The Northern Edge

Study Guide

Learning Doesn't Stop Once You Get the Job You Want



Learning doesn't stop once you get the job you want

Introduction

This story is from **Issue # 2 of The Northern Edge**. Patrick Wedawin tells how he progressed from an entry-level worker to a trainer and coach. He encourages workers to continue their education while working on the job and he advocates lifelong learning. There are no on-line learning activities for this story.

This story is an opportunity for learners to explore what literacy means, and the different relationships between English literacy and employment.

This section first presents a list of eight learning activities and the written text for the story. The pages following the written text give instructor notes and handouts for each activity, in the order on the list.

This symbol marks the written text for the story.



This symbol marks instructor notes.



This symbol marks handouts you can copy for learners.





| Instructor Notes | Handouts Final Handouts | Page #s |
|-------------------------------------------|-------------------------|---------------|
| 1) Vocabulary | 1 handout | 6, 7, 8 |
| 2) Language skills | 1 handout | 6, 9 |
| 3) Questions | 2 handouts | 6, 10, 11, 12 |
| 4) Writing | 2 handouts | 13 to 17 |
| 5) How do we define and measure literacy? | 3 handouts | 18 to 24 |
| 6) Education and employment | 1 handout | 25 to 31 |
| 7) WHMIS | 3 handouts | 32 to 41 |
| 8) Map skills | 1 handout | 42 to 44 |





Issue #2 The Northern Edge

Learning doesn't stop once you get the job you want.

In 1991 diamonds were first discovered in the Northwest Territories. In 1996 both the Canadian and the Northwest Territories governments approved the diamond mine project.

Construction of the Ekati Diamond Mine began in 1997 and the mine opened officially in 1998. Since then over \$1 billion US dollars of rough diamonds have been produced and sold.

The Ekati diamond mine is located approximately 300 kilometres northeast of Yellowknife and 100 kilometres north of the treeline in an area of continuous permafrost.

Access to the Ekati diamond mine is by air only, except during a three-month period in winter when a 400-kilometre ice road allows for the trucking of bulk supplies to the site.

A worker at the mine, Patrick Wedawin, wrote this excellent story to explain his work and how he sees the relationship between literacy and work.

We have Patrick's story in two languages. Click on either the Dogrib or the English button now.

Patrick Wedawin's story

Before I started my employment with BHP Billiton Diamonds in 1998, I had a previous experience operating heavy equipment. At the Mine Operations at Ekati, I first operated the D10 dozer, then a grader and front-end loaders. When I was able to load trucks smoothly, I moved up to the shovel.

The Demag is very scary at first because it has a lot of blind spots. It is difficult to learn and a big responsibility. This piece of equipment costs \$12 million. We try to reach a certain tonnage per day. I can't do it alone on the shovel, so I need to work as a part of the team with haul truck drivers.

Learning doesn't stop when you get to the Demag. I'm now learning more about different digging styles and good scaling techniques and how to keep trucks moving fast.

I am a fast learner on the job, but reading and writing is still difficult because my family was always in the bush when I was young. While on site, I upgraded my skills with the Workplace Learning Program so that I can learn more about the Demag and write my reports for coaching.

Many equipment operators are starting out at entry-level jobs and do not have strong reading and writing skills. Without a lot of prior experience, this can make a new job stressful. It is important to provide people with the training they need.

In Mine Operations, we have Heavy Equipment Trainers and Job Coaches. Together, we support employees throughout their work.

I coach my co-workers on the dozer, grader, and front-end loader.

When co-workers have difficulties doing a new job, I help them out. I first show them and they watch, then I show them how to work with all the other equipment around them. When they operate, I give them tips.

As a coach, I have to be respectful and professional – I learned that in the Train-the-Trainer course. I enjoy being a coach because it is good to speak in our own language. When our people are new at Ekati, it helps to explain difficult concepts in our own language.

