community needs such as: supplements to trapping, in which many students engage; a rather involved support system of pipes and braces for a semi-invalid so he can get out of bed and exercise his arms; and fabricated items for the school. Students are learning to work on large vehicles (trucks, buses, pickups); learning wiring, steam cleaning engines, replacing worn and broken parts; and welding car parts.

The total Mitchell community regards this program as a most valuable contribution. Welding and mechanics are carried on throughout the term as a learning center and as a useful service in repair and fabrication.

Since the three-year grant will terminate this year, the program will require more local monies in the future. The program has strong community support, so this should be no problem.

The shop facility financed by the EDA grant should have a woodworking shop to be fully utilized; however, start-up funds from outside the district would be necessary.

Visitors are very welcome. The program of instruction is in the early afternoon, Monday through Friday. Contact Maxine Andrews, Superintendent, for additional information or to arrange a visit.

### Part 3 PROFILES

CAREER AND VOCATIONAL EDUCATION PROFILES . . . . .	33
Career Awareness and Career Exploration . . . . .	34
Career Exploration at the High School . . . . .	41
Career Guidance . . . . .	44
Business . . . . .	45
Construction . . . . .	50
Cooperative Work Experience . . . . .	50
Distributive Education - Marketing . . . . .	52
Diversified Occupations . . . . .	52
Energy . . . . .	53
Foodservice . . . . .	55
Forestry . . . . .	55
Graphics . . . . .	57
Health Occupations . . . . .	58
Home Economics . . . . .	58
Industrial Arts . . . . .	60
Industrial Mechanics . . . . .	61
Manufacturing Technology . . . . .	63
Service Occupations . . . . .	63
Vocational Agriculture . . . . .	64
Shared Services . . . . .	67

## CAREER AND VOCATIONAL EDUCATION PROFILES

This section presents a picture of the career and vocational education programs and activities going on in our schools. There are ideas to be gained from all of them.

These profiles were solicited from all the small schools, regional career and vocational education coordinators, larger schools whose programs have practical application to small schools, and Department of Education Specialists. It is impossible to list all the interesting programs and activities, but an attempt was made to have representative profiles from all areas of the state.

We encourage you to contact people named for additional information, materials, or to arrange a visit to observe first hand. You may wish to inquire about how long the program has been in operation, how many students are involved, etc.

Please make an appointment before you visit. Write or telephone and describe the purpose of your visit, who will be visiting, and so forth. By observing this courtesy, you will benefit from your visit and not inconvenience the host school.

## CAREER AWARENESS AND CAREER EXPLORATION

Enterprise Elementary School  
School Enrollment 350

Enterprise School District 21  
District Enrollment 550

### Careers and Budget

Grade 6

A six-part course on Careers and Budget includes: selecting and researching an occupation for the future to learn about income, education and training requirements, fringe benefits; preparing income tax returns for the occupation selected; using and balancing checkbooks; grocery shopping; clothing shopping; shopping for appliances for the home; and making blueprints for a home.

This "home made" program has been in operation three years and has had good success. There are no materials available, but visitors are welcome. Contact Chuck Corak for more information.

John Day Grade School  
School Enrollment 167

Grant Administrative District 3  
District Enrollment 800

### Career Awareness and Exploration

Grades 6, 7 and 8

Sixth graders increase career awareness by combining practice of basic skills; studying occupations related to health, environment, safety, math, reading, science and recreation; and learning about nutrition and consumerism through a variety of activities.

Seventh and eighth graders explore careers by taking nine-week segments of exploration, ecology, wood shop, arts and crafts, or other electives the last class period of the day. During exploration, they visit John Day businesses, interview employers and employees, examine job skills used, find out education and experience requirements for certain jobs, do library research, learn to read and answer newspaper ads, role play interviews, and evaluate their own interests, skills, abilities and expectations for future careers. In conjunction with their visit to the bank, students study payroll and deductions, deposits, check writing and checkbook balancing.

Juntura Elementary School  
School Enrollment 25

Juntura School District 12  
District Enrollment 25

Janitorial Service

Grades 5-8, Elective

The students cooperate with the school to do the janitorial work formerly done by an adult. Students "volunteer" to do the work, and the school board "volunteers" to send the students on a field trip with the money saved by not hiring an adult janitor.

The work is divided up at the beginning of the school year so there is one job per student. Students rotate weekly, so that all get a chance at every job. The supervisor controls the management end of a business situation and is responsible for the overall appearance of the school for that week. No specific task is assigned the supervisor.

Minor repair work, such as replacing broken windows, is done by the teacher. There is no charge to the school for this; rather, it is an aid to the students who would ordinarily do this as part of the job. Major repair and painting is done as a separate summer job by an adult. It is a separate budget amount not connected with the janitorial work.

No student has ever refused to participate in this program. They can refuse, but they would not be allowed to participate in the field trip at the end of the year.

This program has been in operation for five years, and students have taken trips to Disneyland, Boise, Salem, Portland, and the beach. They are planning a week-long trip to Washington, D. C. in the spring of 1980.

The program has brought a halt to all types of vandalism. The only broken window occurred when a bird flew through it. The overall appearance of the school has improved because students are reluctant to make a mess. Students have increased pride for themselves and the school.

Are visitors welcome? "Absolutely," says teacher Tom White.

---

Mill City Elementary School  
School Enrollment 237

Mill City-Gates School District 129J  
District Enrollment 600

Career Awareness

Grade 8, Required

A career awareness program has been developed as part of the social studies class so that students may begin to develop future goals. Students use key-sort test and write for information about training required and need for employees in selected occupations. A written report is part of the class assignment and is submitted for a grade.



Eighth graders also have the opportunity to spend one semester in elective classes in home economics and industrial arts taught by the high school teachers. Contact Al Glover, eighth grade teacher, for additional information.

---

St. Mary's Public School  
School Enrollment 252

Mt. Angel School District 91  
District Enrollment 734

The Mental Health of the Student (Self-Image) All grades, Elective

The way in which students view themselves is directly related to how they will perform in the classroom. Students with positive self-images are more likely to reach potential than those with poor self-images.

The following is a list of activities used in the classroom or in other groups. Each one can be adjusted to a particular grade level or student.

- Who am I? Writing an autobiography is an excellent way to get students to look at themselves. It is surprising to find how many children have never thought about their likes, dislikes, hobbies, etc. The autobiography can either be written totally by students or by filling in sentences such as, "My name is \_\_\_\_\_. I am \_\_\_\_\_ years old. My favorite subject in school is \_\_\_\_\_." The purpose of this is to introduce the students to themselves.
- Me After students begin to realize who they are, they can reveal themselves to other people by making a collage titled, "Me." This consists of students' cutting out pictures from old magazines which they feel will reveal who they are, who they'd like to be, their hobbies, feelings, etc. Pictures may include a basketball player, sailor, housewife, nurse, dog, wildlife, a forest, clouds, birds, a sunrise, and so forth. As a result of this activity, students will take a closer look at themselves and will also show who they are to other people.
- I am Successful It is important for each student to feel successful. Students must understand that success does not mean being at the top of the class in everything. Success should be seen as improvement of any kind. A good project to show individual success is for each student to start a notebook. Each day a success or good thing that happens will be written down. The teacher may have to help some students identify successes until they get the idea.
- Feelings Being able to express feelings is as important to children as it is to adults. Letter writing provides a good way for students to express their feelings. About once a month students write letters to the teacher expressing honest feelings about both good and bad things. It must be recognized that students won't be very honest at first, but the more they write, the more honest and open they will become.

These are a few activities used to help students build a positive self-image. More activities can be found in the book 100 Ways to Enhance Self Concept in the Classroom by Jack Canfield and Harold C. Wells.

Contact Gary Livingston for more information. This program is in its second year.

---

North Plains Elementary School  
School Enrollment 312

North Plains School District 70  
District Enrollment 312

Infusion

Grades K-6

Career awareness is taught in K-6 in conjunction with other subjects. In most cases it is done as part of social studies, but the music teacher and other specialists also contribute to the awareness program. Only on special occasions, usually once or twice a year, classroom teachers actually single out careers as a major stress. They believe the correct way to deal with career education is to have children recognize that everything they do is career related.

Results of this program, which has been in effect for seven years, is that children understand the value of many aspects of life and are more aware of how all things they are exposed to interrelate. Visitors are welcome. Contact person is C. H. Lewis.

---

Parkersville Elementary School  
School Enrollment 47

Parkersville School District 82  
District Enrollment 47

Survival

Grade 8

All eighth graders work through a Holt, Rinehart and Winston study guide, Oregon Survival, by Betty Hall and Colin Dunkeld. It includes job hunting, tax forms, banking, reading maps, borrowing money, renting, and forms to be filled out for each topic. The class is held for nine weeks, 45 minutes a day. It helps the students become more aware of what lies ahead. This was badly needed since a large number of the students are Russian (77%), and most of them do not go on to high school. Contact person is Victor Barnick, Principal.

Riverdale Elementary School  
School Enrollment 240

Riverdale School District 51Jt  
District Enrollment 240

Career Awareness

Grades 7 and 8

As part of the career awareness program, all seventh and eighth graders spend two days in actual occupations of their choice--doctor's office, medical school, lawyer's office, architect's office, etc. Since 100 percent of the students normally are college bound and live in a very affluent residential area, a wide range of professions is available.

