DOCUMENT RESUME

ED 234 270 CE 037 090

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TITLE Partners for Youth Employability: An Ideabook for Educators and Employers.
INSTITUTION Northwest Regional Educational Lab., Portland, Oreg.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE Nov 82
CONTRACT 400-80-0105
NOTE 46p.; Developed through the Education and Work Program of the Northwest Regional Educational Laboratory.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Competence; Computer Literacy; Demand Occupations; Educational Resources; *Education Work Relationship; Employee Responsibility; *Employment Potential; Job Search Methods; *Job Skills; Job Training; Labor Market; Learning Activities; Literacy Education; Occupational Information; Productivity; Secondary Education; Student Responsibility; *Teaching Methods; Technological Advancement; *Work Attitudes; *Youth Employment
IDENTIFIERS Oregon

ABSTRACT

This ideabook, designed for middle school and high school teachers, Comprehensive Employment and Training Act (CETA) counselors, youth job developers, residential treatment staff, and other youth service providers, suggests ways to increase young people's success in the labor market. It provides specific ideas and strategies to structure experiences that will help students learn about the job market and learn skills that enable them to seek, find, and keep jobs. The book is intended to help staff take advantage of opportunities that already exist in a school or program setting and relate them directly to similar situations or requirements in a work setting. The ideabook is divided into five skill areas that have been identified by people concerned with youth unemployment. The five areas are responsibility, productivity, literacy, understanding new technology, and using labor market information. Each of the skill areas contains these five sections: (1) what does it mean (a definition and a short statement about why this is an important employability skill); (2) what does it look like (a description of two youth who are demonstrating competency in the particular skill); (3) work requirements and how to teach them; (4) what can a teacher do (examples of activities and ideas that teachers or job training staff might try); and (5) space for staff to jot down other ideas that might work or that are already working locally. A list of resources completes the ideabook. (KC)

# PARTNERS FOR YOUTH EMPLOYABILITY:

## An Ideabook For Educators and Employers

Prepared by: Andrea Hunter
Education and Work Program



Submitted to the
National Institute of Education
U.S. Department of Education
Contract No. 400-80-0105

November 1982

The mission of the Northwest Regional Educational Laboratory (NWREL) is to assist education, government, community agencies, business and labor in bringing about improvement in educational programs and processes. NWREL serves a region that includes Oregon, Washington, Alaska, Hawaii, Idaho and Montana, along with the territories of American Samoa and Guam.

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This report is produced by the Northwest Regional Educational Laboratory, a private nonprofit corporation. The work contained herein has been developed pursuant to Contract No. 400-80-0105 with the National Institute of Education, U.S. Department of Education. The opinions expressed in this publication do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by the Institute should be inferred.

# ACKNOWLEDGEMENTS

Partners for Youth Employability: An Ideabook for Educators and Employers is based on findings and analysis of Experience-Based Career Education (EBCE), recent adaptations of EBCE for youth with special employability needs (e.g., migrant youth, young women, gifted and talented students), and current thinking of researchers and practitioners who help young people prepare for their future. The development process synthesized information gathered through research analysis, individual interviews, roundtable discussions, and consultations for critique and review.

Because the essence of this Ideabook is to present ways for youth-serving institutions to help young people prepare for the realities of the workplace, hearty appreciation is extended to those educators and employers who contributed their time and expertise: Matt Bailey, instructor of the hearing impaired, Lyn Bonyhadi-Schleicher, Columber River Girl Scouts/art gallery manager; Doug Buck, Career Resource Specialist; Patricia Dykes, Crown Zellerbach; Michael Grice, middle school assistant principal; Camille Hall, Oregon Consortium (CETA Prime Sponsor); Eleanor Lang, high school science teacher; Trudie Mishler, 8th grade science teacher; Madeline Moore, school district sex-equity coordinator; Fred Rectanus, 6th grade math teacher; Cynthia Shelton, Director of Private Initiatives in Public Education; Hal Stoltz, high school counselor; Darrell Tucker, high school social studies teacher; Louise Wasson, coordinator of Business and Industry for Gifted Education. NWREL reviewers included Bob Blum, Goal-Based Education Program; Greg Druian, Computer Technology Program; Steve Reder, Literacy and Language Program. Production of this document was made possible by Pat Badnin, Marcia Douglas, Barbara Gill, Kathryn Morimitsu, Charline Nemeth and Larry Picus.

# INTRODUCTION

Youth employment has been the topic of numerous studies in the past decade. Notable among them are: The Vice President's Task Force on Youth Employment, Focusing Better on Youth: Legislative Recommendations from the Field, the Report of the Washington State White House Conference on Children and Youth: Careers and Employment, and Emerging Trends in Secondary Education, NWREL's review of major youth employment studies of the 1970's. These studies all conclude that the major youth employment issues facing schools during the 1980's are:

- o The demands of new technology for specially trained, skilled workers
- o The need for better employability training and basic education skills
- o The need to smooth transitions between school and work

Research has shown that experiential learning is an effective way to increase students' employability while motivating them to stay in school before seeking full-time employment (NWREL, Owens and Owen). Programs such as Experience-Based Career Education (EBCE) provide a variety of opportunities for youth to interact with adults. As a result of community based career explorations, youth increase their self-confidence in seeking work and in performing work tasks. They are able to make more realistic decisions about their careers. Private industry also seeks to help young people improve their career awareness and job skills because this will help increase the productivity of their future employees. School-based or industry-based, these activities all help ease the transition from school to work by connecting *what* is being learned with *why* it's being learned.

