DOCUMENT RESUME

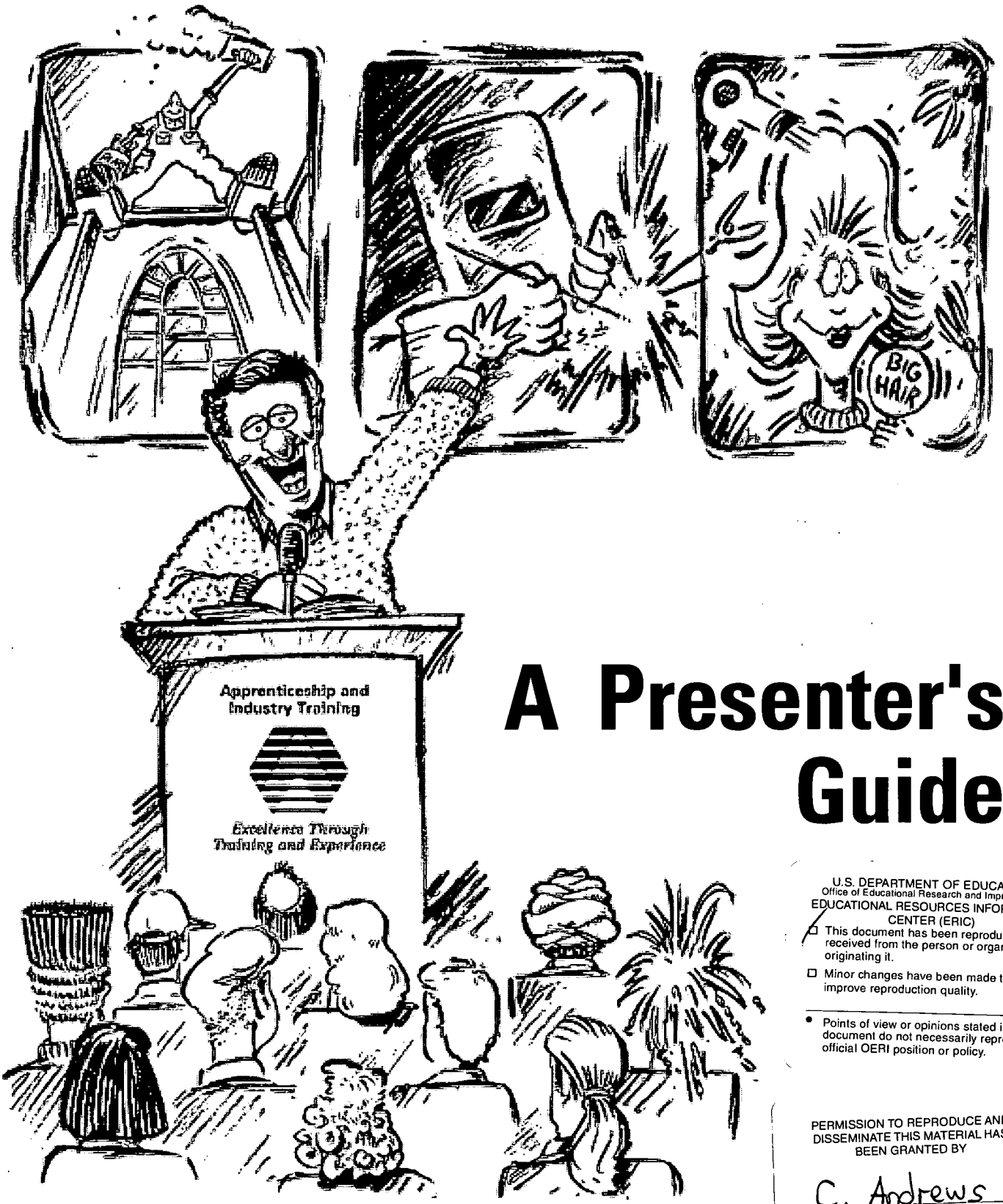
ED 455 437 CE 082 104

TITLE	Careers in the Trades: A Presenter's Guide.
INSTITUTION	Alberta Learning, Edmonton. Apprenticeship and Industry Training.
ISBN	ISBN-0-7732-0629-9
PUB DATE	2000-07-00
NOTE	49p.
AVAILABLE FROM	Apprenticeship and Industry Training, Alberta Learning, 10th Floor, Commerce Place, 10155-102 Street, Edmonton, Alberta, Canada T5J 4L5. Tel: 780-427-8765; Fax: 780-422-7376; Web site: http://www.tradesecrets.org/. For full text: http://www.tradesecrets.org/library/careers/prguide.htm.
PUB TYPE	Guides - Non-Classroom (055)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Agricultural Education; *Apprenticeships; *Blue Collar Occupations; *Career Education; Career Planning; *Demonstrations (Educational); Developed Nations; Foreign Countries; Occupational Home Economics; Secondary Education; Semiskilled Occupations; Skilled Occupations; *Speeches; Student Recruitment; *Trade and Industrial Education; Work Experience Programs

ABSTRACT

This guide provides all the ingredients a speaker needs to give an interactive, informative presentation about careers in the trades and the apprenticeship system of training in Alberta. It is designed specifically for those who work or have worked in a trade, who have been asked to present information about careers in the trades, and who need ideas on organizing or packaging their presentation. Section 1 provides questions to be answered to provide a clear background for development of the presentation. Section 2 contains an outline for a presentation. Section 3 presents background reading that will provide some basic information that is needed to develop a presentation, including why one should talk about careers in the trades and the apprenticeship system. Section 4 addresses what career planning is, career planning in the trades, reasons for working, interests, nature of work, and skills. Section 5 provides a general list of trade skills and abilities to help describe the work carried out in a specific trade. Section 6 is comprised of presentation resources, pages that can be reproduced as overheads or used as speaking notes to assist the presenter in describing the apprenticeship system of training and careers in the trades. Section 7 suggests creative ideas for demonstrating in the classroom some skills of a trade or discussing the work of a particular trade. (YLB)

Careers in the Trades:



A Presenter's Guide

Careers in the Trades: A Presenter's Guide is published by Apprenticeship and Industry Training, Alberta Learning, 10th Floor, Commerce Place, 10155 – 102 Street, Edmonton, Alberta, Canada T5J 4L5, telephone (780) 427-8765, fax (780) 422-7376.

The information contained within this document is accurate at the time of printing. This information may change.

For more information on the apprenticeship system of training and careers in the trades in Alberta visit:

http://www.tradesecrets.org

or contact the nearest apprenticeship and industry training office.

ISBN: 0-7732-0629-9

July 2000

Contents

Who should read this guide?

- If:
  - you work or have worked in a trade; have been asked to present information about careers in the trades; and you need some ideas on organizing or packaging your presentation;
  - you are comfortable with speaking to a crowd but you need a quick "refresher" about careers in the trades and the apprenticeship system of training;
  - you will be discussing career planning with young people and would like to include careers in the trades and the apprenticeship system of training;
  - you could use some hand-outs about apprenticeship training and the trades;
- Then you should read this guide.