They also do a great deal of environmental study with the cooperation of the Bureau of Land Management, the Forest Service and marine biologists. Contact person is Lyman Bruce, Superintendent.

St. Paul Elementary School  
School Enrollment 92

St. Paul School District 45  
District Enrollment 220

Career Awareness and Exploration

Grades K-8

They have purchased and are using the Oregon Department of Education's Career Awareness and Exploration kits for grades K through 8. Activities are designed for all levels according to objective being taught, and they are thorough in scope and fun for students. Use of the kits has increased knowledge of careers available and qualifications for entry level. Contact David Forsberg, Principal, for more information.

Union Education Service District

Elementary Industrial Arts Approach to Career Awareness

The most exciting program going on in Union County, in addition to regular awareness activities in the classroom, is the Elementary Industrial Arts Approach to Career Awareness. Three mobile workshops, fully equipped with tools, have been constructed. These mobile units are transported to the various small schools in a pickup truck.

The teachers may implement the projects themselves or may request the assistance of the Career Awareness Coordinator. Wood for the projects is supplied by local industry.

Teachers select activities for construction from a book, Elementary Construction Ideas, produced by the Union County ESD secretarial and media staff.

The units are used to develop hands-on activities that support a concept. For instance, boys and girls build covered wagons when they study about the westward movement and the Oregon Trail. The interdisciplinary approach is used; nearly all disciplines are involved in some part of the total unit.

The workshop part of the units uses tools to accomplish the assembly manufacturing of an item such as the covered wagons. The unit stresses student planning, student implementation, and student evaluation. Teachers and students thoroughly enjoy this activity.

Career Awareness Coordinator Robert French believes that all elementary schools should have a tool kit of this type. There are some monies available to schools that wish to implement this project through Promising Practices, Vocational Exemplary and Research Specialist, ODE.

---

Vale Middle School  
School Enrollment 185

Vale School District 15  
District Enrollment 630

Career Exploration

Grades 7 and 8

The Vale Middle School has a model career exploration program in operation. The program is built on the interdisciplinary concept and was developed by the total staff. Career exploration is considered everyone's responsibility; it is infused into every phase of the curriculum.

The program features self-assessment, career and personal guidance, a modified and innovative version of the occupational versatility concept and a new approach to consumer/homemaking. The consumer/homemaking and occupational versatility programs emphasize basic principles and hands-on techniques. Practical application and relevance are the central theme of this program.

Printed materials developed include: Student Needs Assessment Guide, Interdisciplinary Guide to Career Education, Community Resource Guide, an Implementation Guide and several printed units.

Costs of the program include tools, equipment and supplies for shop and laboratory areas, and planning and writing time for project organizers. Two additional staff members were required.

Visitors are accepted by appointment. For additional information contact Jim Carlson, Superintendent.

Victor Point Elementary School  
School Enrollment 139

Victor Point School District 42C  
District Enrollment 139

Career Education Day

Grades 1-8

The school sets aside one day each year as "Career Education Day." Representatives from as many career fields as possible visit in each classroom, bringing with them the tools of their trade and wearing their uniforms, if applicable. This has been done for two years, and has generated tremendous student interest and community support. Contact person is Lloyd Barnes, Principal.

## CAREER EXPLORATION AT THE HIGH SCHOOL

Adrian, Harper and Jordan Valley  
High Schools

Malheur Education Service  
District

Career Exploration the Small School Way

Grades 9-12, Required

This year the ESD received a grant to enable Jordan Valley, Harper and Adrian High Schools to receive assistance in providing career exploration and career guidance opportunities to their students. The objectives of this grant are to: enrich the curriculum by developing a process of career exploration; make career information and guidance services available with appropriate software; modify learning activities for the "turned-off," disadvantaged students; assist teachers to become more comfortable in working with guidance.

The grant provides inservice training for the schools' staffs on guidance and exploration in the classroom and by visitations; purchasing software for testing and assessing students, providing information on occupations, and assessing career assistance; providing an itinerant resource person as tutor and guidance director; and providing for the needs of disadvantaged and handicapped students.

The program began this school year. Materials are being developed to be shared with other school districts. Contact person is Sam Banner, Regional Career and Vocational Coordinator.

---

Detroit High School  
School Enrollment 50

Detroit School District 123J  
District Enrollment 158

Careers

Grade 10, Required

This required class for tenth graders deals with personal skills and competencies relating to job preparation. It uses teacher-made materials based on SUTOE and has been in operation four years. Contact person is Elaine Hopson, Superintendent.

Elgin High School  
School Enrollment 200

Elgin School District 23  
District Enrollment 622

Business Cruise

Grade 9

Students are introduced to "business" during this nine-weeks course. Special attention is given to careers in business, stocks and bonds, labor unions, record keeping. Occupations examined include marketing, clerical occupations, management, data processing, and "professional" business jobs.

Methods used are needle sort, occupational material in the library for report writing, speakers, and field trips. They have purchased two kits from McGraw-Hill, "Exploring Marketing Occupations" and "Exploring Clerical Occupations," which suggest numerous activities. This year the class is being taught by the personnel manager from Boise Cascade, Elgin's major employer.

For more information or materials contact Betty McClennan, business education teacher.

\* \* \*

New Options

Elgin High School received a grant this year for New Options, a class to encourage women to consider nontraditional roles. Their motto is, "The best man for the job may be a woman."

In planning the course, all available material dealing with careers, diversified occupations, distributive education, women's roles, etc., was looked up or ordered. Movies and filmstrips by the dozens were previewed. Much of what was done was experimental--some things worked well, and some didn't; e.g., too much emphasis on the ill effects of stereotyping caused negative reactions. Teachers kept track of materials that were used successfully and those that were not effective.

Girls in the class wrote letters of application, resumes, filled out employment applications, and discussed job interviewing. Speakers talked about their careers, and field trips were taken to observe jobs not traditionally held by women. Junior and senior girls were encouraged to take the GATB and ASVAB tests.

Handouts were used to determine attitude, aptitude, and opinions. Some materials were developed by teachers, others were copyrighted materials.

Girls were placed in jobs at the beginning of December. Employers were very cooperative. The advisory committee was responsible for some of the positions.

Another year will be necessary to prove or disprove the program's success, but the teachers feel it is off to a good start. It is an area that must be pursued; many women support families, many two-parent families need double incomes, and it is necessary for young women to be able to support themselves to avoid a dependency role.

Questions are welcome. Contact Robin Naughton or Betty McClennan for information.

\* \* \*

Vocational Education Cruise

Grade 9

This nine-week class introduces students to the industrial arts and vocational agriculture classes at Elgin High School and opportunities and careers in the vocational fields.

Students are exposed to basic information through lectures, films, guest speakers and demonstrations. They become familiar with shop safety, tool identification and jobs and careers related to the units taught. They are also instructed how to apply the units to home use, and build a notebook which can be used for reference.

Units taught include: how to read and draw building plans; a simple project in woodworking (birdhouses, mailboxes, etc.); arc and gas welding; demonstration of the forge and foundry; working problems to learn board feet; bills for material; electricity; metric measurements; tool identification; plumbing; agriculture (animal and plant science). A field trip at the end of the nine weeks to a local business gives students first-hand observation of an area studied in class.

For additional information contact Gale Wilson.



## CAREER GUIDANCE

Dayton Junior-Senior High School  
School Enrollment 400

Dayton School District 8  
District Enrollment 830

### Integrated Career Guidance

Grades 7-12, Required

Nine curricular-integrated units for grades 7-12 allow students to develop career information and career decision-making skills. The program is built on a developmental counseling base and is designed to meet the requirements of the State Standards for Guidance and Counseling. Units include: (1) Self Understanding, (2) World of Work, (3) Communications and Interpersonal Relations, (4) Exploring Career Opportunities, (5) Understanding Personal Values, (6) Decision-Making and Personal Planning (Part I), (7) Job Seeking, (8) Financial Management, (9) Personal Planning (Part II). The units include selected activities from career education programs in several other districts.

Partial implementation of the program began in 1978, and it should be fully implemented by the 1980-81 school year. Visitors are welcome. Contact person is Ron Wilkinson, Vice Principal and Career Education Coordinator.

## BUSINESS

Colton High School  
School Enrollment 366

Colton School District 53  
District Enrollment 788

---

### Self-Paced Office Training

Grades 9-12

The program provides individual, self-paced office job training sequences for fifteen common entry-level office jobs available across the country--typist, clerk typist, file clerk, mail clerk, payroll clerk, accounts payable clerk, stock control clerk, purchasing clerk, credit clerk and traffic clerk. Also, programmed and individual self-paced instruction is offered in pen and machine shorthand, filing, office machines, bookkeeping and accounting.

This program simulates the most effective techniques used by business and industry in on-the-job training. It recreates the personal character of the trainer-trainee relationship in actual, on-the-job training programs by means of an easy, give-and-take dialog format that not only conveys essential information but suggests the kind of language and behavior expected in business situations.

Visitors are welcome and course related materials are available. Contact J. Sullivan, Business Education Teacher.

---

Detroit High School  
School Enrollment 50

Detroit School District 123J  
District Enrollment 158

### Clerical Cluster

Grades 11 and 12

A two-year program for juniors and seniors is offered. It is an open lab for all levels of shorthand and bookkeeping. Every other year typing is taught and is available to students in grades 10 - 12. The clerical program varies from year to year, depending upon student interest and need.

Visitors are welcome. Contact Monica Hillebrand for additional information.