Employers are concerned about the ability of recent high school graduates to meet current employment needs. Many decry the lack of reading, writing and computing skills found among new employees. Other frequently mentioned problems are poor attendance and work habits, not following through on commitments and lacking the skills necessary for finding and holding a job--particularly jobs that are influenced by technological advances.

This Ideabook suggests ways to increase young people's success in a very competitive labor market. It provides specific ideas and strategies to structure experiences that will help students learn about the job market and learn skills that enable them to seek, find and keep a job.

The Ideabook is designed for middle/high school teachers, CETA counselors, youth job developers, residential treatment staff and other youth service providers. It is for those who do not have access to an experiential learning program, to a career awareness project or to active industry/education collaboration activities. The activities suggested here can be performed without changing curriculum, without added responsibilities and without the need for training or inservice. The Ideabook does not require extensive planning with local employers or community resource people, nor is it necessary to know details of specific jobs. Rather, the book will help staff take advantage of opportunities that already exist in a school or program setting and relate them directly to similar situations or requirements in a work setting. In this way, staff can cover their regular subject matter while teaching the skills that contribute to successful employment. Thus, the school or learning center itself could even be seen as a work setting where the learning is the actual work to be accomplished (Peterson 1982).

This Ideabook is divided into five "skill" areas which have been identified by people concerned with youth unemployment. The five areas are:

RESPONSIBILITY: According to employers, the most common reason that youth do not succeed at work is because they lack responsible behavior (e.g., regular attendance).

PRODUCTIVITY: Compared to other technologically advanced countries, declines in American productivity rates force employers to demand that workers be efficient and motivated.

LITERACY: Essential for employment and for independent living is the ability to read, write, communicate and compute, as well as the appreciation for how those skills can be used. And, yes, spelling is part of it!

UNDERSTANDING NEW TECHNOLOGY: Rapid changes in technology require a basic level of computer literacy for successful competition in the work world. For example, computer keyboards are attached to most of our everyday tools.

USING LABOR MARKET INFORMATION: Up-to-date information about the job market must be accessible and useable so youth can plan careers in the fields where jobs will exist.

Each of the skill areas is divided into five sections:

What Does it Mean? This section provides a dictionary definition and a short statement about why this is an important employability skill.

What Does it Look Like? This section describes two hypothetical youth who are demonstrating competency in the particular skill.

Work Requirements...and How to Teach Them. For each skill area, we list work setting requirements and numerous opportunities to teach them.

What Can a Teacher Do? Examples of actual activities and ideas that teachers or job training staff might try.

Ideas. Finally, space is provided for staff to share and jot down other ideas that might work or that already are working locally.

The Ideabook can be used in a variety of ways. A few of the many possibilities are: as a resource for an individual teacher in a self-contained classroom, as part of an inservice or staff development program, in department or inter-departmental meetings as a communication vehicle for academic and vocational staff, as a resource in CETA programs or in residential treatment programs. However it is used, we hope these ideas stimulate meaningful experiences and activities that help young people with the critical tasks of finding and keeping jobs and choosing careers.

# RESPONSIBILITY

## What does it mean?

*Definition:* *[re·spon si·ble adj. 1. Legally or ethically accountable for the care and welfare of another. 2. Involving personal accountability or ability to act without guidance or superior authority. 3. Being the source or cause of something. 4. Capable of making moral or rational decisions on one's own, and therefore answerable for one's behavior. 5. Able to be trusted or depended upon; reliable. 6. Based upon or characterized by good judgment or sound thinking. 7. Having the means to pay debts or fulfill obligations. 8. Required to render account; answerable. The American Heritage Dictionary of the English Language, 1976.]*

Responsibility is often thought to be the major personal characteristic that will lead to job success. Although the term means many things to many people and there are countless ways to "be responsible", commonalities do exist. In the preliminary findings of a Responsibility Study (NWREL, 1982), employers, teachers and students unanimously said that "being on time" is the critical ingredient of responsibility. Teachers and employers cited other behaviors that demonstrate responsibility, such as fulfilling commitments, being accountable, doing work on time, being independent and self-motivated, showing interest in the company, being able to follow instructions, maintaining a positive attitude, asking good questions and conforming to standards. In addition to doing class work on time, students mentioned the following: "does what he says he will do, never lets you down; obeys the boss; independent; can keep a steady job; and doesn't call in sick if he/she is not."

Ethics was not a quality mentioned by interviewees in the NWREL Responsibility Study, but it was stressed by other practitioners, particularly adults who work in school/community liaison capacities. One educator said that "stealing" was the reason that most of her students were fired from work experience jobs. Other youth related aspects of the ethics issue include "respecting confidentiality" and not gossiping.

# What does it look like?

Janie misses her bus transfer on the way to school. While she waits for the next bus, she calls the school attendance office. By the time she gets to class, her teacher has been notified by the main office, thereby avoiding the need for discipline and providing an opportunity for the teacher to reward Janie for demonstrating behavior that is respected in a job situation.