Careers in the Trades: A Presenter's Guide provides all the ingredients you need to give an interactive, informative presentation about careers in the trades and the apprenticeship system of training.

Use the Guide to organize your entire presentation — just begin at the first page, or use it to supplement your own ideas.

Start at the beginning

Knowing the answers to the following questions will provide a clear background for the development of your presentation.

Know the background

What is the purpose of your presentation?

_____

What is the name and telephone number of the host?

_____

What is the address of the host?

_____

What is the date and time of your presentation?

_____

How much time is allotted for your presentation?

_____

What type of room set-up is provided (informal, rows of desks, etc.)?

_____

What audio-visual or other equipment do you need for your presentation?

_____

Are other speakers presenting at the same time? What are their names and topics?

_____

Know your audience

Imagine the questions your audience will ask, then structure your presentation to answer the questions.

Know your audience

If you will be speaking to a group of junior or senior high school students, you will also need to know:

- what grade are the students in?

_____

- what is their knowledge of the trades?

_____

- what is their knowledge of your trade, if you work in a trade?

_____

- what are their needs, expectations and interests?

_____

- how does your presentation relate to what they are studying?

_____

Junior high (grades 7, 8, 9) and senior high (grade 10, 11, 12) students learn about educational planning, and career planning according to the following Alberta Learning (2000) grade level objectives:

By the end of Grade 7, students are expected to:

- understand how personal and societal needs may be met through work
- understand that career planning is a lifelong process
- understand the relationship between individual characteristics, career development and personal satisfaction.

By the end of Grade 8, students are expected to:

- describe the relationship between occupation and lifestyle choices
- explain the importance of lifelong career planning
- analyze personal characteristics with respect to possible career options.

By the end of Grade 9, students are expected to:

- use occupational classifications
- investigate different occupations and their educational requirements
- discuss the changing roles of men and women and the effect of stereotyping
- develop a personal career plan
- develop profile of personal strengths and uniqueness.

Sr. High:
CALM (Career and Life Management) students are learning about:

- planning for the world of work (how to plan for a career, how to match individual personalities and interests to a group of occupations, and how to get job experience)
- how to explore career options (how to get along with others in the workplace, how to be self-employed, and what education and training are needed for different kinds of jobs)
- how to move on to a chosen occupation (i.e. how to get the job you want, write a resume, and make a good impression at a job interview)

In addition, students in grades 7 – 12 learn about career planning through the Career and Technology Studies (CTS) program in general and in the Career Transitions strand of the CTS program in particular.

Create an outline of your presentation

Here is an outline for a presentation. You can base your customized presentation on it. Background reading is provided after the outline.

Don't forget to estimate how long each section will take in your presentation. You don't want to run out of time for your most important point.

Be focused

Nervous presenters focus on what *they're going to say. Powerful presenters focus on* why *they are making their presentation. Know what you want to accomplish by making your presentation, and what you want the audience to do as a result.*

Introduction

- Introduce yourself.
- Describe your trade background (if applicable) or your current job, or why you have been chosen to give this talk.
- Explain what you would like to achieve in this career talk, and what you hope your listeners will achieve.
- Advise if you prefer questions during your presentation or after.

Enjoy yourself

Have fun. Don't take yourself, your "mission", or your nervousness too seriously, but be sincere.

Specific trade information and practical demonstration

- If you are a journeyman or apprentice, talk about what you do in your trade in a usual work day.
- Provide a practical demonstration of your trade. See the demonstration ideas section for suggestions.

Present answers to these questions:

- What do you like best and least about your trade?
- What are some of the challenges you face?
- What salary range could an apprentice expect?
- What potential is there for hiring and for progression in your trade?

How you look says a lot about you

Your posture, eye contact, facial expression, head movements, gestures and clothing speak volumes about you. Dress appropriately for the classroom unless you're planning a demonstration of your trade. If you're a journeyman or apprentice, your description of your work day and your skill in demonstrating your trade(s) will be very interesting. Your confidence in the skills of your trade will shine through.

General apprenticeship information

- Describe the trades, and the apprenticeship system, including the requirements and costs.
- Describe the benefits of choosing a career in the trades.
- Describe the opportunities for journeymen after certification.

Keep it Simple

A simple, relevant message is best.

Questions

- Ask for and answer any questions. If necessary, pose questions for the audience to answer.

Brainstorming

- Ask the audience to look around the room, and then describe which tradespeople they think helped to build it. What tools might have been used?

Summary and final questions

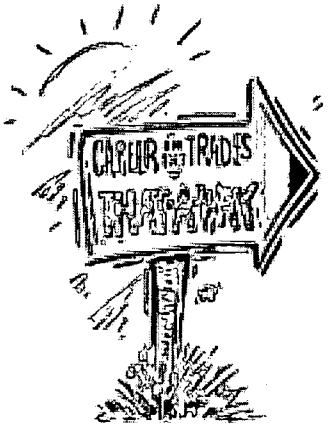
- Use this time to conclude your talk, summarize your main points and answer final questions.
- Mention where the listeners can find more information.
  - More information about the trades can be found in brochures available from apprenticeship and industry training. Or visit www.tradesecrets.org and look in the sections "Working in Alberta" and "The System."
  - Additional information can be obtained by contacting the nearest apprenticeship and industry training office — see "Contact Us" at www.tradesecrets.org.
  - The Career Information Hotline, 1-800-661-3753 (Edmonton 422-4266) is a toll-free telephone career consulting service provided by Alberta Human Resources and Employment. Career consultants at the Hotline provide career consulting services, and referrals to appropriate organizations. You can provide the Hotline's telephone number.

Practice

This might just be the hardest part of all, but it's a very important tip.

Stand in front of a mirror, your family, or a friend, and practice your presentation for all it's worth. Or simply stand up in a quiet room with no audience. Practice pays off. You will be much more comfortable if you have "walked and talked" through your entire presentation. Listen to the feedback, then try again.

Research



The following background reading will provide some of the basic information you will need to develop your presentation. Is there other information you will need?

Why talk about careers in the trades and the apprenticeship system of training?

The trades and our world are in transition. Today's trades offer creative, satisfying work and a potentially rewarding lifestyle.

For many years our society has placed a higher value on college and university training than on an apprenticeship training program. Yes, we need engineers, medical doctors, scientists and technologists. However, many young people need alternative career choices. Often, they would rather pursue careers that have traditionally been described as "hands on". These are the young people who need to hear more about the rewarding careers that await them in the trades.

Young people need to be encouraged to:
- see the trades as a suitable, satisfying career choice;
- see apprenticeship as a quality post-secondary training opportunity;
- become a registered apprentice through the Registered Apprenticeship Program (RAP);
- choose a career in the trades if the work interests them.