Elgin High School  
School Enrollment 200

Elgin School District 23  
District Enrollment 622

### Office Simulation

Enrollment in the class determines its activities. When there is high enrollment, half the year is spent learning calculators, transcribers, and a choice of typing and record keeping projects. The second half is spent with the Serendipity Office Simulation Course from Southwestern. "Employees" are seated at regular office style desks. They make up company names, design letterhead and envelopes. "Applicants" write letters of application, complete application forms, prepare resumes and take a pre-employment test. They are interviewed by the high school counselor who judges them on the written work, poise, grooming, and answers to the pre-determined interview questions. Results are reviewed with the students, and the "employees" are selected. They rotate the jobs for a wide range of experience. The class is divided into "employees" and "customers," then they switch.

When enrollment is low, typing II and office simulation classes are combined. A variety of kits is used to provide experience in all phases of office training.

Contact Betty McClennan for more information.

Elkton High School  
School Enrollment 92

Elkton School District 34  
District Enrollment 240

### Office Occupations

Grades 11 and 12

The Office Occupations Cluster is comprised of courses in business machines, business lab, accounting, and an office occupations class for seniors. Typing is a graduation requirement at Elkton High School and a prerequisite for the Office Occupations Cluster.

The business machines course includes introduction to the electronic calculator with projects and simulations. Business lab is a one-hour course in which students may choose a variety of options including typing II, typing applications, OJT clerk packets, advanced business machine applications. Accounting is a one-hour course, two semesters in length. The office occupations class is divided into quarters, with one quarter emphasizing phone techniques, filing, and letter typing; the second quarter is a flip-flop program covering graphics, dictaphone, statistical typing, business communications, fluid duplicator, and spelling. Quarters three and four are business simulation.

Work experience is done in the office occupations class during the senior year. Students may work at a governmental office in the area if they desire. In addition, if they are interested in specific areas (medical receptionist, accounting, life insurance, etc.), the school has enlisted the help of merchants and professional people in nearby towns to give them the opportunity to work on an experience basis.

Contact Carol Beckley for more information.

---

Monument High School  
School Enrollment 28

Monument School District 8  
District Enrollment 100

---

Office Aide

Grades 11 and 12

In this class students learn to handle correspondence, follow instructions; make multiple copies of many different kinds of materials; plan, organize, and put up bulletin boards; file carbon copies of all assigned work; budget time; work cooperatively with another individual; and learn the importance of producing quality work. The students are also given the opportunity to do some service work for the community, such as addressing envelopes (about 1,000) for the annual Columbia Power Co-op meeting; typing the school paper; and typing programs for the school. Satisfactory completion of Typing I is a prerequisite.

Most students show skill and confidence after taking the course, and some have found employment with the Oregon State Forestry Department after course completion. Contact Thad Sprague, Superintendent, or Mildred Goe, Teacher.

---

North Douglas High School  
School Enrollment 200

North Douglas School District 22  
District Enrollment 592

Business Occupations Skill Center

The Business Occupations Skill Center is similar to an office in its physical layout. The teacher functions as a resource person. Students choose their own areas of study from the units available to them and proceed through the units on individualized programs. The lab places more responsibility for decision-making on the student, provides more realistic office-type interaction among students, facilitates scheduling, maximizes use of equipment, and provides each student an opportunity for more electives.

Visitors are welcome. Contact people are Joe Canon, Principal, and Bea Barrett, Business Education Teacher.

Rainier High School  
School Enrollment 520

Columbia County School District 13  
District Enrollment 1580

Individualized Business Laboratory      Grades 10, 11 and 12  
(Required for students in cluster program, elective for others)

Beginning in the fall of 1976, many of the business education offerings were individualized. Classes are offered in "regular" classroom study in the following courses: Typewriting I and II (first year), Shorthand I and II (first year), Accounting I and II (first year), Office Procedures, and Simulated Office (using Lester Hill).

Individualized courses may be taken at any time during the day when "Lab" is listed on the schedule. Credit varies, depending on the amount of work required for the various units. Credit is granted for work completed--not for time spent in class. The responsibility for learning is placed on the student with help from the instructor, when needed.

Individualized courses are: Typewriting III (third semester), Vocational Typewriting (specialized), Accounting III and IV (second year), Vocational Business Mathematics, Business English, Communications, Shorthand III and IV (second year), Dictation and Transcription, Office Machines, Filing, Recordkeeping, and Cooperative Work Experience.

The starting cost of the program was \$3,500 over the regular budget; a major portion of this amount was spent on slide-tape presentations and equipment. A program involving fewer courses could be implemented with a smaller expenditure.

Visitors are definitely encouraged and their comments appreciated. Each course has competencies, planned course statements, performance indicators, guidelines and curriculum materials. Information is available to anyone wanting to come and look at the program. Contact Jeanette Beard or Carol Eckart, Business Education Department.

Union High School  
School Enrollment 265

Union School District 5  
District Enrollment 512

### Office Simulation

This class is operated as a regular office with a simple time card system. A receptionist handles all callers and writes up and distributes job orders as they come in. The work is handled on a steno pool basis. The jobs of receptionist, bookkeeper, inventory and supply clerk are filled on a rotation basis.

Simultaneously during the second and third nine-week periods, Southwestern's Serendipity office simulation is operated, which fits in very well with the overall operation of the regular class. Basically, the students are involved in five areas: (1) learning packets, commercial practice sets or teacher-assigned projects directed at their particular ability and interest; (2) completion of actual jobs for the community or school district; (3) completion of job rotations in the Serendipity office; (4) office practice procedure study; and (5) work observation sites and actual work experience outside of class.

Typing I is a prerequisite, and students are encouraged to complete all of the other secretarial-stenographic cluster courses. This class is a two-year course; however, it is operated on a three-track system: first-year juniors, first-year seniors (who come in during their last year only), and second-year seniors.

A highlight each year is a three-day field trip to Portland. First-year students visit businesses, business schools and low-cost housing accommodations. Second-year students go out on prearranged individual job interviews, seek out information from private employment agencies and governmental agencies. First-year seniors do some of both.

The program is a simple one, and the flexibility of the two-hour block is the reason for its success. We did not make any major room changes--just some simple rearrangement. Equipment was acquired over a five-year period.

Visitors are welcome. Contact Charlene Moffit, Instructor.

Sheridan High School  
School Enrollment 238

Sheridan School District 48J  
District Enrollment 622

---

Construction Cluster

The Sheridan High School Construction Cluster class builds a duplex, two bedrooms per unit, approximately every one and one-half years. Students pour concrete and do the framing on one duplex in the fall, then when winter comes, move inside to complete the interior of the units started the previous year. In the spring, they complete the roofing and siding on the duplex begun in the fall. Students do all the work except the electrical wiring.

The home economics class selects interior paints, carpets, and major appliances for the duplexes as part of their home furnishings class. The agriculture department landscapes each duplex prior to its sale. Students learn by actually doing.

To visit or obtain additional information, contact Judy Bramhall, Career Education Coordinator, or Cecil Gross, Construction Instructor.

---

COOPERATIVE WORK EXPERIENCE

Banks High School  
School Enrollment 400

Banks School District 13  
District Enrollment 1000

Banks Youth Career Opportunities Program

This program provides assistance to high school students and drop-outs, 15 to 21, with CETA jobs, work experience, Portland Community College evening classes, G.E.D., apprenticeship training programs, career information, direct job placement, Job Corps and Armed Services referrals, and other career related services.

Funding from the Multnomah-Washington CETA Consortium has enabled the Banks Youth Careers Opportunities to get underway. It has been in operation two years under the guidance of the CETA Consortium and the Banks High School administration. A program book has been developed. Contact Glenda Jones for additional information.

Gilchrist High School  
School Enrollment 175

Klamath County School District  
District Enrollment 7500

Cooperative Work Experience

Grades 11 and 12

In connection with the Office Occupations, Foodservice, and Construction programs, students may become involved in the work experience program during the second semester. It is a nonpaid experience one day a week at a cooperating business in the student's vocational area. It has been in operation eight years, and has resulted in increased post-graduate employment or training. For more information contact Gary Simmonds, Principal or Christine Trapanese, Instructor.

Monument High School  
School Enrollment 28

Monument School District 8  
District Enrollment 100

Work Experience

Following completion of a one-half year course in career education, seniors are placed in businesses or ranches in the community to learn how to perform in a particular occupation or trade. Some stay at school and work in the office or as custodial assistants.

Contact person is Thad Sprague, Superintendent-Principal.



## DISTRIBUTIVE EDUCATION - MARKETING

Riddle High School  
School Enrollment 302

Riddle School District 70  
District Enrollment 592

### Marketing

Grades 10, 11 and 12

The program includes: (1) one hour in the classroom each day doing "book work;" (2) students operate the student store, working before and after school and during lunch; (3) students help serve food in the lunch line (food is transported from South Umpqua School District); (4) students work all concessions for every athletic function; and (5) students order merchandise, stock shelves, count money, prepare bank deposits, take inventory, clean the store, and keep books. They do it all.

Cost of the program is instructor salary and about \$1,000 for supplies, equipment, etc. Visitors are welcome. Contact person is Blanche Chapman.