After receiving a science assignment to watch "Goodbye Gutenberg" on TV at 8 p.m. on Tuesday, Ronnie tells his teacher during the break that he will not be able to watch the show because of previous family plans that night. He asks for a substitute assignment and says he will finish it during his independent study period on Thursday.

## Work requirements

- Arrive at a designated time.
- Miss work no more than a specified number of vacation and sick days.
- Complete tasks according to schedule.
- Be accountable for own actions.
- Respect the needs of a supervisor.
- Respect the needs of co-workers.
- Maintain confidential information and refrain from "gossiping."
- Cooperate as a member of a team.

## ...And how to teach them

- Reward punctuality.
- Enforce attendance policy.
- Evaluate specified requirements in each grading period or time slot.
- Be clear about consequences of unacceptable behavior.
- Make adult expectations clear and firm.
- Model respect for fellow students of different races, cultures and ability levels.
- Show negative effects of "name calling" and model supportive behavior.
- Teach specific listening, team building and decision-making skills.

# What can a teacher do?

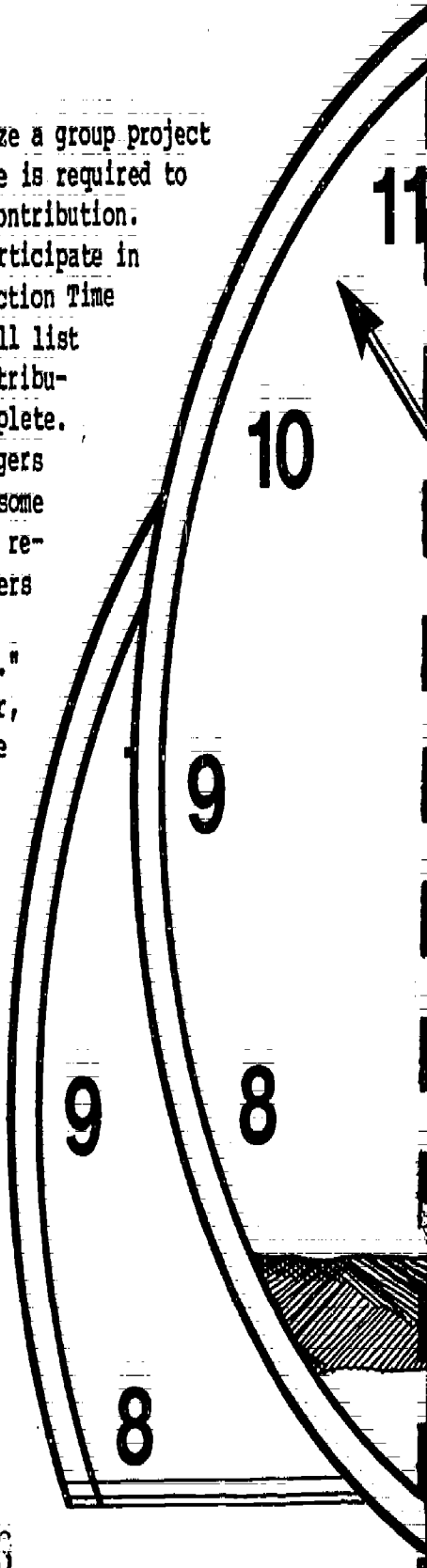
1. Set up a simple "government" system that rewards participation by each student. Because many youth are not active in school government, the smaller classroom environment makes participation and personal contributions more visible, and therefore more teachable and rewardable.

2. A school can set up a "public information center" or a "rumor control center" that monitors and spreads useful information, particularly during times of special events or incidents. Students can be involved in planning and operating this center. Tabloids or newsletters that encourage group responsibility can be built into the activity.

3. Require students to keep a record of their unexcused absences and tardies. Ask them to calculate their personal financial losses based on a specified hourly rate. Present a "pay bonus award" for students with the best attendance record. Ask a local personnel manager to present the reward and briefly talk about how his/her company respects that behavior.

4. Use techniques such as team learning projects, group work and peer tutoring to help youth acquire teamwork skills. These skills are often learned through participation in organized sports which, according to some researchers, is a reason that some males are more prepared than females for success in competitive management careers. Non-athletic techniques can help equalize acquistion of these skills.

5. Let youth organize a group project in which each one is required to make a visible contribution. Everyone will participate in making the Production Time Line and each will list when his/her contribution will be complete. Some can be managers of the process, some can be "friendly reminders" and others can serve on an "assistance crew." Everyone, however, will have to make a contribution upon which the project's ultimate success will depend.




# RESPONSIBILITY

# RESPONSIBILITY

# RESPONSIBILITY

Some ideas you've seen, heard or could use to encourage responsibility as it is required for successful employment:

# PRODUCTIVITY
## What does it mean?

*Definition:* *[pro·duc·tive adj. 1. Producing or capable of producing. 2. Producing abundantly; fertile; prolific. 3. Yielding favorable useful results; constructive. 4. Economics. Of or involved in the creation of goods and services to produce wealth or value. 5. Resulting in. The American Heritage Dictionary of the English Language, 1976.]*

According to the National Association of State Directors of Vocational Education, "Productivity is the relationship of input to output." The tools of production include both the physical equipment used in production (capital), and the skills and intensity with which that capital is applied (labor). Here we are concerned with the "labor" aspect and how to help youth see connections between the extent of an effort and the quality of a result. Clearly, it is a combination of the quality and the quantity of a product that is the measure of productivity. Although the quality is harder to measure, a product can refer to a human service as well as to business and industry.