As part of the Workplace Learning Program, I presented at the national conference in Calgary. We talked about essential skills development on the job and what we are doing here at Ekati. Many businesses were very interested in what we do. Presenting at a conference was good experience for me.





Vocabulary Learning Activity 1

One handout

Learners put words in alphabetical order and look up the best meaning and write the meaning down.



Language skills Learning Activity 2

One handout

Learners read ten sentences and decide if each is true or false.



Questions Learning Activity 3

Two handouts

3-1: Story questions

Learners answer questions about the story with sentences.

3-2: Journal writing

Learners use questions to guide their journal writing.



Vocabulary Learning Activity 1

| Use a dictionary and write down the best meaning for these words. |
|-------------------------------------------------------------------|
| Site |
| |
| |
| Concepts |
| |
| Access |
| |
| Tips |
| |
| Relationship |
| |
| Bulk |
| |
| |

| Techniques | | | |
|---------------------|---------------------|---------------------|-------|
| | | | |
| | | | |
| Prior | | | |
| | | | |
| | | | |
| Put the eight words | s from the story ir | n alphabetical orde | r. |
| site | concepts | access | tips |
| relationship | bulk | techniques | prior |
| | | | |
| | Alphabetica | al order | |
| 1) | | | |
| 2) | | | |
| , | | | |
| 3) | | | |
| 4) | | | |
| 5 | | | |
| 5) | | | |
| 6) | | | |
| | | | |
| 7) | | | |
| 8) | | | |
| | | | |



Language skills Learning Activity 2

Read each sentence and decide if it is true or false. Write T for true or F for false in the blank at the beginning of the sentence.

1) _____ The diamond mines are located south of Yellowknife.

| 2) | The Demag is scary to operate at first because there are a lot of 'blind spots'. Blind spots means the size of the Demag makes it difficult to see what you are doing. |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3) | You work alone when you work on the Demag. |
| 4) | A person who is inexperienced in a field of work is called an 'entry-level worker'. |
| 5) | Upgrading your academic skills is not important when you are working in an entry level job. |
| 6) | Teaching workers how to operate heavy equipment in their Aboriginal language helps them to learn the job. |
| 7) | Workers do not need to take advantage of upgrading programs offered at the mines. |
| 8) | The treeline is a line of trees located about 200 miles north of Yellowknife. |
| 9) | Learning how to operate heavy equipment is an easy job. |
| 10) | People who start off in entry-level jobs can eventually become trainers and coaches at the mine. |



Questions Learning Activity 3

3-1: Story questions

Use a sentence to answer the following eight questions. Begin with a capital letter and end with the correct punctuation.

| 1) | What is an ice road? Who uses the ice road? | | |
|----|---------------------------------------------------------------------------------|--|--|
| | | | |
| 2) | What three pieces of equipment did Patrick use when he started at the BHP mine? | | |
| | | | |
| 3) | Why was reading and writing difficult for Patrick? | | |
| | | | |
| | | | |

| 4) | Why did Patrick upgrade his reading and writing skills? |
|----|----------------------------------------------------------------------------------|
| | , |
| 5) | In what two ways does Patrick help the new workers learn their job? |
| | |
| 6) | Why is it important to continue learning throughout your life? |
| | |
| 7) | What is the relationship between literacy and work? |
| | |
| 8) | What do you think you need to learn in school to prepare you for the work world? |
| | |
| | |





Questions Learning Activity 3

3-2: Journal writing

Use these questions to guide your journal writing.

- ✓ In what ways do you relate to this story?
- ✓ What new information did you find out that you did not know before?
- ✓ Have you had experience working at the mines? If yes, describe your experience. If no, what do you imagine it would be like?
- ✓ Are you interested in working at the mines? Why or why not?





Writing Learning Activity 4

Two handouts

4-1: Heavy-duty equipment

Learners research heavy-duty equipment and do a project such as a model, a poster, or a booklet about the machine. Ask learners to present their findings to the class. Make a display of the different projects learners did.