---

## DIVERSIFIED OCCUPATIONS

Joseph High School  
School Enrollment 150

Joseph School District 6  
District Enrollment 380

### Diversified Occupations

Grade 12 (11 rarely)

The students in this diversified occupations class meet as a class five hours a week. During this time work is done on basic career information such as interviewing for a job, writing a resume, computing payrolls, etc. Job related instruction is given, depending on the worksite of each student. For instance, students working in auto mechanics study auto mechanics curricula. Class time is also used to discuss problems as they arise.

In addition to the time in class, each student is employed and works a minimum of ten hours a week. The occupations range from bank teller to skidder operator on a logging operation.

The program has been in operation six years. Visitors are welcome. Contact person is Ernest Paterson.

Lowell High School  
School Enrollment 143

Lowell School District 71  
District Enrollment 459

Diversified Occupations

Grade 12

Classroom instruction related to the world of work and job experience of students at work stations is held one hour per day, five days a week. Students (seniors only) are released either morning or afternoon for their work experience on the job.

Nine weeks of classroom instruction is related to the world of work, then the majority of instruction is independent study in areas of occupational placement. Emphasis is on additional study recommended by employers and aspects of employment beyond getting the job--taxes, insurance, fringe benefits, employer costs, etc.

Three students have taken night classes at Lane Community College and used their DO class time at Lowell for study related to the community college classes.

All work stations are paid, ensuring quality stations and quality work. Occasionally students are placed in positions for two weeks without pay on a trial basis. Thus far, all have been accepted and subsequently paid.

The program is in its sixth year. Contact person is Ken Dresser, Career Education Coordinator. He feels small schools benefit greatly from offering Diversified Occupations to their students.

---

ENERGY

Creswell High School  
School Enrollment 317

Creswell School District 40  
District Enrollment 1049

Energy Efficient Construction

Grades 10, 11 and 12

Funded by a \$16,244 State of Oregon grant for improvement of vocational programs, our construction program includes special use of energy projects. Plumbing and pipe trades are taught with teams of four students building solar hot water panels. The final project is a semi-commercial passive solar greenhouse and will teach nearly all skills normally used in residential construction--masonry/concrete foundation, sheet metal ductwork, framing, glazing, insulation, sheetrock, doors, and many special features needed for efficient use of solar energy. The greenhouse will be turned over to our vocational agriculture classes for future use.

Visitors are welcome, but they should call first. Contact Jim Richards, Instructor.

---

Scio High School  
School Enrollment 250

Scio School District 95C  
District Enrollment 707

Basic Electricity/Solar

Grades 9 and 10

The 18-week course includes basic theory and application of inside wiring--single, double and triple switches; how circuits are rated for loads, building codes; saving of electric power through use of solar heaters--space, water and swimming pool. Materials on solar energy savers have been developed. Visitors are welcome. Contact person is Larry Sipe.

---

Vale High School  
School Enrollment 445

Vale School District 15  
District Enrollment 630

Solar Heated House Construction

This is the second winter for Bob and Shirley Harrod in the solar heated house constructed by the building trades students at Vale High School. The house has a vertical collector of about 360 square feet with the storage in 2000 individual solar salt cells stacked in an insulated box. Hot air is circulated through them for heat collection by a small fan which, by the way, is the only mechanical part other than two thermostatically controlled dampers.

The first winter was disappointing because the system wasn't properly sealed, so they couldn't compare it very well to real fuel costs.

This winter, they estimate they are saving 75 percent over what the cost would be to heat with electricity and probably 85 percent over the cost for oil.

On a long-term basis, they question whether paying \$8,000 to have a similar unit installed in a home would be cost effective. The fact that students did the work kept the cost of their system down to about \$5,000.

For more information on this contact Sam Banner, Malheur ESD.

## FOODSERVICE

Harrisburg High School  
School Enrollment 221

Harrisburg Union High District 5J  
District Enrollment 221

### Foodservice

Grades 11 and 12

The food service curriculum outlines basic knowledge and skills necessary for entry level employment in a broad group of occupations in the foodservice industry. Some topics covered are employment in the foodservice industry, work orientation, sanitation and safety, use and care of equipment, fundamentals of preparing food for the public, menu planning, cost control and food purchasing.

Included in the course is a student-run snack bar in which students sell lunch to the student body. Each day regular items are sold (hamburgers, hot dogs, milkshakes, pop), and three days a week special items are featured. A special checking account is used, and students prepare bills and keep the budget and books. Students also purchase foods for the snack bar.

Visitors are welcome. Contact Colleen Beelart, Instructor.

## FORESTRY

Chiloquin High School  
School Enrollment 366

Klamath County School District  
District Enrollment 7500

### Forest Products

The forestry program at Chiloquin High School began three years ago. Loss of instructor caused a lapse, but this year a new instructor has been hired and the program is in operation again. The forest products industry has donated equipment to the school. The program offers a good opportunity for Caucasian and Indian male and female students to learn skills in an appropriate local industry. Contact person is Paul Mallonee, Career and Vocational Coordinator for the district.

Long Creek High School  
School Enrollment 35

Long Creek School District  
District Enrollment 119

Forest Products

A plus feature of the Long Creek Forest Products program is the use of a land lab adjacent to the school provided by the U. S. Forest Service. The program is fairly new and plans are being made to expand it next year. Contact person is Dennis Mills, Superintendent-Principal.

---

Vernonia High School  
School Enrollment 248

Vernonia School District 47J  
District Enrollment 732

Forestry I and II

Grades 11 and 12

Units in the forestry program include: History of Forestry and Forest Occupations in the US and Oregon, Compass and Pacing and Elementary Land Subdivision, Tree Identification, Forest Tool Identification, Forest Occupations Vocabulary, Woods Safety, Use of Forest Tools, First Aid, Elementary Cruising, Log Scaling, Forest Insects and Diseases, Forest Protection--Fire Control, and Wire Rope Splicing. Students are involved in a variety of land lab activities. There is an active advisory committee comprised of local industry.

Vernonia is in the heart of the logging industry, and many of the graduating students go into the forest products industry. This program was implemented to assist those students with entry level skills. The program is in its second year. Contact person is Arthur Parrow, Principal.

---

Willamina High School  
School Enrollment 288

Willamina School District 30J  
District Enrollment 1051

Forest Products

Grades 10-12

This was one of the first forest products programs implemented in Oregon, and it has had excellent support from the local community. Students receive experience in all kinds of activities--creek cleaning, fire line instruction, tree planting, and harvesting projects.

There is an active youth club, Lo-Speed Loggers, which assists the instructor in providing leadership in program direction through participation with community members on the advisory committee. The club has met with Chemeketa Community College Forestry Club in an effort to assist one another in building a competitive skills site for logging sports.

This two-year program involves both male and female students in introductory and advanced classes. Contact Terry Selby for additional information.

---

## GRAPHICS

Wahtonka High School  
School Enrollment 290

Chenoweth School District 9  
District Enrollment 920

### Offset Lithography

Grades 10, 11 and 12

In 1966, Wahtonka High School introduced offset lithography to five students with a scanner, a used offset press and a platemaker. Two years later a bond was passed; as part of the bond, the offset lab moved into its present white house location.

The program is based on three years of school performance, including one year of work-experience. The first year is one period in length and emphasizes layout-design, photography and process photography, stripping, plate-burning, offset press and bindery. The second year is two periods long to build skills in the fundamentals learned the first year, plus color separation and cost estimating. The third year is two to three periods in length and students are placed in the local shops. This program has proven successful in providing job entry skills and in building a solid foundation for further study in college.

All school printing requirements are done; outside jobs (not bid on by local shops) are accepted; the school newspaper is published jointly by the journalism and graphics classes; and the school annual, except for binding and covers, is published at a cost of \$900.

Supplies cost \$6,000 yearly; two presses have been added since 1968, at a cost of \$5,020; one selectronic composer was purchased for \$8,000; and one aide hired. The school is delighted to host visitors. Planned course statements and a descriptive pamphlet are available. For additional information, contact Don Myers.

[This book was printed by students in the Wahtonka High School offset lithography class.]

## HEALTH OCCUPATIONS

Taft High School  
School Enrollment 425

Lincoln County School District

### Medical Careers

Grade 12

This is a one-year program for seniors. The class meets in the classroom two hours per day for the first semester. During this time many resource people are part of the classroom preparation of students for the second semester. Students also take three Red Cross courses and receive certification--CPR and Vital Signs I and II.

During the second semester, students are rotated through a variety of clinical experiences of two to four weeks in length. Students experience hands-on activities, and, for the most part, serve in an assisting capacity. They are placed at the hospital, in private practices, clinics, nursing homes, dental offices, and even the mortuary.

Paid cooperative work experience is available, and a four-week cruise in health is a required course for freshmen.

Planned course statements and curriculum materials are available. Contact person for more information is Charlene Tepper.

---

## HOME ECONOMICS

Elgin High School  
School Enrollment 200

Elgin School District 23  
District Enrollment 622

### Pre-Parenting Training

Grades 11 and 12

Pre-Parenting is a course to help students begin to think about parenting. Three days a week the students meet as a class; two days a week they work with children in an aide capacity at the grade school. Topics studied and discussed in class are discipline, feelings, constructive changes, values clarification, communication, acceptance, self disclosure, self concept, needs, and play. The course is similar to a psychology class which emphasizes that mentally healthy people make better parents. The course started this year with grant money. Marcia Moore is contact person.