Without minimizing the importance of influences such as mass media, family, peers, and jobs actually held, agencies such as schools have a critical role in helping youth develop the principles and skills of productivity. They can provide the motivation, understanding and habits of conduct that allow youth to become productive members of society; schools can also teach students basic skills that will enable them to profit from training. Some teachers and employers who hire young people cite the following examples of productivity: giving extra effort when necessary; cooperating as a member of a team; managing time effectively; being willing to assist others; communicating clearly about progress or problems at work; and accepting constructive criticism. These commonly valued qualities can be taught in school and they are rewarded in the work place.

# What does it look like?

Tiffany's math class is working on a project that requires an illustration of a growth rate for a period of one year. Although the class has just learned one method of making graphs, Tiffany suggests using colors on a chart which would make the information clearer and easier to understand. Her teacher describes this creative idea to the class and mentions that some companies give financial bonuses to employee who suggest effective technical improvements.

During Michael's junior year, he becomes so involved in basketball that he doesn't pass his algebra class. Because he plans to go to college, Michael meets with his counselor and sets goals for each course next year. By setting these goals and carefully keeping track of progress, he makes up the credit he lost. In addition, Michael and his counselor have a useful discussion about how this kind of planning can minimize distractions from important tasks and deadlines.

## Work requirements

- Carefully balance work time and break time.
- Initiate steps to improve the quality of a product.
- Be willing to exert extra effort in times of need.
- Incorporate criticism and evaluation into product development.
- Visualize "the big picture" and the reasons for doing a task.
- Cooperate as a member of a team.
- Set personal goals for task accomplishment.
- Take pride in work and appreciate nonmonetary rewards and self-satisfaction.

## ...And how to teach them

- Teach efficient use of breaks, study halls and independent study time.
- Encourage youth to seek ways to improve their grades.
- Provide structured and nonstructured opportunities for extra credit.
- Use evaluation and criticism, as well as grades to identify ways to improve skills.
- Show real daily applications for academic coursework.
- Use techniques such as student-team learning, group projects, youth entrepreneurship, etc.
- Announce goals/objectives at the beginning of a course or a lesson, and summarize at the end.
- Create situations for students to feel proud of their efforts.

# What can a teacher do?

1. Teach goal setting strategies and at the beginning a grading period or teaching unit, ask each student to set two goals. At specified times, ask everyone to check their progress with a self-rating checklist. The checklist could include independence, self-motivation, anticipating problems, asking for assistance and expressing pride upon success. In a school or any youth agency setting, students can be taught how to make task charts and timelines similar to ones used in many jobs.

2. At selected points in time--but not so often that impact will be lost--ask students to stop what they are doing and answer these questions: At this moment, are you on task or off task? Would asking for clarification or for assistance help you get the job done any better? What would make you feel most successful regarding this particular task? Is there any way you would/could have accomplished more in the same period of time?

3. When you give grades or evaluations, include at least two suggestions about how a student can improve something that is important to him or her. These suggestions can be used in the goal setting activities described above, and the format can even be similar to Employee Evaluations used by local employers.

4. Make sure there are independent study times and work breaks in students' schedules. This will give them an opportunity to learn, demonstrate and be rewarded for being productive in a loosely structured environment. For those students who do not know how to use independent time well, this can be an opportunity to teach it. One middle school uses class mottos such as "Settle for Excellence" or "Accept the Challenge" to help set the tone. The opportunity to work on class projects at this time will increase the visibility of each student's productivity towards a collaborative effort.

5. Let the class organize a "mini-work experience" project in which each student volunteers one hour per month to "work" for the school. "Jobs" could be tutoring in a lower grade, helping the maintenance crew, advising the principal about critical school issues, being an aide in a class for students with special needs, etc. Document all the work experiences (encourage your student photographers) and at the end of the quarter or semester, produce a PRODUCTIVITY PORTFOLIO for presentation to parents or community groups.

# PRODUCTIVITY

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# PRODUCTIVITY

Some ideas you've seen, heard or would like to use to encourage productivity as it is required for successful employment:

# LITERACY

## What does it mean?

*Definition:* *[lit·er·ate adj. 1. Able to read and write. 2. Knowledgeable; educated. 3. Familiar with literature; literary. -n. 1. Someone who can read or write. 2. A well-informed educated person. The American Heritage Dictionary of the English Language, 1976.]*

The September 6, 1982 Oregonian reported that 23 million adults in America are functional illiterates--that is, people who can barely cope with daily reading and writing tasks, such as addressing an envelope, writing and signing checks, deciphering a bus schedule, and reading food labels. The article goes on to say that "conventional illiteracy, a category that includes any American older than 14 who lacks a sixth-grade education, is nearly obsolete (0.06 percent of the population). The functional illiteracy rate is much higher--and actually may be increasing, according to specialists in the field." It is many of these 23 million that employers refer to when they bemoan the number of young job seekers who are incapable of filling out a job application form correctly. A similar complaint is heard from many college instructors when they face freshmen who "can't construct a complete sentence, paragraph or report."