The apprenticeship system of training

How does apprenticeship work?

Apprenticeship is an education and training system that teaches trade knowledge and skills through on-the-job training, work experience and technical training. The on-the-job training and work experience is provided by the employer and supervised by a journeyman. The technical training is arranged by Alberta Learning and provided by various post-secondary institutions and training establishments.

An apprenticeship training program is compulsory when learning a trade.

About 80% of the apprentice's training takes place on-the-job. The other 20% of the training is technical training at post-secondary institutions or training establishments.

What is a trade?

A wide variety of occupations can be classified as trades, and in fact the list of trades differs in each province. In Alberta, a trade is designated under the *Apprenticeship and Industry Training Act*. See the "Working in Alberta" section of www.tradesecrets.org for a list of the more than 50 trades and crafts in Alberta.*

What is an apprentice?

An apprentice works on-the-job while he or she learns a trade. An apprentice has an apprenticeship contract with an employer that is registered with the Alberta government. An apprentice attends technical training. There are about 30,000 registered apprentices in Alberta at any one time. Each year, Alberta registers about 7,000 new apprentices.

What is a journeyman?

A journeyman has learned the skills of the trade. Most journeymen hold a certificate in their trade. The Alberta Journeyman Certificate indicates that the holder has met certain standards and learned the skills of the trade. About 13% of Alberta's working age population hold trade certificates.

How long is an apprenticeship training program?

Apprenticeship training programs vary with the trade. The longest programs run for four periods of training (about four years). A period of training for each trade usually has two components* for each trade, a specific number of hours of on-the-job training and work experience, and a set amount of technical training. The amount of technical training ranges from three to 12 weeks per period.

How much does an apprentice earn?

Apprentices earn a percentage of the journeyman wage in their trade at the company in which they are employed. The apprentice's wage varies from 40% to 90% of the journeyman's wage, depending on the trade and depending on how much training the apprentice has completed. The apprentice's wage increases as the apprentice progresses from one level of training to the next.*

An employer must pay a RAP apprentice at least the basic minimum wage.

Occupational Profiles are available for each trade. Visit www.tradesecrets.org to print occupational profiles.

What is RAP?

RAP — the Registered Apprenticeship Program* — is a modified apprenticeship program that permits a high school student to become an apprentice while attending high school.

A RAP apprentice accumulates hours of on-the-job training and work experience as credit toward his or her apprenticeship program, and credit toward a High School Diploma, or Certificate of Achievement.

How does an apprentice progress through the training?

To progress from one period of an apprenticeship training program to the next, an apprentice will:

- successfully complete the technical training;
- have the required hours of on-the-job training and work experience and a satisfactory report from the supervisor;
- pass the apprenticeship examination for that period of training;
- have the record book stamped by the nearest apprenticeship and industry training office, Alberta Learning.

The employer will:

- update the apprentice's record book by recording the on-the-job training provided, the hours worked, the type of work performed, and by evaluating the apprentice;
- forward the record book to the nearest apprenticeship and industry training office, Alberta Learning for stamping.

After completing these steps an apprentice's wages should increase to the next level for that trade. The level may differ with each employer, but will be based on the journeyman wage rate in that company.

What are the responsibilities of the employer?

The employer is responsible for:

- providing on-the-job training and work experience to the apprentice under the supervision of a journeyman;
- paying the apprentice's wages;
- providing time away from work so that the apprentice can complete the required technical training;
- maintaining the apprentice's record book.

**for more information, visit the "Working in Alberta" section of www.tradesecrets.org or call an apprenticeship and industry training office.*

What are the responsibilities of the apprentice?

The apprentice is responsible for:

- completing the required on-the-job training as assigned by the employer and, at the end of each period of apprenticeship, reviewing with his or her supervisor:
  - the hours worked
  - the on-the-job training completed.
- ensuring that his or her record book is updated at the end of each period, and forwarded to the nearest apprenticeship and industry training office, Alberta Learning, for completion.
- attending the required technical training:
  - making arrangements to meet personal financial needs while attending technical training;
  - acquiring the text books and supplies required for technical training;
  - successfully completing the requirements of the technical training.
- completing the required examinations.
- advising the department:
  - if he or she becomes unemployed or employed by another person so that the contract of apprenticeship can be transferred;
  - if there is a change in address or employment.
- carrying his or her apprentice identification card at all times while at work and producing it on request.

Where does apprenticeship technical training take place?

Technical training is delivered at a variety of post-secondary institutions and training establishments, depending on the trade:

- technical institutes;
- colleges;
- vocational colleges;
- private trade schools;
- industry training centres;
- in some trades and in some regions technical training may be available in forms such as one-day-a-week, evening or weekend, on-site training, or in various forms of distance learning.

How much does an apprenticeship training program cost?

There is a tuition fee for each week of technical training required for your trade. Additional costs involve textbooks and other classroom materials. Apprentices who must travel to receive technical training are responsible for travel, accommodation and meals.

Based on need, student grants or loans may be available to apprentices while attending technical training. Most apprentices graduate to certified journeymen completely free of student debt!

Most apprentices are eligible for employment insurance (EI) while attending technical training. For details, check with the nearest Alberta apprenticeship and industry training office.

Fees: 2000 – 2001

Classes 3 to 4 weeks....$200.00
Classes 5 to 12 weeks...$50.00/wk

(e.g. an 8 week program is $400.00)

An apprentice's tuition fee is payable to the institution before commencement of the class. In addition to tuition, institutions charge student association, locker, parking and other facility fees.

How does an apprentice obtain an Alberta Journeyman Certificate?

An Alberta Journeyman Certificate is granted to an apprentice who:

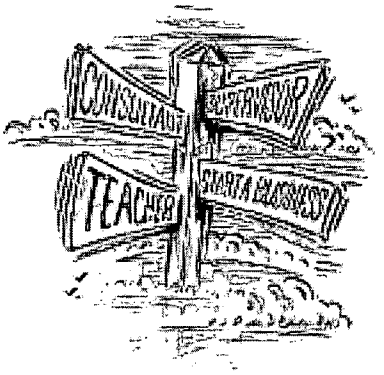
- completes the required hours of on-the-job training and receives a satisfactory report from the supervisor;
- successfully completes the technical training;
- passes all required examinations;
- has forwarded his or her record book to an apprenticeship and industry training office, Alberta Learning, for completion.

When an apprentice receives an Alberta Journeyman Certificate, the new journeyman can use the term "certified" with the name of the trade. This title lets employers and consumers know that a standard of quality or skill, established by industry, has been attained. Journeyman wages should now be paid.

Where can the journeyman work?

The Alberta Journeyman Certificate is valid in the province of Alberta, and may be recognized in other provinces. If the journeyman holds a certificate in one of the Interprovincial Standards Program (Red Seal) trades and is interested in working in another province, the journeyman can write a Red Seal exam. Journeymen who carry an Interprovincial Standards Program Red Seal on their provincial certificate are qualified to work in their trade anywhere in Canada that the designation is recognized.