4-2: Similes

Learners use the word 'as' to compare how two things are alike.



Writing Learning Activity 4

4-1: Heavy-duty equipment

Do research and learn about a D10 dozer, grader, front-end loader, Demag shovel, or other piece of heavy equipment people use in the mining industry.

Use your information and do one of these projects, or think up your own project.

- ✓ Make a poster or booklet with pictures.
- ✓ Describe what these machines do.

Present your project to the class.

✓ Use household materials such as toothpicks, wood, lego, plasticine, playdough, papier mache, nails, etc. to make a model of a machine.

Exhibit your project in a student showcase in the school.

If you had the chance, what machine would you like to operate?

Why?

Did you know?

To take the Heavy Equipment Operator Program at Aurora College in Fort Smith, NWT you must:

- ✓ Be 18 years or older
- ✓ Have a grade 9 level of reading, writing, and math or Adult Basic Education 130
- ✓ Pass a driver's medical exam
- ✓ Have a Class V driver's licence

The course takes 18 weeks to complete.



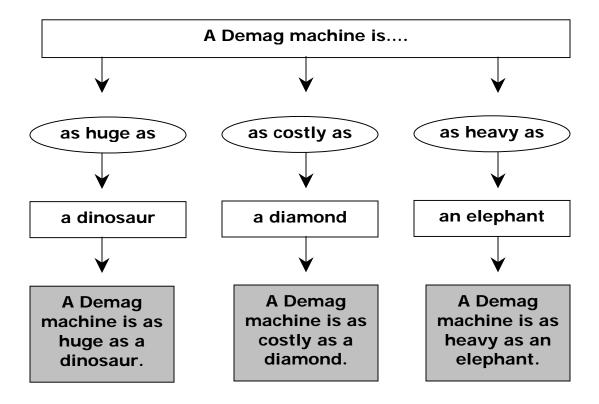
Writing Learning Activity 4

4-2: Similes

A simile uses the word 'as' to compare two things. For example:

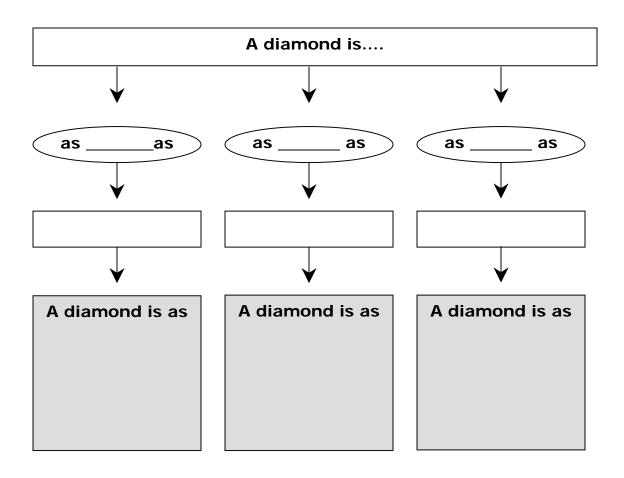
- ✓ The ice is as clear as glass.
- ✓ The night is as black as ink.

Look at the example about the Demag machine. We know a Demag machine is huge, heavy, and costly. We know a dinosaur is huge, a diamond is costly, and an elephant is heavy. So we can use them to compare with a Demag machine.



Use the example about a Demag machine to think of similes for a diamond.

- ✓ Think of three things you know about diamonds. Write them in the blank 'as _____as' in the three ovals below.
- ✓ For each of the three things, think of one other thing that's also like that. Write the name of that thing in the box below the oval.
- ✓ Write a sentence with the simile in the shaded box at the bottom.





How do we define and measure literacy? Learning Activity 5

Three handouts

Each handout has information about the topic and questions for class discussion.

Give learners copies of the fact sheets and/or put the information and questions on flipchart pages.

5-1: Multiple literacies

Learners explore the idea that literacy is much more than reading and writing.