Because most daily tasks require an ability to read, compute and communicate, schools have traditionally focused on learning basic literacy skills, such as decoding words, grammar, adding/subtracting, etc. While acquiring these skills, youth must also learn to apply them. Schools need to assume the responsibility for teaching literacy tasks, such as reading and following written instructions; alphabetizing, storing, processing and retrieving information; managing money and other survival skills. Teaching competency in these and similar applied tasks will sharpen every young person's edge in the competitive job market. It is also important to help young people appreciate the role these literacy skills can play in their personal as well as their professional lives.

## What does it look like?

Marvin's 8th grade math room has a bulletin board display illustrating the many ways math is used on jobs in the construction business. Although Marvin wants to be a builder, he has not signed up for geometry next year. After reading the information on the bulletin board, he asks his teacher for an appointment with the counselor to talk about whether he needs to change his schedule.

Janie listens to her teacher give oral instructions for a homework assignment, but she isn't sure she understands it. Then, while wondering how to ask a question, she completely misses hearing the assigned page numbers. To clarify her confusion, she tells the teacher what she thinks the assignment is about, and the teacher says that she has, indeed, heard it correctly. The teacher then repeats the page numbers and Janie writes them down in her notebook.

## Work requirements

- Read and complete application forms.
- Read and understand posted information e.g., safety codes.
- Follow written or oral instructions.
- Communicate progress and/or problems to a supervisor.
- Ask for assistance when necessary.
- Remember and use written information.
- Account for one's own time and earnings.

## ...And how to teach them

- Teach reading, spelling and accuracy skills in most assignments, in all subject areas, not just in English and Math.
- Incorporate bulletin boards and wall displays into the curriculum by posting assignments and other required reading.
- State directions clearly--orally and in writing--and check for accuracy.
- Ask youth to assess their own work and tell you how they are doing.
- Provide tutoring for enrichment as well as for remedial purposes; use peers, parents, teachers and community volunteers.
- Design lessons that build upon each other and help students see the connections.
- Ask students to keep personal records of credits or earnings.

# What can a teacher do?

1. Use the blackboard or a bulletin board to write messages that you know students will want to read. Here are two middle school examples:

   - "The first person who reads this message and writes their name, address, phone number and favorite novel or story on a piece of paper will receive a paperback book chosen by you and your teacher."

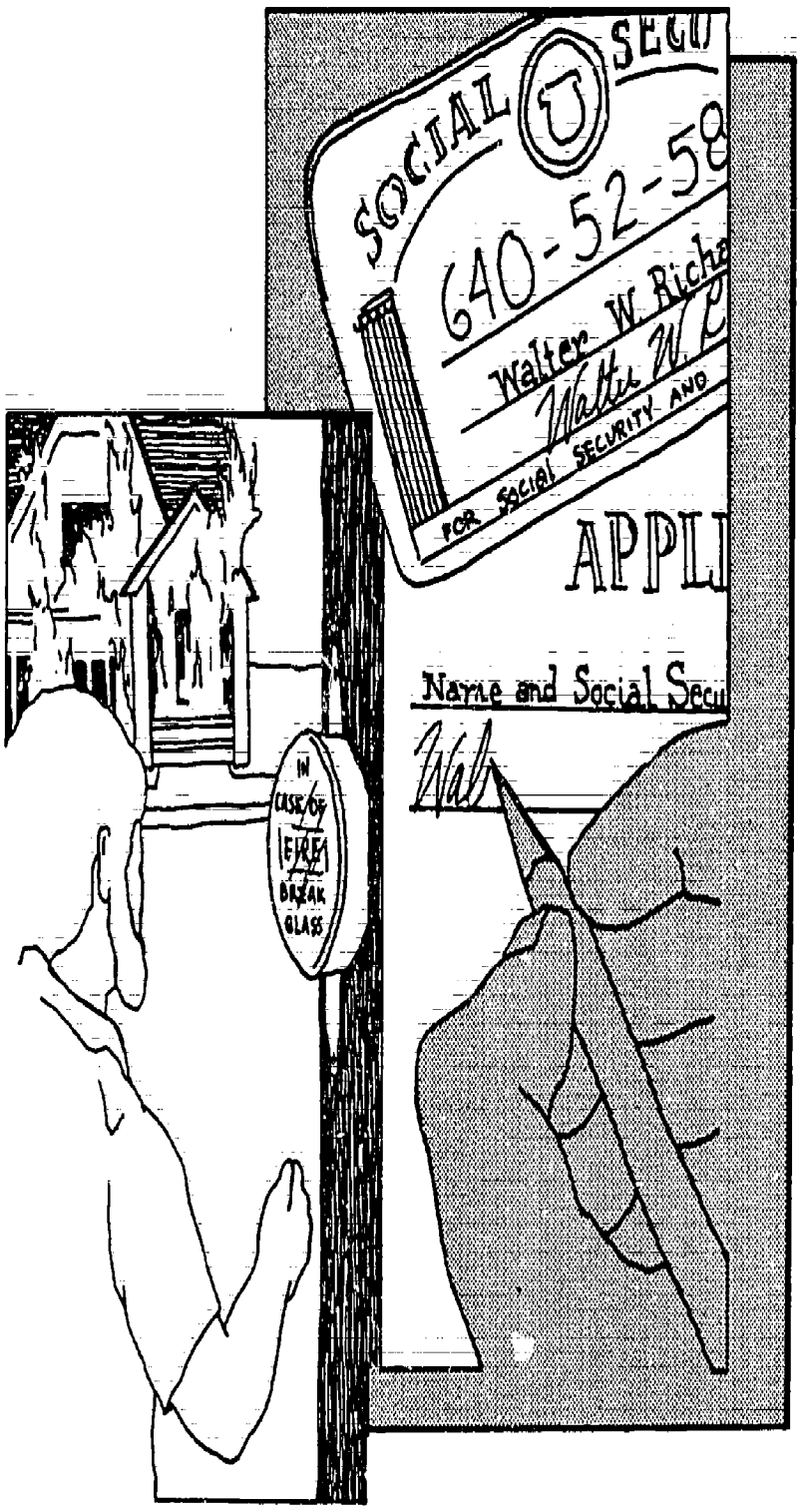
   - "The first two people who write a complete paragraph that accurately describes the difference between football and soccer will receive complimentary tickets to the _____'s game."