Career planning



What is career planning?

Work can be looked at from different perspectives:

- A *job* is work in a position with specific duties and responsibilities within an organization (example: produce clerk in a particular grocery store).
- An *occupation* is a group of similar jobs. Generally, when a person plans for the paid work he or she will do, the plan will be to "become" an occupation (examples: sheet metal worker, x-ray technician, accountant, dentist, store clerk, machinist).
- A *career* is the sum total of a person's work related experiences (including both paid and unpaid work) and all other life experiences (like leisure activities, relationships, etc.).

Each person working through the career planning process needs to know certain things about him or herself: reasons for working, interests, aptitudes, and the skills acquired already. In career planning this knowledge can then be matched with various occupations, through researching the occupations, choosing from a list of "close fits" and developing a planned path to his or her occupational preference.

Career planning in the trades

Young people can plan to become a certified journeyman in a particular trade or in more than one trade. The next step could be a plan to become an employer or entrepreneur (a welder who owns his own rig, for instance). With additional education and training, certified tradespeople can become managers or can teach trades-related courses at high schools, community colleges, and continuing education facilities. With a great deal of experience, some journeymen become consultants and work as representatives for unions and associations or as a training consultants or contractors. As technical experts, certified journeymen may also provide expert advice and support to management or to government.

Inspiration?

A good career talk inspires people to think about alternative occupations, and provides enough information to make an initial "possible fit" decision — does this occupation sound interesting? Then the person can look for more information to see if he or she is really interested.

Why work?

People work for many reasons, and a person who is career planning will need to identify his or her own reasons for working. Reasons for working could include, but are not limited to:

- money;
- helping others;
- getting out of the house;
- power;
- satisfaction;
- prestige;
- self fulfillment.

Interests

Career success usually comes from working at something a person likes to do. In career planning terms, what a person likes to do is called an *interest*. Some interests are more important and satisfying than others, and should be considered while making occupational decisions.

Nature of work

Another area that needs to be considered when a person is making an occupational decision is the *nature of the work* including: the duties, educational requirements, employment outlook, salary, working conditions, and available training.

Skills

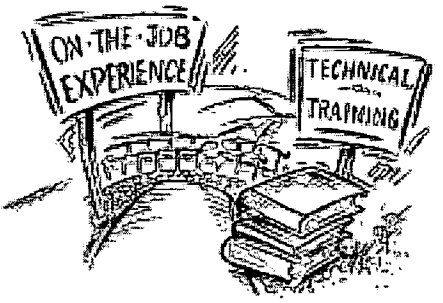
While researching, a person needs to investigate the skills that an occupation requires.* Skills are often classified into three categories:

Technical skills are specific to one or a few occupations. These skills can be learned on- the-job or in a classroom. Some examples of technical skills include: computer programming; air brushing; stainless steel welding; diagnosing computer and electric problems in automobiles.

Personal skills are usually associated with a person's personality and attitude. Personal skills are developed throughout a person's life and may include: dependability; enthusiasm; a sense of humour; the ability to create a positive overall impression to others.

Transferable skills can be used in many different occupations. These skills are learned in school and on-the-job as well as through life experience. Examples of transferable skills are problem solving; operating a computer; budgeting. Generally, the more transferable skills, the more occupational choices a person has.

**A general list of trade skills and abilities follows.*



Trade skills and abilities

Choose from the following general list of skills and abilities to help describe the work carried out in a specific trade.

More information about individual trades can be found at www.tradesecrets.org

Working with machines or tools

Operating	Controlling, guiding or otherwise running tools, machines or other equipment.
Assembling	Putting things together.
Adjusting	Changing the setting on machines, devices or electrical equipment to improve performance.
Building/Constructing	Using tools to build or construct objects.
Fixing/Repairing	Fixing machinery or equipment.
Mechanical Reasoning	Understanding how machinery or tools operate and the relationship between mechanical operations.

Physical abilities

Finger Dexterity	Being exact when you use your fingers to hold or move things.
Manual Dexterity	Doing accurate and precise work with your hands.
Motor Coordination	Being well coordinated.
Reacting Quickly	Responding quickly when necessary.
Stamina	Doing physically tiring work without becoming exhausted.
Strength	Doing heavy work — lifting, pulling or carrying heavy objects.
Visual Acuity	Corrected: near 20/20, far 20/40.

Working with details

Caution	Thinking about what you are doing or working cautiously to avoid errors or accidents.
Precision	Being precise and accurate on-the-job, meeting all specifications.
Alertness	Noticing problems, or being able to tell when something is wrong.
Attending to Detail	Remembering to finish many small tasks. Completing each step at the right time and in the right order.
Following Procedure	Doing things exactly as directed.

Working with numbers

Calculating	Using basic shop mathematics.
Measuring	Using tools or equipment to determine length, angle, volume or weight.
Numerical Reasoning	Understanding how to work with and use numbers to solve problems.

Working with difficult situations

Tolerating Discomfort	Being able to work in physically uncomfortable surroundings or stressful situations if the job requires it.
Performing Repetitive Tasks	Doing the same thing over and over again in exactly the same way.
Working Under Pressure	Meeting deadlines. Working while you are being watched or evaluated by your supervisor.

Creativity

Visualizing/Imagining	Being able to form a mental image of objects, forms, drawings, models and blueprints.
Creating/Inventing Improvising/Adapting/	Originating new ideas or inventions. Making changes or modifications to get the job done.
Experimenting	Finding new and creative ways to accomplish tasks.

■ Communication skills

Reading	Getting information from written material. Following written instructions on what to do or how to operate something.
Questioning	Asking appropriate questions to get useful information or clarification from others.
Listening	Listening carefully to whatever the other person is saying and responding appropriately.
Verbal	Communicating job-related information and requirements.
Responding to Feedback	Listening to the negative and positive comments of others and changing your behavior if necessary.

■ Self-Management skills

Efficiency	Planning your work. Doing things without wasting time or energy.
Dependability	Completing your work on time and being reliable.
Flexibility	Changing tasks as needed. Knowing how to do very different tasks. Changing from one task to another.
Pride in Performance	Taking pride in the quality of work that you do. Consistently trying to do the very best job possible no matter what the task.
Persistence	Working toward a goal in spite of distraction or interruption. Concentrating on what you are doing.
Enthusiasm	Being keenly interested in and excited about what you are doing.

■ Sensory

Sound Discrimination	Hearing slight differences in sound.
Shape Discrimination	Seeing small differences in shapes and sizes, observing how things are alike or different.
Depth Discrimination	Accurately judging distance, judging how far away or apart things are.
Color Discrimination	Seeing small differences in color.