Monument High School  
School Enrollment 28

Monument School District 8  
District Enrollment 100

Home Economics, Survive and Thrive

Grades 9-12

During the Foods Preparation unit students use only portable electrical appliances in one kitchen area and the traditional free-standing range with adequate cooking utensils in the other. They learn how to conserve energy and prepare nutritious, well-balanced meals with limited appliances and equipment.

The Food Preservation unit gives students the experience in custom canning, freezing, drying and pickling for the community. Community "customers" furnish all supplies and materials, and students do the work and return the finished products to the suppliers.

Results have been good; students, parent and community response is very positive. Visitors are welcome. Contact persons are Thad Sprague, Superintendent-Principal, or Mildred Goe, Teacher.

---

Heppner Jr. High and Elementary School  
School Enrollment 389

Morrow County School District  
District Enrollment 1889

Occupational Versatility Homemaking

Grade 7, Required

Occupational versatility in homemaking stresses the learning of math and reading skills through practical means. All students spend nine weeks each in a self-taught program for foods and clothing, following a course guide and working independently. For one nine-week period all students are in a teacher-taught, general homemaking program. The last nine weeks of the year all students develop their own learning programs by choosing home-making projects they wish to pursue. Assuming responsibility for their own learning is stressed strongly to the students.

Awareness of careers and living skills are introduced through the use of outside speakers and class discussions. Complete course notebooks for foods, sewing and general homemaking have been developed. Contact persons are Don Cole, Principal, and Liz Curtis, Teacher.



## INDUSTRIAL ARTS

Elgin High School  
School Enrollment 200

Elgin School District 23  
District Enrollment 622

### Industrial Arts

Grades 9 - 12

Shop I--planning and beginning woodworking for freshmen--allows students to spend the first three months learning mechanical drawing and planning. Their last exercise is to plan a wood project to construct in class. Students learn machine identification, operation and safety rules, then construct wood projects such as coffee tables, bookcases, chests, desks, end tables, night stands.

Shop II is mass production and group rotation for sophomores. Students go through a variety of basic units designed to help them find out what they like. Units include: mass production, foundry, wood lathe, metal lathe, milling machine, industrial synthetics, electricity, plumbing, gas welding, arc welding, wood cuts and joints, concrete, forge heat treatment, tool sharpening and soldering. The last part of the year is spent developing skills by doing a wood or metal project.

Shop III and IV are individualized. Junior and senior students are allowed to move from one area to another as they complete their individually planned programs. The only limitation is the amount and type of equipment available in specific areas. Units include advanced wood work, art, ceramics, leather, industrial synthetics and project welding.

Shop Skills course provides fundamental instruction in tool identification, measuring, plumbing, electricity, gas welding, vehicle maintenance, terrariums, kitchen knife sharpening and woodworking.

Art provides training in the fine arts. It covers sketching, pastels, water colors, ceramics (pottery making by pinch, coil, stab and potter's wheel) and sign making. Elements of design, perspective, composition and use of colors are emphasized.

In all of the above units, emphasis is placed on: (1) arriving at class and starting work without being told; (2) learning to plan effectively and help themselves; (3) cooperation, positive attitude and participation with good, safe working habits.

Visitors are welcome at Elgin, and course related materials are available. Contact Donald R. Hendricks, Industrial Arts Instructor.

### Project Welding

Project Welding class is designed for students interested in building metal projects. The prerequisite is Career Cruise, Shop I and II, or the instructor's approval.

Students review shop safety rules and practice basic arc and gas welding positions before starting their projects. They design, select materials and construct projects with the help of the instructor. Projects may include truck livestock racks, portable squeeze chutes, trailers, vehicle ramps and jacks, calf tables, roll bars, welding tables, etc. Field trips to local businesses enable students to become more familiar with welding.

For further information, contact Gale Wilson, Elgin High School.

---

Griswold High School  
School Enrollment 37

Kelix School District 1R  
District Enrollment 104

#### Woodworking

The school has a new, well equipped shop in a building recently purchased from the Masonic lodge for a nominal fee. The district spent \$20,000 remodeling and converting the lodge into a combination wood shop (lower floor) and music room (second floor).

---

### INDUSTRIAL MECHANICS

Monument High School  
School Enrollment 28

Monument School District 8  
District Enrollment 100

#### Small Engines

Grades 9-12

Students learn the theory of small gasoline engines and suitable techniques for diagnosing and repairing them. Practice is provided on both two-cycle and four-cycle engines. The course has been in operation five years. Visitors are welcome. Contact person is Thad Sprague, Superintendent-Principal.

---

North Bend High School  
School Enrollment 1135

North Bend School District 13  
District Enrollment 3528

Industrial Mechanics Cluster I & II      Grades 10 - 12, Selective Elective

The first year of the cluster program covers: Introduction to Industrial Mechanics, Industrial Mechanics Basics, Electrical Systems, Ignition Systems, Body and Paint, Fuel Systems, Brake Systems, Refrigeration and Air Conditioning, Hydraulics and Pneumatics, Cooling and Lubrication Systems, Engines, Diesel, Tires and Suspension, and Basic Gears.

During the second year, students work in the following units: Introduction to Industrial Mechanics II, Service and Parts Management, Welding and Auto Body and Paint, Electrical Advanced, Contracted Work I, Aircraft Mechanics, Advanced Hydraulics and Pneumatics, Advanced Refrigeration, Tune-up, Engine Machining, Advanced Diesel, Contracted Work II. Course units vary in length, but generally run about three weeks.

The cluster program has been in operation six years. It has been successful in terms of student placement and employer opinions. Visitors are welcome by pre-arrangement and may exchange materials developed for the course. Although this program is in a considerably larger school, it or parts of it may be adaptable to small schools. Contact instructor Bruce Hawkins to arrange a visit or to obtain more information.

---

Yamhill-Carlton High School  
School Enrollment 450

Yamhill-Carlton Union High District 1  
District Enrollment 450

Industrial Mechanics      Grades 11 and 12

The mechanics cluster goes through every phase of varying types of engines, theory of carburetion, electrical systems, brakes and culminates with students overhauling their own engines.

Curriculum materials have been developed, and visitors are welcome. Contact Gene Carlson, Principal.

## MANUFACTURING TECHNOLOGY

McKenzie River High School  
School Enrollment 221

McKenzie School District 68  
District Enrollment 446

### Manufacturing Technology

Grades 10 - 12

This course is designed to teach the American principle of free enterprise and build confidence that the students' work is saleable. The class is organized as a profit-sharing, manufacturing cooperative. The students bid for jobs in the community, purchase the material and make the part or assemblies to the purchasers' specifications. At the end of the school year, the students divide the profits, based on their attendance.

This program is of low cost to the school because the students buy their own material and use the available shop tools. Visitors are welcome. Contact person is Roger Crist, Instructor.

---

## SERVICE OCCUPATIONS

Taft High School  
School Enrollment 425

Lincoln County School District

### Service Occupations

Grades 11 and 12

This two-year program involves one hour of class and a minimum of one hour of work experience. The junior students may rotate their experiences among a variety of classes and schools through cadet teaching, dispatching or riding with the police department, or being involved in a variety of recreation or city government jobs.

The senior year students select nonpaid training stations for the full year. The curriculum deals with specific skills that students will need at graduation and involves regular instruction from professionals in the community. Paid work experience is available to students, too.

Course outlines and curriculum materials are available. Visitors are welcome. Contact person for more information is Duane Ticknor.

## VOCATIONAL AGRICULTURE

Adrian High School  
School Enrollment 110

Adrian School District 61  
District Enrollment 335

### Vocational Agriculture

Grades 9 - 12

A small engine repair unit is part of the Ag II program. Students bring in small engines to repair. The district has budgeted money to hire a small engines mechanic to come in once a week as a consultant. He works under the direction of the regular instructor and gives some of the lectures, demonstrates procedures and works with students to solve problems with their engines. This unit has been operational for one year and has improved the instruction in this area. Cost of the program is small, \$200, and the results are good. Contact Joe Witty, Instructor.

Crane Union High School  
School Enrollment 80

Harney County School District UH1J  
District Enrollment 80

### Ag Mechanics

Grades 10 - 12

Crane High School is located in Oregon's largest (7,230 square miles) and least populated (8,000 residents) county. Crane is in cattle ranching country in a rather secluded part of the high Oregon desert. The high school is unique because it is a publicly supported boarding school. Its 80 students live in a dormitory on campus during the week and return home on weekends, weather permitting. There is only one other high school in Harney County, located in Burns, so Crane serves a vast area. Some of the students come from as far away as 140 miles. Approximately 50 percent of Crane's graduates stay in the county, and most live on ranches.

Because of the uniqueness of the school and its students, the Ag Mechanics program operates differently from most. Students need survival skills in many areas, rather than a lot of specialization. The program is designed to offer material which can be taken home and applied in the field, literally.

A Mechanics I class covers basic gas and diesel theory, tool use, fastener identification and trouble shooting. Time is split about 75 percent lab and 25 percent classroom. This is offered for grades 9 - 11.

Mechanics II is a lab class which allows students to work on school or community vehicles and equipment. Work is limited in scope to that which is common to ranches. Complete engine or transmission overhaul is discouraged; emphasis is on maintenance. Most ranches have neither the talent nor the tools and facilities to do their own precision engine and driveline work, so that kind of repair is taken to town. Trouble shooting, gas and

diesel maintenance, tune-up (no emission analyzers!), lubrication, electrical and charging systems, brakes, U-joints, wheel bearings, hydraulic service are covered. This class also does complete maintenance and repair of the school owned buses, one each gas and diesel, and other vehicles.