2. Borrow a time clock from a local business and for two weeks, ask youth to compute the hours and minutes they spend in your class or program. They can then (1) calculate a salary based on minimum wage and compare it to earnings at a job of their choice, (2) compute how much they would pay in taxes for a specific income bracket. If necessary, they can set improvement goals for the next two weeks.

3. Select a class or school issue that is of interest to a most of the students. Some possibilities are: potential school closure, loss of a sports team or other activity due to budget cuts, smoking/no-smoking rules, ideas for a field trip or lack of transportation funds for field trips. Using the issue as a context, teach the "problem-solving process." Students can assume responsibility for researching the issue, interviewing people and gathering data, analyzing information, selecting alternative solutions and presenting formal recommendations.

4. Ask youth to fill out job applications, but tell them that they will be evaluated by a Personnel Officer from a local business firm. Criteria for evaluation can be: A = "You have created an excellent impression of yourself and would definitely be interviewed for the job;" B = "You would probably be interviewed but you would have less chance of getting the job than the person who did an "A" job application;" C = "You would be interviewed only if there were few or no other applicants and that isn't very likely these days" and D/F = "You would not be considered for a job based on the quality of the application."

5. A middle school organizes a school-wide effort to improve basic writing skills. Every teacher in every class—not just English classes—gives some writing assignments and all teachers use the same proofreading symbols (e.g., fr=fragment, sp=spelling, p=punctuation) and the entire school chooses five areas of concentration. This united effort illustrates how writing is important in all subjects and it provides integrated reinforcement of learning.




# LITERACY

# LITERACY

Some ideas you've seen, heard or would like to use to reinforce literacy skills as they are required for successful employment:

# UNDERSTANDING NEW TECHNOLOGIES

## What does it mean?

*Definition:* *[tech·nol·o·gy n. 1. a. The application of science, especially to industrial or commercial objectives. b. The entire body of methods and materials used to achieve such objectives. 2. Anthropology. Broadly, the body of knowledge available to a civilization that is of use in fashioning implements, practicing manual arts and skills, and extracting or collecting materials. The American Heritage Dictionary of the English Language, 1976]*

The Bureau of Labor Statistics reports that three out of every four jobs in the 1980s will require some technological training and the Washington State Vocational Directors were recently told that "over one-half of the students graduating from high school in 1987 will be directly involved in computers, either as programmers, operators or users." As business and industry take advantage of the latest technological advances, the "skills gap" between high school graduates and the needs of employers could continue to grow. Today's youth, however, can succeed in the "information society," if they have an understanding of ideas such as micrographics, word processing, telecommunications and other new technologies. Schools must insure that students develop awareness of these new technologies as well as more specific computer literacy skills such as knowledge of computer hardware and software, personal and social capabilities of computers, and skills in programming.

Because youth born in 1982 will be looking for work in the year 2000, schools must begin today to prepare students for the next century. Computers play such an essential role in technological advances that computer literacy is critical for all students. Even in schools without access to microcomputers, it is possible to provide information and awareness activities. Already many students are acquiring rather sophisticated "systems thinking" skills through commercial video games; they are even developing their own programs and games. In any area of employment, this information and skill will increase chances for success and advancement.

# What does it look like?

The drama class produces "Fiddler on the Roof" and Jordan videotapes the dress rehearsal performance. As part of a volunteer project for his social studies class, he then edits the tape at a local cable TV studio and designs a ten minute show called "Cultural Delights." The show depicts how cultural life styles evolve and survive and it includes interviews with community members with a variety of ethnic backgrounds.

Rosie quickly masters many games on her parents' home computer and she starts to make up science games of her own. One of the games is so popular among the neighborhood kids that Rosie programs it for use on a high school microcomputer. The program includes vocabulary and instructions for her science project. Rosie visits three local high schools to share her new games with students in computer classes and by using her technical skills, she gains confidence in her ability to interact with others.

## Work requirements

- Read computer printouts.
- Use word processing capabilities.
- Learn job skills via video or cable TV.
- Independently improve or expand professional skills by using computers, video, or telecommunications.
- Understand ways to increase productivity by maximizing use of technology.
- Be willing to learn new job skills created by technological advances.