5-2: Levels of schooling in the NWT

Learners explore tables and graphs about different levels of schooling in the NWT.

5-3: International Adult Literacy and Skills Survey (IALSS)

Learners explore a new way to measure and compare literacy skills.



How do we define and measure literacy? Learning Activity 5

5-1: Multiple literacies

Multiple literacies recognize there are many different kinds of literacy.

Literacy includes how people read the weather, tell stories, do traditional activities on the land, communicate, raise their children, use a computer, etc. Literacy involves all languages, cultures, and traditions.

Aboriginal people need their Aboriginal language and culture to maintain their identity and their connection to their ancestors and to the land. They may also need English literacy skills to get a good job.

In the past people thought literacy was just reading and writing. Today we know that literacy is much more complex.

Use the six words below to write a short sentence about the ways that Aboriginal people use literacy skills from their traditional culture.

| ✓ | Watch – the sky for a change in the weather. |
|---|----------------------------------------------|
| ✓ | Listen - |
| | |
| , | |
| ✓ | Count - |
| | |

| ✓ | Sing |
|------|-----------------------------------------|
| ✓ | Speak |
| ✓ | Solve problems - |
| Name | e two of your multiple literacy skills: |
| | |

Discussion questions

- i) What is culture?
- ii) What traditions do you value?
- iii) What languages do people speak in your community?
- iv) What kinds of literacies do Aboriginal and/or non-Aboriginal people need to thrive in today's world?



How do we define and measure literacy? Learning Activity 5

5-2: Levels of schooling in the NWT

Right now we use levels of schooling to measure literacy rates in the NWT because we have no other tool. But levels of schooling don't truly measure peoples' literacy skills.

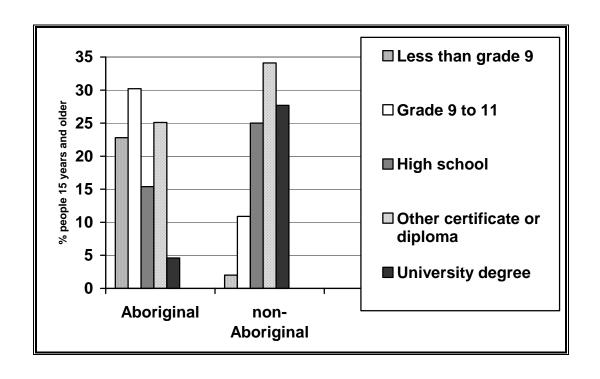
Levels of schooling measure what grade people completed in the education system. But they don't measure how well people read, write, solve problems, or use other literacy skills.

The table and chart on the next page show the highest levels of schooling for Aboriginal people and non-Aboriginal people 15 years and older in the NWT. The information comes from the 2005 NWT Socio-Economic Scan, for 2004.

Discussion questions

- i) Look at the table and the chart. Compare the percent of Aboriginal people and non-Aboriginal people at each level of schooling.
- ii) Why do you think that levels of schooling are like this in the NWT?
- iii) Do you agree that levels of schooling are not a very good way to measure literacy skills? Why or why not?
- iv) What exactly do we learn when we look at levels of schooling?

| | Aboriginal people | Non-Aboriginal people |
|------------------------------|-------------------|-----------------------|
| Less than Grade 9 | 22.8% | 2% |
| Grade 9 to 11 | 30.2% | 10.9% |
| High school | 15.4% | 25% |
| Other certificate or diploma | 25.1% | 34.1% |
| University degree | 4.6% | 27.7% |





How do we define and measure literacy? Learning Activity 5

5-3: International Adult Literacy and Skills Survey (IALSS)

We now have a new tool to help us measure and understand literacy in the NWT. It's called the International Adult Literacy and Skills Survey or IALSS. IALSS compares literacy skills across nations, provinces, and territories.

The NWT participated in the IALSS for the first time in 2003. Look for the results of this survey on the NWT Literacy Council website www.nwt.literacy.ca in November, 2005.