Welding I and II classes are offered along with mechanics, so most of the students complete the program knowing how to use equipment and rods common to the community. AC and DC stick electrodes are still used, and the recent addition of a hi-frequency T. I. G. welder has made it possible to learn the repair of aluminum irrigation equipment.

Some students have been placed in mechanically oriented jobs in Burns, but the biggest result of the program has been seen on the ranches. The program costs approximately \$6,000 per year. Visitors are always welcome at hospitable Crane. Contact person is Gordon Black, Instructor.

---

Elgin High School  
School Enrollment 200

Elgin School District 23  
District Enrollment 622

#### Vocational Agriculture

Vo Ag II is designed to introduce students to the agriculture industry through a series of units: Animal Science, Plant Science, Agriculture Mechanics, Agriculture Management, and Future Farmers of America.

Vo Ag III and IV are taught in a two-hour block for juniors and seniors who have completed Vo-Ag II or have instructor approval. The first hour of the block is spent in the classroom studying a variety of units, similar to those in Vo Ag II, but in more depth. Lectures, filmstrips, films, resource persons, and practical, working field trips are used. The second hour of the block is spent on Ag Mechanics. Students construct individual projects and study classroom material. They also learn tractor maintenance and take field trips to local machinery businesses and blacksmith shops.

For further information, contact Gale Wilson.

Wallowa High School  
School Enrollment 129

Wallowa School District 12  
District Enrollment 402

Vocational Agriculture

Grades 9 - 12

The traditional Vocational Agriculture I, II, III and IV classes are climaxed by the senior Ag Management class. The class studies units in management calculations, farm agencies, marketing, future markets, agriculture finance, tax return preparation, agriculture cooperatives, fertilizer calculations, genetics, animal nutrition, irrigation, machinery calibration, and chemical applications. The year is finalized by a six- to nine-day field trip which includes Washington, Idaho, Montana, Alberta and British Columbia, Canada. The trip is designed to expose the students to actual agriculture management situations. As many as 37 operations have been visited on the trip in recent years. Itinerary varies with classes and interest areas.

Besides the initial class offerings, individual study programs are available in Animal Science, Plant Science, Construction, Agriculture Education, and Agriculture Business.

This program has been in operation since January 1930. It is well balanced and leads to employment or advanced training. Visitors are welcome. Contact person is Dave Hall, Instructor.

---

Eddyville High School  
School Enrollment 65

Lincoln County School District

Horticulture

Grades 9 - 12

The class is year-long, but students may take it for either one or two semesters. In the fall they start bulbs, take cuttings, weed and edge the school's flower beds, plant new plants and arrange the greenhouse.

The Christmas sale of winter plants and the terrariums and dish gardens made by students resulted in gross sales of \$117 this year. In the spring students start early vegetable seeds to sell to local gardeners, and in late spring they sell geraniums and other bedding plants.

Visitors are welcome. Contact person is Janet Snyder.

## SHARED SERVICES

### Clatsop Education Service District

#### Area Vocational Center

The Area Vocational Center serves five high schools from five different districts. This area concept is now in its thirteenth year. The first four years were trial years when the community college began to develop the program. As might be expected, there were growing pains, and the ESD was requested to assume the responsibility for the Center.

The resolution which supports this activity represents the most costly of all services offered by the Clatsop ESD. The projected budget for the 1979-80 school year was \$402,000 with an anticipated enrollment of 400 students. Vocational education, from any point of view, is more expensive than the general approach of the conventional classroom. The Area Center is no exception.

The Area Center is a part of the local school program. Before the Center was developed there were no approved vocational programs in the local school districts. There are ten full-time instructors and one secretary at the Center.

The Area Center is operated as follows to achieve its overall goal of developing some saleable skill(s) for each enrollee

- Classes offered are vocational mechanics, vocational agriculture, and vocational electricity/electronics
- Vocational teachers at the Area Center are contracted by the Clatsop ESD
- In cases where vocational teachers are assigned to a particular school district, the assigned teacher is placed under the immediate authority of the building principal. The ESD pays the teacher's salary; the local district is responsible for classroom cost--space, utilities and supplies
- The Area Center is designed to provide programs desired and approved by the local districts whose students are served
- Yearly class schedules at the Center are based on the combined schedules of the local districts
- The instructional approach is team teaching
- Assignment of students to the Area Center is the primary responsibility of the local school principal



- Counseling and review of student records for those students assigned to the Center is the local principal's responsibility
- Classes are usually designed for juniors and seniors, although some exceptions are made. Vocational agriculture is offered for grades 9-12
- Inservice training of the Center staff is the responsibility of the ESD
- Yearly evaluation of all programs and personnel is made
- Vocational student organizations are supported; currently Vocational Industrial Clubs of America (VICA) and Future Farmers of America (FFA)

Contact person Chuck Dymond at the Clatsop ESD says, "It is most difficult to put this into a short 'how-to-do-it' information sheet. SO, we ask that those who are interested come to visit the Center and sit down with us to talk about the operation."

#### Coos Education Service District

##### Six-District Cooperative Individualized Instruction Project

The Six-District Cooperative Individualized Instruction Project is a career education effort in the field of small engine technology. Participating are the six public school districts of Coos County, Oregon. One middle school and six secondary schools share educational materials via a rotation schedule.

The system purchased is the Ken Cook Automated Teaching Systems produced by Ken Cook Transnational, Milwaukee, Wisconsin. Designed to meet the needs of manufacturers of small engines for a quick, efficient way to train service personnel in the use of industry-approved procedures, the system was quickly adopted for use by our armed forces and by secondary and post-secondary schools.

Hardware for each work station consists of a metal bench with tool rack superstructure, tools, small engines and an audiovisual projector which uses a slide-tape format, incorporating a student reponse feature. (Recently purchased units use the LaBelle film cartridge.) Programs offered involve five different two-cycle and four-cycle engines plus chain saw, outboard marine engines and blueprint reading. Cost of hardware for all programs averaged about \$1,350 per work station.

To facilitate accountability and preserve tranquility, most hardware is permanently located in each school. (One district rotates hardware between schools within its jurisdiction.)

Software for the system was developed around a step-by-step procedure which lets students, two per work station, learn at their own rate. Most programs are segmented into 18 slide-tape units, each of which represents an average class period work load. Each stands alone as a complete learning experience which needs not be performed in predetermined sequence with other segments. So, the same tools and engines can be used by students in successive classes without the necessity of changing engine configuration. Cost per program was \$1,500 to \$2,500 in 1974.

Saving accrues through software sharing and ESD cooperative purchase of student materials. Sharing was developed to accommodate the semester sequence, to adjust to enrollment and to provide accessibility for as many students as possible.

The ESD provides a program coordinator, an audiovisual repair service and materials inventory.

Arc welding programs were added during 1975-76. Also added were business machines which are rotated among the schools. These include memory typewriters, a teletrainer, cash registers, transcribing equipment, and a Gestetner duplicator. Tree planting tools for forestry students and a microwave oven are late additions.

Students, teachers, administrators and parents like the program which not only teaches skills, but can develop attitude changes to help students more easily adapt to conditions in work situations. Beginning in the 1974-75 school year with student participation in 1,899 units of individualized instruction, the use of these programs has increased to 4,317 units in five vocational areas during 1978-79.

Visitors? Yes. For more information, contact Bayard W. Hillway.

---

## Gilliam and Wheeler Education Service Districts

### Ken Cook Program

Five schools in Gilliam and Wheeler Counties are offering courses through the Ken Cook Automated Teaching Systems, described on pages 68 and 83. Arlington, Condon, Fossil, Mitchell and Spray each have one work station. Software, working models, and tools are circulated among the districts. Courses offered are two-cycle engines, four-cycle engines, welding, marine engines, and chain saws.

The hardware and software were provided through CETA and ESD funds. This is the second year of the program. Contact person is Al Starns.

## Umatilla Education Service District

### Umatilla-Morrow Instructional Materials/Equipment Sharing

Special individualized learning systems and related equipment are used to assist disadvantaged and handicapped students in acquiring job related technical skills while they are enrolled in regular vocational education programs.

A consortium agreement was signed by local member districts. Purchase of the equipment was made through the Umatilla ESD office. Sufficient funding was acquired by pooling the disadvantaged and handicapped federal vocational grants and by acquiring additional supplemental grants from the Oregon Department of Education.

Scheduling of the equipment with the various schools is handled by ESD staff, based on agreed upon student need criteria. The agreement includes specific student identification procedures and a required inservice package to maximize the benefits and minimize potential accountability problems. Distribution of equipment and materials uses the ESD courier service.

Local staff members, under the agreement, provide additional classroom assistance as necessary. Each student involved has an Individual Education Program (IEP) with specific vocational training goals and objectives matched to the student's capabilities.

Equipment purchased for sharing includes Ken Cook hardware and software for instruction in two-cycle engines and four-cycle engines, a memory typewriter, microwave ovens, and a micro processor (minicomputer).

Materials developed are interagency agreements, inservice materials, planning documents, student identification process, operation plan, and individual vocational education plans.

For more information about this program which has been in operation one year, contact Sam Pambrun.

Baker, Grant, Harney, Malheur, Union and Wallowa Counties

SIXCO Project

The six-county (SIXCO) project, initiated in 1972 to take career and vocational education to that rural, sparsely populated area of the state has terminated, but its concepts and activities live on.