## ...And how to teach them

- Structure ways to use computers in the instructional process.
- Use a word processor to teach report writing and business letters.
- Organize critical lesson plans with the use of videotapes and cable TV.
- Use media technology to provide enrichment and extra credit activities.
- Do comparisons that teach how new technological strategies are streamlining cost-effective changes.
- Keep a current display of new jobs that occur, related classes being offered and ways to learn the job skills.

# What can a teacher do?

1. Group students in teams that mix interests, abilities and experiences. Ask each team to create a character profile of a person the class has recently studied or a person of national significance. Each member of the team must use a different technical medium to communicate his/her part of the character profile, such as: computer printout, videotape, audiotape, word processor, photographs, picture drawn on a computer, etc. Part of the assignment will be to explain to the class how his/her chosen technology made a unique contribution to describing the character.

2. Plan a "High Technology Career Fair." Students can write and conduct a survey to identify all parents, relatives, friends and local employers who work in high tech jobs and who would be willing to be a "high tech mentor" for the Fair. During the Fair have the mentors give brief explanations of what their job is, how they got it, whether it is what they thought they'd be doing, what training is necessary and what they like about it. Students can then select one of the careers to use as the basis for an independent study assignment called "Is High Technology Ready for Me?" On a larger scale, a similar event can be organized for the entire school.

3. In classes where students are writing research papers, assign some special conditions for the bibliography. Some of these conditions could be including at least two nonprint resources, making reference to at least one document on microfiche or using a recent computer search as one reference. After the reports are all completed and evaluated, select 3-5 students to plan and present a panel discussion about how these particular additions to the bibliography made the report either more comprehensive or easier to complete. Some students could do an alternative lesson by putting their report on a word processor and then revising it after an initial evaluation.

4. Ask students who are interested in sports to teach a two-part math lesson to PE classes in the lower grades. First, they should produce a videotape that illustates all the ways that technological advances are used in professional sports, such as TV instant replay, photo-finish at the horse races, coaches using videotapes as an instructional tool, or computer printouts for recording finishing times for a marathon race. Next, they should design a lesson that uses this videotape and present it to a 7th or 8th grade PE class.

# UNDERSTANDING NEW TECHNOLOGIES

UNDERSTANDING NEW TECHNOLOGIES

UNDERSTANDING NEW TECHNOLOGIES

Some ideas you've seen, heard or would like to use to encourage the understanding of new technologies as they are required for successful employment:

# USING LABOR MARKET INFORMATION

## What does it mean?

*Definition:* *[in·for·ma·tion n. 1. The act of informing or the condition of being informed; communication of knowledge. 2. Knowledge derived from study, experience, or instruction. 3. Knowledge of a specific event or situation; news; word. 4. A service or facility for supplying facts or news. The American Heritage Dictionary of the English Language, 1976.]*

*[labor market n. 1. the institutions and processes through which employment and wages are determined. 2. the factors affecting the supply of and demand for labor. 3. the area within which workers compete for jobs and employers compete for workers. Websters' Third New International Dictionary, 1976.]*

Labor market information includes such data as: all the jobs that exist locally or nationally; the wage and employment outlook for major occupational fields; hiring requirements of major employers; education, training and licensing requirements, skill and experience requirements, work setting demands, and information about institutions that offer some of those services. The providers of all this information are numerous and diverse--U.S. Bureau of Labor Statistics, State Employment Division, Worker's Compensation, trade unions, apprenticeship and outreach programs, Equal Employment Opportunity Offices, Occupational Outlook Handbook (OOH), Dictionary of Occupational Titles (DOT), career vocational counselors, and a myriad of commercial books, systems and learning kits. Some are local and some are national, but there is neither a common vocabulary nor a common audience. Because the needs of the users are as diverse as the sources of information, it can be a formidable task to find and use current information about what and where the available jobs are. The nature of labor market information is further complicated by: (1) the speed with which it changes because of technological advances and (2) regional and local variations in trends and markets. These conditions make it difficult even for an economic specialist to understand and use labor market information for personal career planning or for policy analysis.

In the midst of this sea of information, a recent survey of high school students (Pendergrass, et al, NWREL, 1981) revealed that the "individual (school) counselor was the preferred method of getting occupational information...," while at the same time very few of the youth surveyed felt that occupational information would help them find out what kind of jobs are available. This situation clearly defines the task for schools and youth employment programs: to make these sources of information familiar and available to teachers and counselors so that students will learn why and how to use them.

## What does it look like?

Linda is interested in the field of medicine, partly due to caring for her invalid mother. She has not, however, thought about focusing her interests to make more realistic choices about which classes to enroll in for her junior and senior years. With assistance from her counselor, Linda completes the personal profile information form for input on the computer. Reading the computer printout helps Linda learn about some of the academic requirements for jobs in different medical fields. After talking with her parents, she and her counselor use this information to schedule her classes for next year.

Although Allen enjoys his after-school job at a veterinary clinic, he is not sure he should turn his love for animal care into his career. At a career fair offered by a youth employment counselor at the Job Service, Allen talks with representatives from electronics firms, a junior college animal husbandry program and a hospital. A follow-up meeting with the counselor helps Allen think about matching his broad interest in medical care to available and expanding job opportunities. Consulting the Career Information System indicates a very good local outlook for nurse practitioners, but a moderate to poor outlook for veterinarians. This information helps Allen think about work experience placements and science courses for next year.