■ Reasoning abilities

Investigating/Researching	Gathering information in an organized way in order to establish certain facts or principles.
Analyzing	Breaking a problem into its parts so that each part can be dealt with separately.
Synthesizing	Putting facts and ideas together in new and creative ways — finding new ways to look at problems or do things, creating new ideas by putting old ideas together in a new way.
Remembering	Having a good memory for facts, figures and incidences. Being able to recall information accurately.

■ Working with others

Cooperating	Working together with others to reach a common goal. Working as part of a team to complete a task.

■ Working with or for customers

Providing Service	Identifying customers needs and wants and meeting them, whenever possible.
Ensuring Satisfaction	Checking with customers to ensure that they are satisfied with the products and services received.

Presentation resources

The following pages can be reproduced as overheads or used as speaking notes to assist you in describing the apprenticeship system of training and careers in the trades.

Apprenticeship facts and figures

There are about 30,000 registered apprentices in Alberta at any one time.

Each year, Alberta registers an average of 7,000 new apprentices.

About 13% of Alberta's working age population hold trade certificates.

Alberta trains about 19% of all apprentices in Canada.

What is apprenticeship?

Apprenticeship is a system of education and training that offers the opportunity to learn skilled work: through technical training, and on-the-job training* and work experience under the supervision of a journeyman.

The person who is learning while working is called the *apprentice*. The apprentice has a contract with an employer to learn the particular skills of a trade. An apprentice also attends technical training.

How does apprenticeship work?

The *employer*:

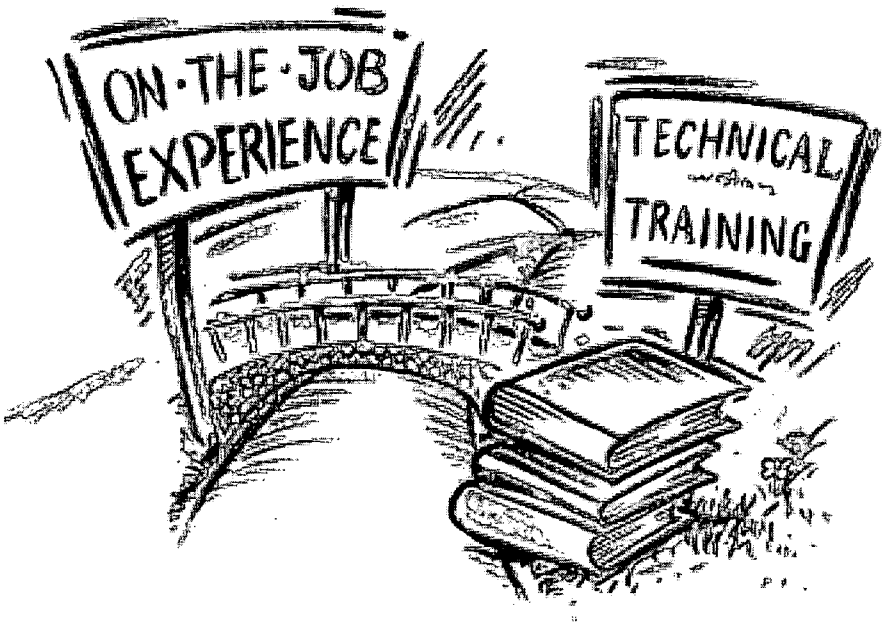
- provides a journeyman to teach the skills of the trade;
- releases the apprentice from work so that the apprentice can attend technical training every year.

The *apprentice* spends:

- about 80% of his or her time on-the-job learning the skills of the trade,

  and

- the other 20% in technical training learning the theory of the trade.



The Registered Apprenticeship Program (RAP)

is a modified apprenticeship program that permits a high school student to become an apprentice while attending high school.

Enables students to receive credit toward:

- an apprenticeship program, and
- a high school diploma or certificate of achievement, while completing their high school program.

A RAP apprentice is a full-time high school student. A RAP apprentice must be paid at least minimum wage.

Maximize your opportunities

Become an apprentice and finish your high school program through the Registered Apprenticeship Program (RAP).

What are apprentices paid?

Apprentices are paid 40 – 90% of the journeyman's wage, depending on the trade and depending on how much training the apprentice has completed.

Examples:

Trade	1st*	2nd	3rd	4th period
Appliance Service Technician	55%	70%	85%	n/a
Automotive Service Technician	55%	70%	80%	90%
Baker	65%	75%	85%	n/a
Electronic Technician	50%	60%	70%	80%
Instrument Technician	55%	65%	75%	85%
Landscape Gardener	60%	70%	80%	90%
Machinist	55%	65%	75%	85%
Millwright	60%	70%	80%	90%
Sheet Metal Worker	50%	65%	75%	85%
Welder	60%	75%	90%	n/a

*In any trade, for RAP apprentices, first period apprentice rates may be different.

The skills of these trades are learned using the apprenticeship method of training

Electrical Trades
Communication Electrician
Electrical Rewind Mechanic
Electrician*
Electronic Technician
Power Lineman*
Power System Electrician

Metal Trades
Ironworker*
Machinist
Sheet Metal Worker*
Structural Steel and Plate Fitter
Welder*

Vehicle and Related Trades
Agricultural Mechanic
Auto Body Technician
Automotive Service Technician
Heavy Equipment Technician
Motorcycle Mechanic
Partsman
Recreation Vehicle Service Technician
Transport Refrigeration Technician

Industrial Trades
Instrument Technician
Insulator*
Millwright*
Printing and Graphic Arts Craftsman
Sawfiler
Water Well Driller

Service Trades
Appliance Service Technician
Baker
Cook
Hairstylist
Landscape Gardener*
Locksmith
Refrigeration & Air Conditioning Mechanic

Piping Trades
Boilermaker*
Gasfitter — First Class*
Plumber*
Sprinkler System Installer*
Steamfitter-Pipefitter*

Building Trades
*Bricklayer
*Cabinetmaker
*Carpenter
*Concrete Finisher
*Crane and Hoisting Equipment Operator
*Elevator Constructor
Floorcovering Installer*
Glazier*
Lather-Interior Systems Mechanic*
Painter and Decorator*
Roofer*
Tilesetter*

these trades could also be described as Construction Trades.

Why should you think about apprenticing in a trade?

Earn while you learn . . .
Earn a paycheque while apprenticing.

Quality training . . .
An apprentice receives up-to-date training.
An apprentice learns the skills industry needs . . . the right skills.

Travel . . .
Pass the Interprovincial Standards (Red Seal) exam and work in most Canadian provinces and territories.

The right kind of challenge . . .
Many trades are highly technical, involve lots of maths and sciences, and are changing quickly.

Be valued
Reliable, certified tradespeople are valuable employees.
A trades career can lead to supervsion, management, and business entrepreneurship.

Earn a certificate
Completion of an apprenticeship program earns a Journeyman Certificate.

How long is an apprenticeship program?

Depending on the trade, an apprenticeship training program runs for up to four periods of training.

A period of training usually has two components:

- a specific number of hours of on-the-job training and work experience where specific skills are taught and learned;

- a set amount of technical training.