Sam Banner, former project director, reports that the most dramatic outcome was that 19 of the 27 districts in the project have built, remodeled or otherwise provided facilities and vocational education programs through their own resources. Most of the schools that shared business education equipment during the project have since purchased their own.

Some sharing is still going on. Mt. Vernon and Dayville share the small appliance van from the project. They also share the welding van with Jordan Valley. A traveling instructor for the vans was hired by the Grant Education Service District for the two schools in that county. Jordan Valley provides the instructor while the van is at that school.

Mt. Vernon's program is state approved through a Special Vocational Program.

For more information, contact Sam Banner, Malheur ESD.

## APPENDIXES

Appendix A - Small Schools Position Paper . . . . .	73
Appendix B - Goal for Vocational Education . . . . .	74
Oregon State Board of Education Policies for Vocational Education . . . . .	75
Appendix C - Regional Career and Vocational Education Coordinators . . . . .	77
Appendix D - ODE Career and Vocational Education Personnel . . . . .	78
Appendix E - Industrial Arts Guidelines . . . . .	79
Appendix F - Bibliography . . . . .	80

## APPENDIX A

### SMALL SCHOOLS POSITION PAPER

-Adopted by the State Board of Education May 28, 1978-

The State Board of Education supports each community's right to fulfill its obligation to provide a quality education that operates within the framework of the minimum standards. Small school districts are financially responsible for their educational programs and should have the option of operating their own schools if they choose.

Two hundred five of Oregon's 329 operating school districts and 12 high school attendance areas within county unit systems are small schools. In its report to the Oregon Department of Education April 1, 1974, the Small Schools Task Force stated:

The small school is defined as having 1,000 or fewer average daily membership for the unified district or high school attendance center and the elementary schools that feed into it; the thirty-one unified districts without an operating high school; and small elementary and union high districts with 350 AOM or fewer.

The Department of Education, through a full-time Small Schools Office, will provide assistance to the small schools in developing and maintaining a quality education by:

- brokering assistance of the Department of Education and other appropriate agencies to meet the needs of small schools
- providing personalized field service to small schools
- identifying and creating an awareness of promising practices of small schools from throughout the state and nation
- serving as liaison among the small schools and between the small schools and the Department of Education
- coordinating activities especially for small schools

APPENDIX B

GOAL FOR VOCATIONAL EDUCATION

Excerpts from a planning statement adopted by the State Board of Education  
August 17, 1979

The statewide goal is that quality vocational education programs will be accessible to all students, resulting in the availability of skilled workers for Oregon business and industry.

"Quality programs" require that:

students are provided opportunities to develop skills needed for employment

students are offered choices among occupational options

basic skills instruction is incorporated with occupational preparation

students are encouraged to accept a sense of responsibility to self and others

all learning is related to its later application in careers and other adult life roles

"Access" requires that:

programs are designed to eliminate unfair discrimination

programs are available to all secondary students, and cooperative programs between school districts are provided as appropriate

post-secondary programs are available as needed, with regional community college programs offered where appropriate

the efforts of all agencies, institutions and organizations are coordinated to best serve students

Skilled worker "availability" depends on:

business, industry, labor and educators working together to stimulate economic development and to identify and meet training needs

short-term programs offered in areas of high demand

providing students with current and projected occupational requirements and labor market information

examining data on the work history and performance of former students so that programs can be modified for greater effectiveness

The following Board policies will guide future development and operation of vocational programs in Oregon community colleges and local education agencies.

OREGON STATE BOARD OF EDUCATION POLICIES  
FOR VOCATIONAL EDUCATION

Contained in a planning statement adopted by the State Board of Education  
August 17, 1979

- All Oregon learners should have opportunities to prepare or train further in occupations of their choosing.
- Vocational education is an integral part of a comprehensive education program. It begins with junior high exploration programs, continues through high school, and becomes more specific in community colleges, apprenticeship, private vocational-technical schools, the military service, on-the-job training, and in other occupational training programs.
- Vocational education at the high school level is organized around common teachable skills or clusters of occupations. The cluster approach helps students avoid the commitment to a narrow work specialization, but still provides preparation to enter the work force or post-secondary specialization.
- Grant-in-aid assistance will be provided as resources permit for
  - program development, maintenance and operation
  - program improvement, including personnel, student leadership, curriculum and model programs and exemplary practices development, as well as evaluation activities
  - special projects for serving the disadvantaged and handicapped and eliminating discrimination
  - assistance for development of apprentice and other training programs
- Program approval will give particular attention to the
  - needs and desires of individuals, especially training for unemployed and underemployed
  - potential for employment in that area of training
  - elimination of unfair discriminatory practices
  - occupational health and safety factors needed in the curriculum



coordination and articulation with labor and other training programs

specific requirements of employers in business and industry

the cost effectiveness of the proposed program

- Technical assistance in program, personnel, student leadership, and curriculum development, vocational guidance and other supportive services will be provided through Department staff, regional coordinators, and/or contracted services.
- Planning for vocational education will be attentive to the needs of students and to the impact of that vocational preparation upon the individual.
- Planning for vocational education will be done in cooperation with other agencies and institutions providing occupational preparation.
- Planning for vocational education will be responsive to the need for skilled workers to meet the employment needs of business and industry.
- Planning for vocational education will be sensitive to environmental concerns.

APPENDIX C

REGIONAL  
CAREER AND VOCATIONAL EDUCATION COORDINATORS

<u>Coordinator</u>	<u>Counties</u>	<u>Address</u>	<u>Phone</u>
Sam Banner	Malheur Harney	PO Box 156 Vale 97918	473-3138
Marv Clemons	Lane	1200 Highway 99N Eugene 97402	689-6500
Jim Davison	Union	1100 K Avenue La Grande 97850	963-4106
Chuck Dymond	Clatsop Tillamook	3194 Marine Drive Astoria 97103	325-2862
Nat Etzel	Jackson Josephine	101 N. Grape Medford 97501	776-8593
Wayne Johnson	Linn-Benton	905 E. 4th Avenue Albany 97321	967-4381
Jeannette Hamby	Washington	14150 Science Park Dr. Portland 97229	641-7191
Ernie Keller	Wasco	422 E 3rd Hammel Bldg. The Dalles 97058	298-5157
Sonya McDowell	Multnomah	PO Box 16657 Portland 97216	255-1841
Gayard Hillway	Coos Curry	1350 Teakwood Coos Bay 97420	269-1611
Sam Pambrun	Umatilla Morrow	404 SE Dorion, Box 38 Pendleton 97801	276-6616
Al Pfahl	Clackamas	Marylhurst Campus Marylhurst 97036	635-4341
Jerry Shiveley	Douglas	1871 NE Stephens Street Roseburg 97420	672-6571
Chuck Skeans	Jefferson Crook Central C. C.	1355 Buff Street Madras 97741	475-6192

<u>Coordinator</u>	<u>Counties</u>	<u>Address</u>	<u>Phone</u>
Louella Thomas	Yamhill Polk	800 E. 2nd Street McMinnville 97128	472-1431
Jack Tilton	Marion	3180 Center Street, NE Salem 97301	588-5330

#### APPENDIX D

#### OREGON DEPARTMENT OF EDUCATION CAREER AND VOCATIONAL EDUCATION PERSONNEL

Career and Vocational Education, 378-3584      Toll Free 1-800-452-7813

DIRECTOR - Monty Multanen      378-2337

VOCATIONAL PLANNING AND EVALUATION

Unit Director - Darrell Ward      378-2407

State Planning/Fiscal Management

James Hargis, Coordinator      378-2686

Alan Schultz, State Planning      378-2707

Ora Lee Young, Accounting      378-2925

Research Coordinating

Eugene Vinarskai, Applied Research & Exemplary Programs      378-2717

John Barton, Evaluation      378-2713

Beverley Fitzpatrick, Statistical Reporting      378-2718

SPECIAL VOCATIONAL PROGRAMS

Unit Director - Richard Schmidt      378-2182

Apprenticeship - Larry Mathews      378-3593

CETA - Ted Williams      378-2285

Consumer Homemaking - Pauline Goodwin      378-1128

Disadvantaged & Handicapped - Dave Backman      378-3823

Industrial Arts & Exploratory - John Fessant      378-2129

VOCATIONAL PROGRAM OPERATIONS

Unit Director - Sydney Thompson      378-2127

Agriculture - Gordon Galbraith      378-3594

Business Education - Lola Wager      378-8223

Construction & Metals - Ralph Little      378-8376

Cooperative Work Experience, Diversified Occupations,  
and Agri-Business - Ray Rhodes      378-3594

Electrical, Graphics, Secondary Local Applications -  
John Havery      378-8421

Forest Products, Conservation, Energy, and Service Occupations - Howard Brock	378-8291
Health Occupations, Program Development, and Community College Applications - Joan Stoddard	378-8449
Industrial Mechanics & VICA - Charles Howell	378-8496
Marketing & Student Leadership - Dean Herman	378-8569

**PERSONNEL IN OTHER SECTIONS**

Career Education Coordination - Tom Williams	378-4777
Career Guidance - Charlotte Conner	378-5213
Consumer Education & Personal Finance - Marian Kienzle	378-3816
Curriculum - (vacant)	378-4774
Education Equal Opportunity - Joan Siebert	378-3567
Center for Program Coordination - Nancy Hargis	378-4770
Personnel Development - Sharon Martin	378-8005
Small Schools Specialist - Don Miller	378-8543

**STUDENT LEADERSHIP CENTER**

Larry Hall	588-5338
------------	----------

---

**APPENDIX E**

**INDUSTRIAL ARTS GUIDELINES**

Taken from "Guidelines for Completing the Annual Local Application  
for Vocational Education Funds," ODE, September 1979

In high schools up to 200 ADM in grades 9-12, basic vocational grant monies may be used to expand or implement industrial arts programs to include areas not presently offered. The teacher must have an Industrial Arts endorsement.

