Overview and Working Conditions of the Carpentry and Joinery Trades

Description
There are two fields of woodworking trades within the construction industry in British Columbia: Carpenters and cabinetmakers (also known as joiners). Both share some common training and both involve working primarily with wood. Both of these trades offer apprenticeships, during which on-the-job training as well as classroom experience take place. Typically, an apprenticeship is a four-year process, with 85% of the training spent on the job and 15% spent in school (technical training). The activity plans written for Youth Explore Trades concentrate on the basic skills of both woodworking trades, although much of the material is specifically suited for carpentry training.

Lesson Outcomes
The student will be able to:

• Understand the main duties of carpenters
• Know the difference between a carpenter and a cabinetmaker
• Be aware of the working conditions of a carpenter

Assumptions
• Students will have little or no knowledge about the carpentry trade.
• Students will have an interest in gaining knowledge about the carpentry trade.

Terminology
Cabinetmaker (joiner): a person who builds, repairs, and restyles wooden furniture, cabinets, fixtures, and other products. There are many similarities with the carpentry trade, and both involve primarily working with wood. Joiners are designated as cabinetmakers under the Interprovincial Red Seal Program. Using architectural drawings, joiners often operate woodworking machines to cut and form parts, which they then assemble into finished products. Some specialize in custom-made furniture, and increasingly joiners are tasked with installing pre-manufactured cabinets and fixtures.

Carpenter: a person who builds and repairs a vast array of structures made of wood, wood substitutes, and other materials. Carpenters assemble and erect forms for concrete, wood and metal frame construction and use plans and instruments to prepare for excavating and shoring. On smaller projects, they direct concrete placement and install exterior and interior finish materials such as siding, doors, windows, and cabinets.
Essential Skills: ITA Essential Skills were created to help people prepare for success in the first two levels of technical training during their apprenticeship. Essential Skills focus on foundation skills such as reading, math, and document use. Each trade requires Essential Skills, but to different degrees. For example, both carpenters and bakers use math, but electricians need trigonometry and bakers do not.

Industry Training Authority (ITA): the organization responsible for leading and coordinating the skilled trades training and credentialing system for the province of BC. ITA provides strategic leadership, policy support, and customer services to help apprentices, employers, and industry. ITA sets program standards, maintains credential records, and issues the highly regarded Interprovincial Red Seal (IP) and BC Certificate of Qualification (CofQ) credentials.

Interprovincial Red Seal and BC Certificate of Qualification: Through the Red Seal program, certified tradespeople can obtain a “Red Seal” endorsement on a BC Certificate of Qualification. The Red Seal allows qualified tradespeople to practise their trade in any province or territory in Canada where the trade is designated, without having to write further examinations. See www.red-seal.ca for additional information on the Red Seal Program. CofQ is only recognized in the province where it is obtained.

National Occupational Classification (NOC): standardized language for describing the work performed by Canadians in the labour market. It gives statisticians, labour market analysts, career counsellors, employers, and individual job seekers a consistent way to collect data and describe and understand the nature of work.

Technical training: in-school training—in the case of this activity plan, for the carpentry trade.

Working conditions: the conditions in which an individual works, including environment, noise levels, degree of safety, physical environment, wages, and hours of work.

Estimated Time
1.5–3 hours

Recommended Number of Students
20, based on the BC Technology Educators’ Best Practice Guide

Facilities
Classroom or computer lab

Tools
Projector with computer and speakers, Internet access
Materials

None

Recommended

The introduction of this session is a great opportunity to invite a carpenter in as a guest speaker to talk about the carpentry trade. The person could speak to the students about duties performed by a carpenter and working conditions, and could provide stories about the trade as well as share their experiences as an apprentice. Alternatively, a cabinetmaker could also present an overview of the cabinetmaking (joiner) trade.