The amount of technical training ranges from three to 12 weeks per period.

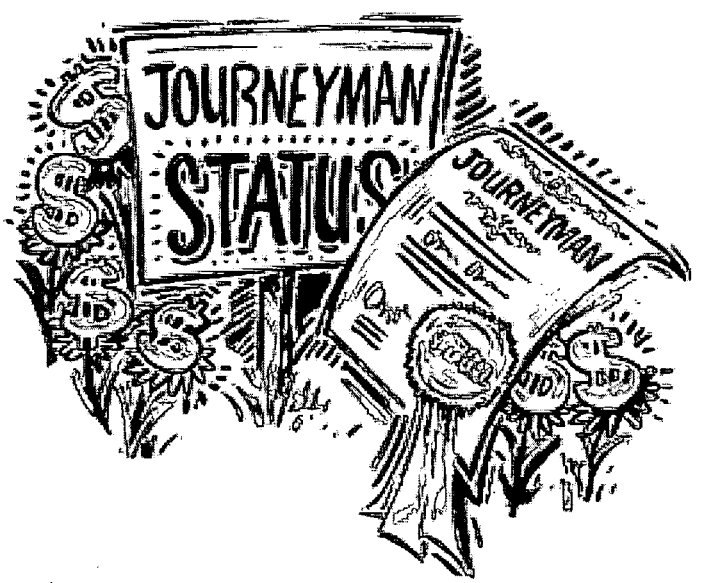
How does an apprentice become a journeyman?

A Journeyman Certificate is granted to an apprentice who:

- completes the required number of hours of on-the-job training and work experience and receives a satisfactory report from the supervisor;
- successfully completes the required technical training;
- passes all required examinations;
- provides his or her record book to the apprenticeship and industry training office so that a certificate can be issued.

A Journeyman:

- can use the term "certified" with the name of the trade;
- is paid journeyman's wages;
- is qualified to teach apprentices.



What are the career paths in the trades?

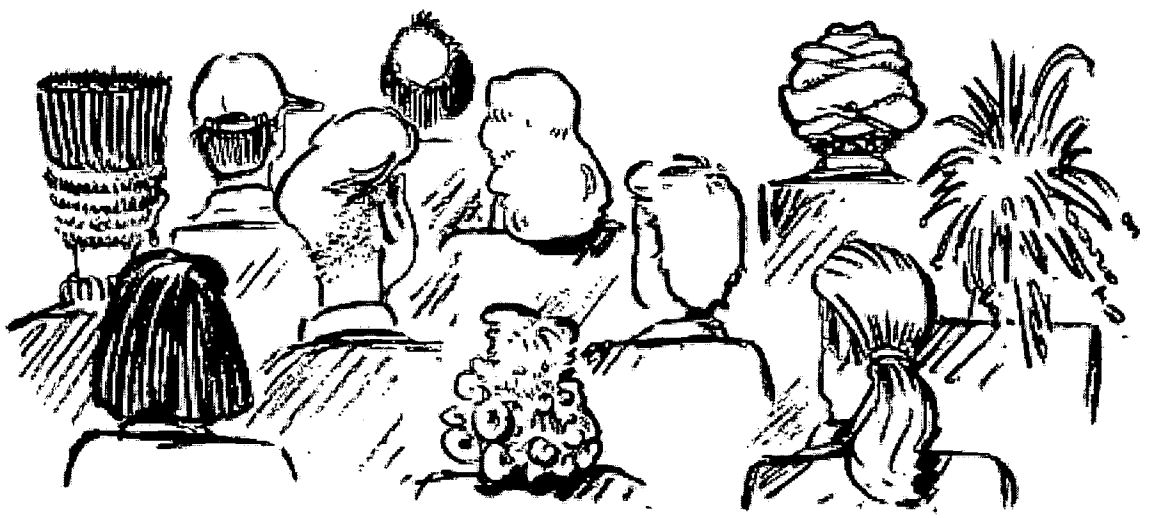
With additional education, training and experience, journeymen can become:

- employers
- entrepreneurs
- managers
- teachers of trades-related courses at high schools, community colleges, and continuing education facilities
- consultants for unions, associations
- training consultants
- contractors

Profile of people in the trades

People in the trades are especially:

- interested in working with their hands, with machines, or with tools;
- concerned about the end result of their work;
- satisfied by solving concrete, not abstract, problems;
- interested in working with people.



How do I decide if a trade is right for me?

Determine your skills, interests and abilities. Decide if they indicate an interest in the trades.

Talk to:

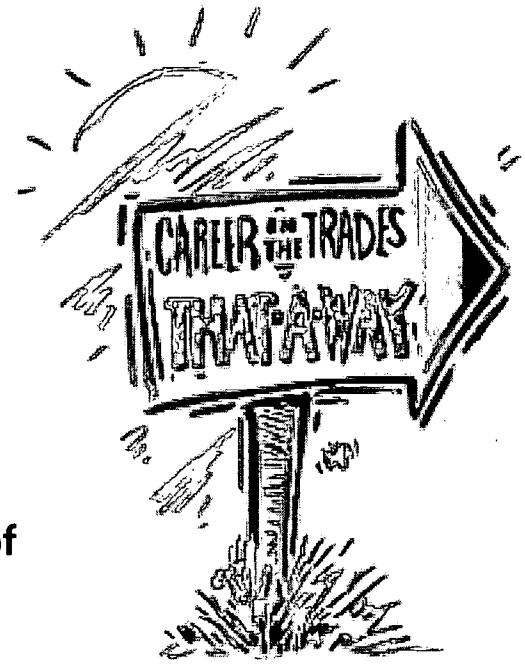
- someone who is apprenticing in "your" trade, or to a journeyman
- apprenticeship consultants at the nearest apprenticeship and industry training office
- your school career counsellor
- teachers

Observe or job shadow:

- employers of "your" trade
- construction projects involving "your" trade

Plan:

- most employers prefer a high school diploma or Certificate of Achievement. Plan your high school courses to include mathematics and sciences.



Gain experience and learn new skills:

- find summer jobs in your area of interest
- do volunteer work
- participate in work experience opportunities

How do I become an apprentice?

- Find a job with an employer who is eligible to train an apprentice. If you are enrolled in high school, find out how to become a RAP (Registered Apprenticeship Program) apprentice.
- Most employers prefer grade 12, but provision may be available for less education. For most trades, an entrance examination may be written if education requirements are not met.
- Fill in an apprenticeship application form, available from the nearest apprenticeship and industry training office. Return the application form to the apprenticeship and industry training office.
- An apprenticeship contract between you and the employer will be registered with the Alberta government.