Guidelines are as follows:

● Requirements -

200 ADM or less

Improving existing or implementing new program

Proper certification of teacher

Basic/standard with IA or IE (nonvocational) endorsement  
five-year secondary with major in IA

Matching money provided by district

Approved program goals, course goals and course of study

Classes meet at least one period per day, five days per week

A local advisory committee representing business, industry, education and students to advise on curriculum

State approval

• Allowable -

Salary for Instructor, Aide

Instructional Travel

Equipment

Supplies

Materials

---

APPENDIX F

BIBLIOGRAPHY

Available from the Career and Vocational Education Section (unless otherwise noted), Oregon Department of Education:

Advisory Committees in Career Education, Coos ESD, ODE, 1978

Career and Vocational Education Assessment Guide, ODE, 1978

Career Education Resource Catalog, ODE

A Guide for Planning Career Education in Oregon's Secondary Schools, ODE, 1976

Career Education for Language Arts and Science, Grades 7-12, ODE  
(Available from Language Arts and Science Specialists)

## CAREER AWARENESS AND EXPLORATION

Career Awareness/Exploration Curriculum Kits, Grades K-3, 4-8, 9-10 and 11-12, ODE

Implementing Career Awareness in Elementary Schools, ODE, 1975

Guidelines for Implementing Career Exploration in the Early Secondary School Years, ODE, 1975

Career Exploration for Special Needs Students, Grades 9-12, ODE (Available from Career Education Coordination Specialist)

## HOME ECONOMICS

Child Care Occupations Handbook, ODE

Home Economics for Oregon Schools, a series of five guides, ODE, 1978  
Individual and Family Resource Management  
Nutrition and Foods  
Textiles and Clothing  
Living Environments  
Human Development and the Family

## INDUSTRIAL ARTS

Improving Facilities in Industrial Arts: A Guide for Improving the Organization of Industrial Arts Facilities, ODE, 1975

Improving Programs in Industrial Arts: Guidelines for Improving Existing Industrial Arts Programs, ODE, 1975

Industrial Arts Curriculum Planning Guide, Oregon-Washington Curriculum Development Consortium, 1979 (Available from Industrial Arts Specialist)

Industrial Arts Program Goals and Competencies, Exploratory Careers Developmental Project (Ashland Jr. High; Calapooya Jr. High, Albany; Ponderosa Jr. High and Mazama Middle High, Klamath Falls; Philomath Middle School), ODE, 1974

Career Development Activities, Exploratory Careers Developmental Project, ODE, 1975

Personal Assessments, School Assessments, and Interface Checklists, Industrial Arts Developmental Project, Portland Public Schools/ODE

## OCCUPATIONAL CLUSTER GUIDES

Accounting  
Agriculture  
Building Construction  
Business Office  
Diversified Occupations  
Electrical  
Foodservice  
Forest Products  
Health  
Industrial Mechanics  
Marketing  
Metals  
Service

## BUSINESS

Office Safety, ODE

The Open Lab for Business and Office Occupations, ODE

Standards for Business and Office Education Programs and Vocational Education Assessment Guidelines (Available from Business Education Specialist)

Business Office Occupations Skill Record for Students, ODE

Accounting Vocational Skills Record for Students, ODE

## COOPERATIVE WORK EXPERIENCE

Work Experience Programs: Planning, Implementation and Evaluation, ODE

Training Plans and Work Experience Education, ODE

An Assessment for Cooperative Work Experience, ODE

## DIVERSIFIED OCCUPATIONS

So Now You're On Your Own, ODE

## FOREST PRODUCTS

Forest Products Cluster--A Suggested Forest Products Core Curriculum, ODE, 1974

A Suggested Forest Products Five-Year Plan With Keypoints to Assist in Its Implementation, ODE

## MARKETING

A Career Centered Learning Environment: Suggestions for Developing and Using a Marketing Laboratory Including a Student Store, ODE

A Planned Approach to Program Development, the Model Marketing Cluster Program (Assessment Guide), ODE

Something in Common: An Employer's Orientation and Reference Guide to Cooperative Work Experience in Marketing, ODE, 1975

## GUIDANCE

Elementary School Guidance and Counseling, ODE (Available from Student Services Section)

Available from other sources:

Slater, R. Doyle, Career Education Preparation Needs in Rural or Small Schools (Imbler School District), Interinstitutional Consortium for Career Education, Marion County ESD, 3180 Center Street, NE, Salem 97301, 1977

Slater, R. Doyle, Rural or Small School Teacher Preparation Needs in Career Education (Stanfield School District), Interinstitutional Consortium for Career Education, Marion County ESD, 3180 Center Street, NE, Salem 97301, 1978

## CENTER FOR PROGRAM COORDINATION, Oregon Department of Education

The Center has a special collection of career and vocational education materials developed primarily as a result of federally funded projects in Oregon which are available on a loan basis. The collection includes both print and nonprint materials. The Center also has the capability to conduct ERIC searches for educators, kindergarten through community college, at no charge.

Available from the Center are:

Catalog of Individualized Learning Materials in Career/Vocational Education, ODE, distributed by DCE Publications, PO Box 1491, Portland, OR 97207

Promising Practices in Oregon Career and Vocational Education, ODE

Promising Practices in Oregon Career and Vocational Education, An Adopter's Guide, ODE

"Career Awareness in Oregon," a slide-tape which could be used for inservice or community



## BUSINESS

Oregon and Federal Basic Income Tax Return Preparation Instructor's Manual, DCE Publications, PO Box 1491, Portland 97207

## GUIDANCE

Career/Vocational Guidance Competencies for Educators and Community Resource Personnel, Personnel Development Center, 10234 NE Glisan, Portland 97220

## ENERGY

A wealth of curriculum materials is available from ENERGY AND MAN'S ENVIRONMENT, 7874 SW Nimbus Avenue, Beaverton 97005:

EME Bibliography

EME Home Economics Guide, 7-12

EME Teacher Lesson Plan Notebook, K-12 (Contains energy, environmental, economic and career classroom activities)

## HOME ECONOMICS

Illinois Teacher of Home Economics, a professional journal for home economics teachers, University of Illinois, 351 Education Building, Urbana, Illinois 61801

Tips and Topics in College Home Economics, College of Home Economics, Texas Tech University, PO Box 4170, Lubbock, Texas 79409

## INDIVIDUALIZED INSTRUCTION

Curriculum Catalog, Vocational Curriculum Management Center, Building 17, Airdustrial Park, Olympia, WA 98504

Hargis, James W., "Curriculum Packaging in Career Education," Career Education Digest, November 1973

Individualized Learning Materials Catalog 76-77, Westinghouse Learning Press, 770 Lucerne Drive, Sunnyvale, CA 94086

Ken Cook Education Systems, designed to meet the needs of training for industry. Hardware for each work station consists of metal bench with tool rack superstructure, tools, small engines and an audio-visual projector which uses a slide-tape format. A large variety of software is available. Distributed by Schoolfutures, Marylhurst Education Center, Box A Flavia Hall Room 1, Marylhurst, Oregon 97068.

## SAFETY

A large library of safety films is available at no charge on just about every kind of occupation. Request the Safety Film Catalog from Workers' Compensation Dept., Accident Prevention Division, Labor and Industries Building, Salem 97310, telephone 378-3272.

## INTERDISCIPLINARY

The Career Education Project, Cashmere School District, Cashmere, Washington 98815, has the following materials available:

Three Activity Guides, K-5, 6-8, 9-12  
Advisory Committee for Career Education  
Language Arts & Career Education, K-5, 6-8, 9-12  
Social Science & Career Education, K-5, 6-8, 9-12  
Math & Career Education, K-8, 9-12  
Science & Career Education, K-8, 9-12  
Vocational Education Courses & Career Education, 8-12  
Spanish & Career Education, 9-12  
Music & Career Education, K-12  
Art & Career Education, K-12  
Health & Career Education, K-12  
Physical Education & Career Education, K-12  
Guidance Activities for Career Education, Books 1 & 2 for 6-8;  
9-12

Griffith, Bernie, The Original American Early Morning Primer  
(a how-to-do-it guide for implementing career education in rural schools), Cashmere Career Education Project

## VOCATIONAL STUDENT ORGANIZATIONS

Oregon's vocational student organizations, DECA, FBLA, FFA, FHA, HERO, and VICA (see page 19) are headquartered at the STUDENT LEADERSHIP CENTER, 633 High Street, NE, Salem 97301, 588-5138.

The Center provides state planning and serves as a link between the national organizations and local chapters. It assists local chapters with organization and activities, coordinates statewide skills contests and special activities such as the new Student Leadership Day.

The following publications are available from the Student Leadership Center:

Advisor's Answer Book for Vocational Student Organizations, ODE

Chapter Officer Guidelines for Vocational Student Organizations, ODE