IALSS defines literacy as the ability of adults to use written information to function in society, to achieve their goals, and to develop their knowledge.

IALSS identifies and measures four types of literacy in Canada.

- i) **Prose literacy:** The ability to understand and use information from newspapers, magazine articles, or fiction.
- ii) **Document literacy**: The ability to find and use information from documents such as maps or tables.
- iii) **Numeracy**: The ability to write and calculate numbers such as balancing a chequebook.
- iv) Problem solving: The ability to clarify a problem and develop and apply appropriate solutions.

The survey also shows a link between literacy skills and health.

Stats Canada also has information about the IALSS at <a href="https://www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-www.statcan.ca/cgi-

<u>bin/imdb/p2SV.pl?Function=getSurvey&SDDS=4406&lang=en&db=IMDB&dbg=f&adm=8&dis=2</u>

Discussion questions

- i) Go to the NWT Literacy Council website <u>www.nwt.literacy.ca</u> and find the NWT results for the IALSS survey.
- ii) What does the information from the IALSS tell us about literacy skills in the NWT?
- i) How does the NWT compare with other parts of Canada or with the Canadian average?
- ii) Do you think the IALSS is a useful way to measure and understand literacy skills? Why or why not?



Education and employment Learning Activity 6

One handout

Learners explore three sets of tables and graphs about the relationships between formal education and levels of employment.

First set: relationship between education level, employment rate, and average earnings.

Second set: relationship between level of schooling, employment rate, and unemployment rate.

Third set: relationship between the percent of people at each level of schooling for the whole NWT and the employment rate for each.

The handout includes questions for each set of tables and graphs, and some general discussion questions.





Education and employment Learning Activity 6

In Canada people with a good education are more likely to:

- ✓ Have a job
- ✓ Earn good money
- ✓ Have opportunities to advance in their job
- ✓ Have fewer injuries on the job

The labour market now demands people have higher levels of skills than in the past. People need strong literacy skills for job-related training. Some employers and unions offer workplace literacy programs to help their employees increase their literacy skills.

This handout has three sets of tables and charts that explore some of the relationships between education and employment.

Look at each set of tables and charts and answer the questions for each. The questions are on the next page. The three sets of tables and charts follow the questions.

After you answer the questions about the tables and charts, go to the end of the handout and use those questions to have a class discussion.

Questions about the tables and charts

First set:

- i) What does 'employment rate' and 'unemployment rate' mean?
- ii) What does 'average earnings' mean?
- iii) What level of schooling has the highest and the lowest average earnings?

Second set:

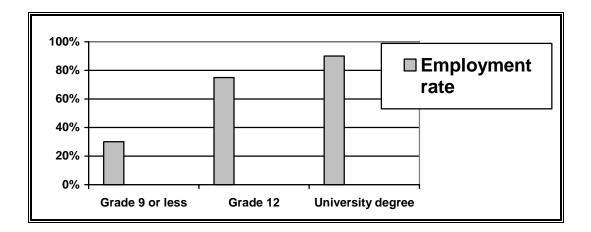
- iv) What level of schooling has the highest and the lowest employment rate?
- v) What level of schooling has the highest and the lowest unemployment rate?

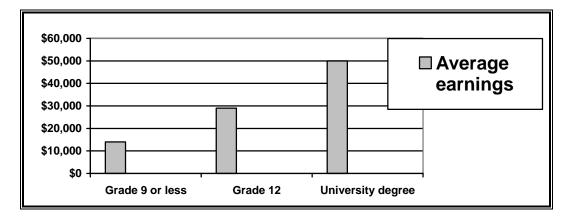
Third set:

- vi) What percent of people don't have a high school diploma?
- vii) What is the employment rate for people who don't have a high school diploma?