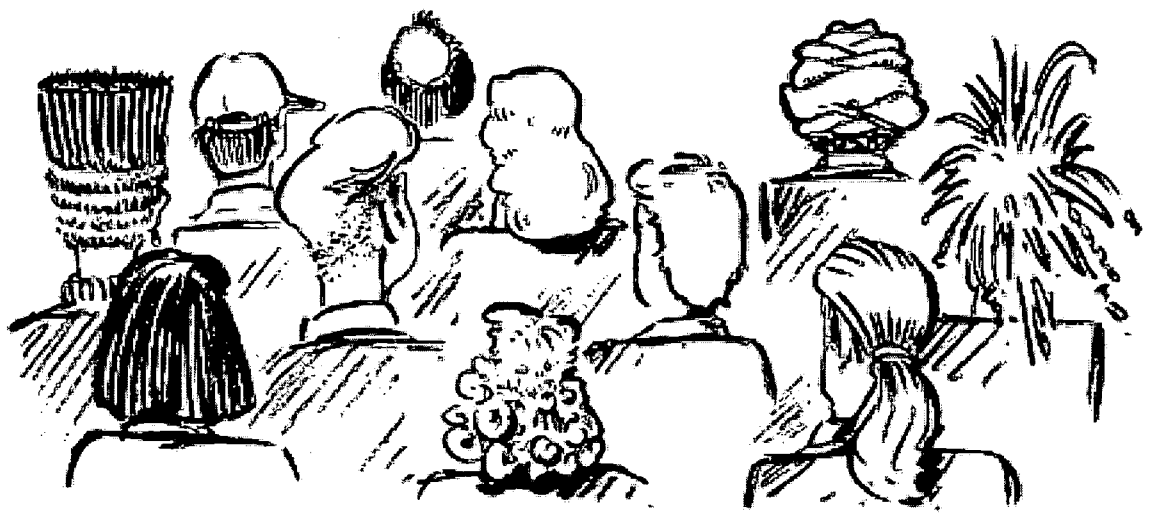
How do I become a RAP apprentice?

- find a job with an employer who is eligible to train apprentices in "your" trade.
- you, or the employer can contact the RAP Coordinator at your local high school, or contact the nearest apprenticeship and industry training office for an apprenticeship application form. The application form can also be printed from www.tradesecrets.org. Look in "the Library," under "Forms."
- fill in an apprenticeship application form and return it to the RAP Coordinator at your high school or to the nearest apprenticeship and industry training office.
- an apprenticeship contract between you and the employer, will be registered with the Alberta government.

Profile of people in the trades

People in the trades are especially:

- interested in working with their hands, with machines, or with tools;
- concerned about the end result of their work;
- satisfied by solving concrete, not abstract, problems;
- interested in working with people.



How do I decide if a trade is right for me?

Determine your skills, interests and abilities. Decide if they indicate an interest in the trades.

Talk to:

- someone who is apprenticing in "your" trade, or to a journeyman
- apprenticeship consultants at the nearest apprenticeship and industry training office
- your school career counsellor
- teachers

Observe or job shadow:

- employers of "your" trade
- construction projects involving "your" trade

Plan:

- most employers prefer a high school diploma or Certificate of Achievement. Plan your high school courses to include mathematics and sciences.

Gain experience and learn new skills:

- find summer jobs in your area of interest
- do volunteer work
- participate in work experience opportunities

How do I become an apprentice?

- Find a job with an employer who is eligible to train an apprentice. If you are enrolled in high school, find out how to become a RAP (Registered Apprenticeship Program) apprentice.
- Most employers prefer grade 12, but provision may be available for less education. For most trades, an entrance examination may be written if education requirements are not met.
- Fill in an apprenticeship application form, available from the nearest apprenticeship and industry training office. Return the application form to the apprenticeship and industry training office.
- An apprenticeship contract between you and the employer will be registered with the Alberta government.

How do I become a RAP apprentice?

- find a job with an employer who is eligible to train apprentices in "your" trade.
- you, or the employer can contact the RAP Coordinator at your local high school, or contact the nearest apprenticeship and industry training office for an apprenticeship application form. The application form can also be printed from www.tradesecrets.org. Look in "the Library," under "Forms."
- fill in an apprenticeship application form and return it to the RAP Coordinator at your high school or to the nearest apprenticeship and industry training office.
- an apprenticeship contract between you and the employer, will be registered with the Alberta government.

Classroom trade demonstrations

Young people are visual learners.

To catch their eye and their interest demonstrate some of the skills of a trade. Or use creativity with visual or interactive materials such as pictures, charts, videotapes, or trade materials and tools. Your presentation will "come alive".

Here are creative ideas for demonstrating some of the skills of a trade or discussing the work of a particular trade.

Agricultural Mechanic
Bring models, diagrams, drawings or photographs of interesting components of agricultural equipment.

Appliance Service Technician
Bring some trouble-shooting equipment (meters, gauges) and a broken appliance.

Auto Body Technician
Bring before and after pictures, and describe how some of the repairs were done.

Automotive Service Technician
Bring a cutaway of an engine with different colored parts and go through the operation of the engine.

Baker
Let students taste samples of pastries or bread. Show pictures of the breadmaking process from beginning to end.

Boilermaker
Show students a scale comparing size of person to a boiler. For example, one boiler at Suncor is 10 stories high and one valve is equal to the size of an automobile.

Bricklayer
Mix a batch of mud and construct a small brick wall.

Cabinetmaker
Bring in samples of wood joining methods such as butterfly, tongue in groove and butt.

Carpenter
Show three aspects of carpentry – framing, roofing and scaffolding. Bring in a four-foot 2 by 6 and lay out a stair system using a square, saw and a blackboard to show calculations.

Communication Electrician
Bring in a fibre-optic cable and talk about its capabilities. For example, it has 15,000 signals that can be used for shopping, banking and dial-in-movies. Talk about the current debate over who gets to use it – the cable companies or telephone companies.

Concrete Finisher
Bring tools such as trowels, hand floats, edgers, or bring a decorative pad or form, and pictures of finished work.

Cook
Show garnishing techniques and the creativity involved – let the students eat the creations.

Crane and Hoisting Equipment Operator
Bring in scale pictures and nylon shackles and slings. Demonstrate how the operator and the rigger must work as a team.

Electrical Motor Systems Technician
Demonstrate wire around a cylinder – show the magnetic polarity by using a small scale motor.

Electrician
Bring an electrical panel with circuits to demonstrate wire stripping and hooking up procedures. Demonstrate bending conduit and compare household cables with industrial cables.

Electronic Technician
Bring in an electronic panel (microcircuit) and demonstrate a repair.

Elevator Constructor
Bring models, diagrams, drawings or photographs of working components of escalators and elevators.

Floorcovering Installer
Bring in samples of floorcoverings. Lay some carpet around a student's desk and cut holes to fit each of the desk's legs.

Gasfitter
Bring in burner controls. Compare the size of residential to industrial burner controls. Take students to the furnace room in the school. Bring trouble-shooting meters.

Glassworker
Bring a small piece of scrap glass and suction cups. Cut, frame and weatherproof the glass.