## Work requirements

- Know the policies regarding promoting from within an agency.
- Be able to transfer job skills to other companies and to other careers.
- Increase math and science skills and know what jobs reward those skills.
- Be aware of expanding career opportunities for women and minorities.
- Anticipate and prepare for career changes based on labor market trends and projections.

## ...And how to teach them

- Make students aware of course prerequisite requirements and graduation requirements.
- Plan interdisciplinary courses and encourage students to relate what they learn to past and future lessons.
- Emphasize the increasing number of careers available to people with math and science backgrounds.
- Teach students about nontraditional career opportunities and ways to seek them.
- Counsel students to plan next year's courses with careers in mind.

# What can a teacher do?

1. Ask youth to list all of the activities or tasks (e.g., mowing the lawn, cooking, washing the car, playing basketball) they have engaged in during the past week and then help them translate these activities into skills. After marking each skill that could be a job, use the daily want ads to identify all the listed jobs in your area that require the skills collectively held by the group. (This activity can boost confidence as well as illustrate current labor market demands.)

2. In a work experience office or a resource center, create a bulletin board display called "Who's Going to Work in 1990?" It should list today's ten most available jobs and those that are predicted to be the top ten in 1990. A related activity can include comparing the variety of jobs our grandparents held to the variety of jobs our peers now hold.

3. Each youth will choose a job, one currently held or one of personal interest, to research in the DOT and the OOH, etc. Required information should focus on local and national availability, training required, salary level, potential for advancement, and vulnerability to technological changes. Ask youth to use this information as a basis for discussing--in writing or orally--whether or not this would be a good job to pursue. They can share them and compare results.

4. Ask students to collect information from their parents/guardians about (1) the number of jobs they've held since age 18, (2) titles of each job and (3) reasons for each job change. Use collective totals as a starting point for a lesson about transferable job skills, flexibility and career mobility, and coping with job loss and/or change.

5. Use current Department of Labor statistics to identify some of the expanding "high technology" jobs. For each of the top 8-10 jobs, list the education and training required and the parts of the country where these jobs may be concentrated. Ask each student to pick one of these jobs that he/she might consider and make a Career Plan that includes: (1) recommended high school courses, (2) interviews with two people in that field, (3) post-secondary education/training. Discuss these plans in light of the students' actual plans.

# USING LABOR MARKET INFORMATION

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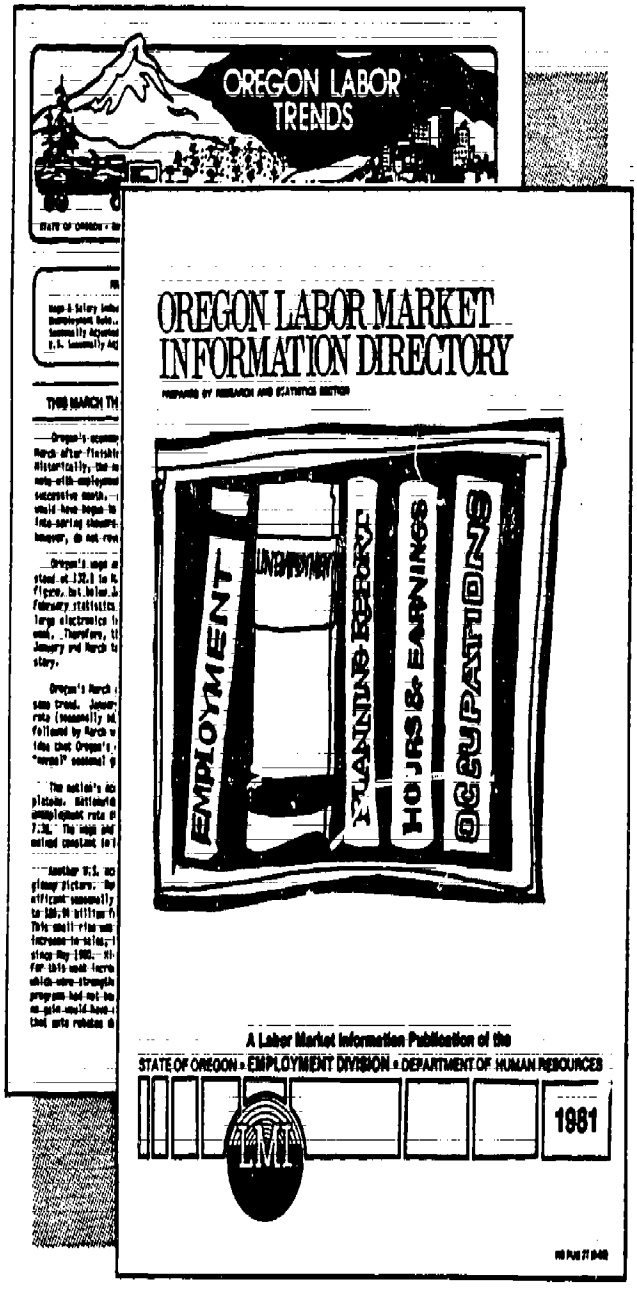


Some ideas you've seen, heard or would like to use to encourage the use of labor market information as it is required for successful employment:

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