First set: This table and two charts show the relationship between level of education, employment rate, and average earnings. The information comes from the NWT 2001 census.

| Education level | Employment rate | Average earnings |
|-------------------|-----------------|---------------------|
| Grade 9 or less | 30% | \$14,000.00 |
| Grade 12 | 75% | \$29,000.00 |
| University Degree | 90% | \$50,000.00 |

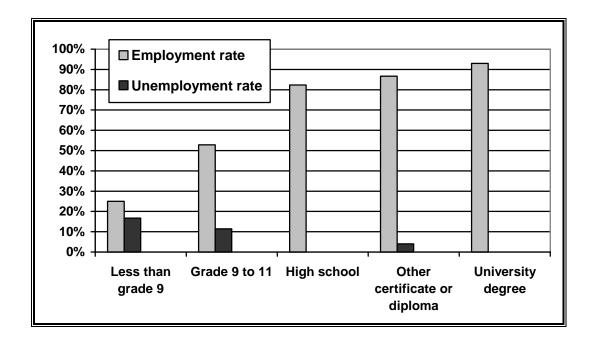






Second set: This table and chart show the level of schooling, employment rate, and unemployment rate. The information comes from the NWT Annual Labour Force Activity 2002.

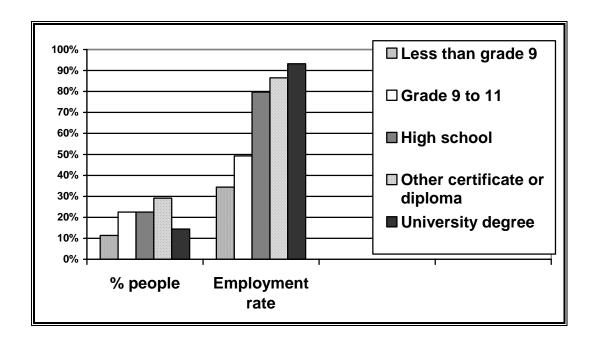
| Level of schooling | Employment rate | Unemployment rate |
|------------------------------|-----------------|-------------------|
| Less than Grade 9 | 25% | 16.7% |
| Grade 9 to 11 | 52.8% | 11.4% |
| High school | 82.3% | 0 |
| Other certificate or diploma | 86.7% | 4% |
| University degree | 93% | 0 |





Third set: This table and chart show the percent of people at each level of schooling for the whole NWT and the employment rate. The information comes from the 2005 NWT Socio-Economic Scan for 2004.

| Level of schooling | % people | Employment rate |
|------------------------------|----------|--------------------|
| Less than grade 9 | 11.4% | 34.3% |
| Grade 9 to 11 | 22.5% | 49.3% |
| High school | 22.5% | 79.7% |
| Other certificate or diploma | 29.1% | 86.5% |
| University degree | 14.4% | 93.2% |





Discussion questions

- i) Do you agree that people need a good education to get a good job? Why or why not?
- ii) What do you think is the best way to encourage young people to get their high school diploma?
- iii) Think of a job you've had in the past. What kind of workplace literacy programs should that kind of employer offer their workers?



Workplace Hazardous Materials Information System (WHMIS) Learning Activity 7

Three handouts

7-1: Introduction to Workplace Safety: Safety and the Young Worker

Learners explore information about workplace safety related to young people.

7-2: Introduction to WHMIS

This handout tells learners what WHMIS is and why we have it.

7-3: WHMIS Symbols

This handout shows learners the eight WHMIS symbols and what they mean. They explore what household products may include hazardous materials.

The three handouts use information from the WHMIS student manual from the Workers' Compensation Board (WCB). All handouts include a short quiz.

People need to take WHMIS and First Aid courses for many jobs in the NWT, especially jobs in the mining industry. The WCB offers courses in many communities.

People can also do a self-study course with CD and video. Contact the WCB for more information. See 'Resources' at the end of this section.