Hairstylist
Give a scalp massage to a volunteer student and talk about the muscles and circulatory system.

Heavy Equipment Technician
Bring models, diagrams, drawings, photographs or cutaways of components of equipment that you work on.

Instrument Technician
Bring calibration tools and meters, and electronic or pneumatic controls, and photographs of equipment you work on.

Insulator
Bring in samples of mechanical (heating) insulation and structural (weatherproofing and sound) insulation. Wear a suit and demonstrate pipe insulation pattern making by turning a flat piece of metal into an oddball shape e.g., insulate and metal cladding.

Ironworker
Bring in pictures of structural steel – 20 ton piece of iron 60 stories high. Wear hand tool belt (let students feel how heavy it is), suspenders and special climbing boots.

Landscape Gardener
Bring garden tools, samples of turf, and pictures or models of job sites.

Lather-Interior Systems Mechanic
Bring in a laser to determine elevations.

Locksmith
Bring a passage set, tumblers and keys (digital or magnetic), or tumblers for a safe. Demonstrate how they work.

Machinist
Bring interesting things you have built and pictures of the shop and the equipment you use.

Millwright
Demonstrate a machinery alignment and setting. Show how precision matters.

Motorcycle Mechanic
Bring in a small motorcycle and review motor parts.

Painter and Decorator
Cut wallpaper to fit around some wall fixtures. Bring some tools of the trade such as a tinting or paint sprayer.

Partsman
Show computer applications relevant to the job.

Plumber
Show how to solder copper tube for waterlines. Compare tubing and joining methods between commercial/institutional jobs and residential jobs.

Power Lineman
Bring in cleats and belt. See if you can get permission to climb a powerpole outside and let students watch you.

Power System Electrician
Bring model sections of transformers, and models, diagrams or photographs of a substation.

Printing and Graphic Arts Craftsman
Bring slides of presses and known examples of printing that your shop has done e.g., cover of telephone book, grocery shopping bags.

Recreation Vehicle Mechanic
Bring photos and specialized tools.

Refrigeration and Air Conditioning Mechanic
Bring cutaways, or components of a refrigerator and recharging tools, or photographs of job-sites you have worked on.

Roofer
Bring felt, tiles and slides of the pitch of the roof. Show the commercial/industrial side by demonstrating the BUR system with a cut-away.

Sawfiler
Sharpen a dull saw. Let students try cutting something before and after you sharpen the saw. Bring pictures of large floor-to-ceiling saw.

Sheet Metal Worker
Bring flat piece of sheet metal and make shapes (square, conical) after making pattern. Let students use tin snips.

Sprinkler Systems Installer
Talk about the chemicals in the water. Bring in examples of different sprinkler heads and show how they are triggered and suppressed.

Steamfitter-Pipefitter
Bring in pipe samples to demonstrate different sizes and joining methods e.g., welded, clamped, screwed – let students check out the weight.

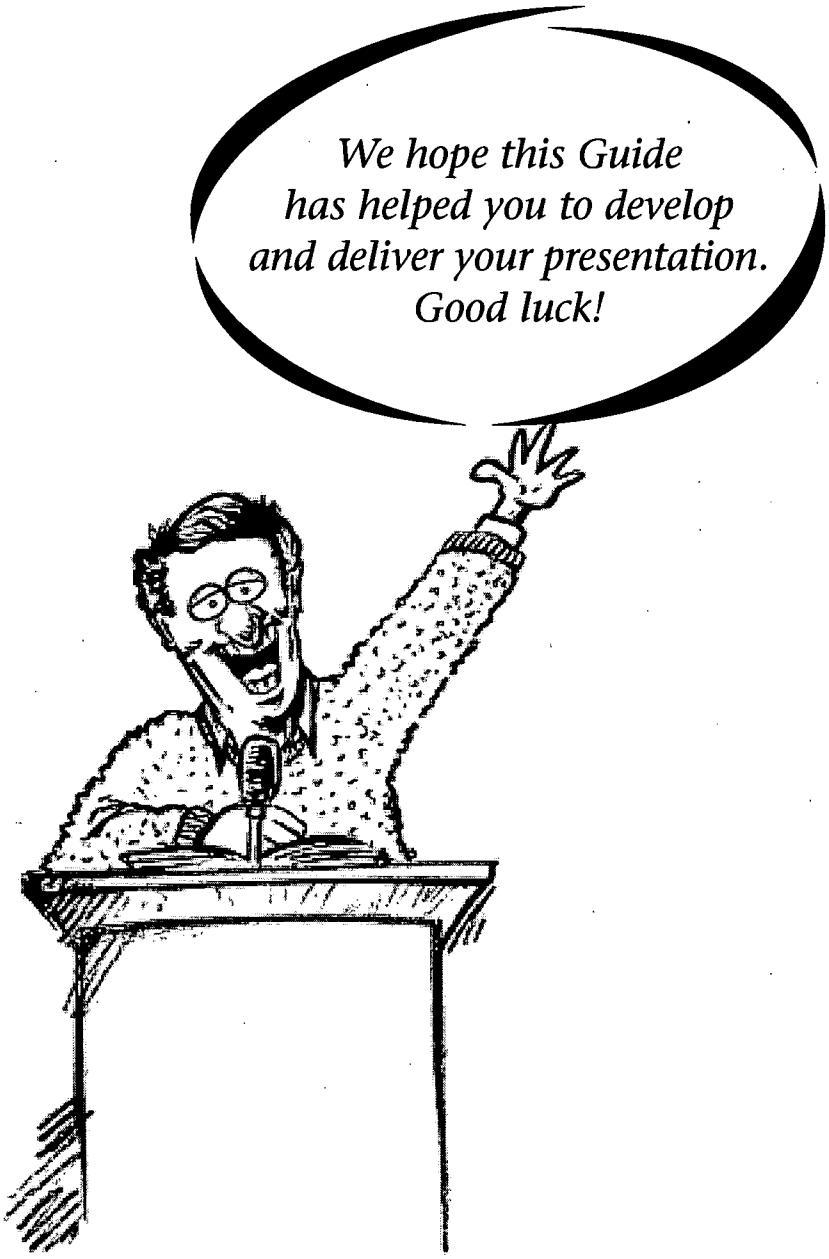
Structural Steel and Plate Fitter
Bring pieces of different grades of metal, and a stringer, rod and cable.

Tilesetter
Cut tiles, mix grout and lay tiles on a piece of plywood.

Transport Refrigeration Technician
Bring photographs or a model of a reefer and talk about equipment you work on.

Water Well Driller
Bring slides of rig and drill bit heads. Show how the stem turns and cuts.

Welder
Bring a variety of helmets and a leather smock for students to try on. Drive to your presentation in a rig welding truck. Bring photographs of job-sites, fabrication shops, or welded materials.


We hope this Guide
has helped you to develop
and deliver your presentation.
Good luck!

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").