Resources

Skills Canada 2008—Carpentry
Keewatin Career Development Corporation (KCDC) video. This video demonstrates this trade in action, performed during the Skills Canada Competition 2008 in Calgary.

http://www.youtube.com/watch?v=EnITU2kOCfE

Skills Canada 2008—Cabinetmaking
Keewatin Career Development Corporation (KCDC) video. This video demonstrates this trade in action, performed during the Skills Canada Competition 2008 in Calgary.

http://www.youtube.com/watch?v=4fBQ6M_4DCc

Industry Trades Association of BC (ITABC) Carpenter information
http://www.itabc.ca/program/carpenter

Industry Trades Association of BC (ITABC) Cabinetmaker information
http://www.itabc.ca/program/cabinet-maker-joiner

Employment and Social Development Canada—National Occupational Classification
http://noc.esdc.gc.ca/English/home.aspx
Activity

Option 1: Guest Speaker Carpenter or Cabinetmaker
The following activity would be optimal prior to a carpenter or cabinetmaker coming in to speak to students:

- The teacher shows video clips listed under the Resources section, including the video of a carpenter’s duties, so students know the difference between the two different types of woodworking trades.
- The teacher leads a discussion and provides an overview to the carpentry trade, explaining the NOC and main duties of carpenters.

Option 2: No Guest Speaker (Class Discussion)
- Show one or both video clips as a starting point to the activity.
- Give an overview of the carpentry trade explaining the NOC and main duties of carpenters. Lead a class discussion.
- Show the video of a cabinetmaker’s duties (see Resources section) so students know the difference between the two different types of carpenters.

Note: This video is from Alberta, where some of the requirements are different from those in British Columbia, such as educational requirements.

Option 3: No Guest Speaker (Class Activity)
- Show one or both video clips as a starting point to the activity.
- Give an overview of the carpentry trade, explaining the NOC and main duties of carpenters.
- Show the video of a cabinetmaker’s duties so students know the difference between the two different types of carpentry trades (see Resources section).

Note: This video is from Alberta, where some of the requirements are different from those in British Columbia, such as educational requirements.

- Hand out slips of paper with duties and descriptions of carpenters and cabinetmakers. Students must decide whether the papers fit carpenters, cabinetmakers, or both. Have them lay the papers down on a table with carpentry on the left, both in the middle, and cabinetmaking on the right (a Venn diagram format with two overlapping circles). The list of duties and descriptions is included at the end of this activity.
Background information

**NOC #7271 Carpenters**

Carpenters construct, erect, install, maintain, and repair structures and components of structures made of wood, wood substitutes, lightweight steel, and other materials. They are employed by construction companies, carpentry contractors, and maintenance departments of factories, plants, and other establishments, or they may be self-employed.

**Main duties**

Carpenters perform some or all of the following duties:

- Read and interpret blueprints, drawings, and sketches to determine specifications and calculate requirements
- Prepare layouts in conformance to building codes, using measuring tools
- Measure, cut, shape, assemble, and join materials made of wood, wood substitutes, lightweight steel, and other materials
- Build foundations, install floor beams, lay subflooring, and erect walls and roof systems
- Fit and install trim items, such as doors, stairs, moulding, and hardware
- Maintain, repair, and renovate residences and wooden structures in mills, mines, hospitals, industrial plants, and other establishments
- Supervise apprentices and other construction workers
- May prepare cost estimates for clients

**NOC #7272 Cabinetmakers**

Cabinetmakers use a variety of woods and laminates to construct and repair wooden cabinets, furniture, fixtures, and related products. They are employed by furniture manufacturing or repair companies, construction companies, and cabinetmaking contractors, or they may be self-employed.

**Main duties**

Cabinetmakers perform some or all of the following duties:

- Study plans, specifications, or drawings of articles to be made, or prepare specifications
- Mark outlines or dimensions of parts on wood
- Operate woodworking machines, such as power saws, jointers, mortisers, and shapers, and use hand tools to cut, shape, and form parts and components
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- Trim joints and fit parts and subassemblies together to form complete units using glue and clamps and reinforce joints using nails, screws, or other fasteners
- Sand wooden surfaces and apply veneer, stain, or polish to finished products
- Repair or restyle wooden furniture, fixtures, and related products
- May estimate the amount, type, and cost of materials required

Evaluation Guidelines

The student:
- participates in class discussion.
- Understands the difference between carpenters and cabinetmakers.
- Displays an understanding of the main duties of a carpenter and a cabinetmaker. The teacher will assess this on the basis of student activity, participation, and discussion.