Workplace Hazardous Materials Information System (WHMIS) Learning Activity 7

7-1: Introduction to Workplace Safety: Safety and the Young Worker

Workplace Safety: Safety and the Young Worker

This program aims to increase young workers' knowledge of safety and health issues in the workplace.

Why do we need a Workplace Safety Program?

Many serious workplace accidents involve young workers – people less than 25 years old. Some young workers have been injured or killed during their first few days at a new job.

"A summer student was killed during his first week of work at a warehouse. He was helping to move 20-foot long pipes with a forklift truck. The pipes were not safely set in place and the whole load became unbalanced and fell on the student. He was crushed to death."

People need to learn many things to work safely at any job. The Workplace Safety Program develops skills to recognize and avoid hazards.

Look for answers to these questions as you read. Underline or highlight the answers.

- ✓ What is the definition of young worker?
- ✓ What is the definition of safety?
- ✓ What is another word for danger or risk?
- ✓ What is the leading cause of workplace deaths for young workers?

In Canada research shows that the leading causes of death for young people at work are electrocutions and injuries involving machines. Many of these deaths could have been avoided if the employer had given the young worker training on how to work safely. It is the employer's responsibility to train workers.

Look at the chart on the next page. It shows the number of injuries to young workers of different ages in the NWT and Nunavut, over a recent three-year period.

Study the chart and answer the questions in the Quick Quiz on the next page.



| Age | Year 1 | Year 2 | Year 3 | Total | Average |
|-------|--------|--------|--------|-------|---------|
| 15 | 12 | 6 | 8 | 26 | 8.7 |
| 16 | 11 | 25 | 18 | 54 | 18 |
| 17 | 12 | 27 | 18 | 57 | 19 |
| 18 | 36 | 48 | 39 | 123 | 41 |
| 19 | 50 | 78 | 51 | 179 | 59.7 |
| 20 | 60 | 69 | 63 | 192 | 64 |
| 21 | 77 | 76 | 79 | 232 | 77.3 |
| 22 | 88 | 101 | 70 | 259 | 86.3 |
| 23 | 108 | 90 | 84 | 282 | 94 |
| 24 | 120 | 86 | 100 | 306 | 102 |
| Total | 574 | 606 | 530 | 1,710 | 570 |

Quick Quiz - Circle the right answer

- 1) How many 18 year olds were injured in Year 1?
 - a) 17
- b) 48
- c) 36
- d) 39
- 2) What was the average number of injuries for 18 year olds over the three-year period?
 - a) 36
- b) 48
- c) 39
- d) 41
- 3) What is the main reason why 15 to 17 years olds seem to have less workplace injuries?
 - a) This group is known to be very safety conscious.
 - b) There are fewer workers in this age group in the workforce.
 - c) Older workers tend to forget about work site dangers.





WHMIS Learning Activity 7

7-2: Introduction to WHMIS

WHMIS stands for Workplace Hazardous Materials Information System.

WHMIS is a Canada-wide information system set up to protect all Canadian workers and employers.

A hazardous material is any substance that can cause illness, disease, injury, or death to unprotected people. Sometimes hazardous materials are called hazardous products, controlled products, or dangerous goods.

Everybody has the right to know about WHMIS.

- ✓ Employers and workers get information about hazardous materials they work with on the job.
- ✓ Workers get necessary information to help protect their health and safety on the job.
- ✓ The NWT and Nunavut made WHMIS the law in 1989.
- ✓ Employers, suppliers, and workers use the WHMIS to identify and safely handle hazardous materials.
- ✓ WHMIS is based on a Canadian law that states 'everybody has a right to know'.
- ✓ WHMIS makes people aware of dangerous workplace chemicals or situations.

| Quick Quiz - Check True or False | True | False |
|------------------------------------------------------------------------------------|------|-------|
| WHMIS is an information system set up in Canada to protect some Canadians. | | |
| 2) WHMIS applies only to the workers in the workplace. | | |
| 3) We need to be informed of dangerous situations that can occur in the workplace. | | |
| 4) Everyone has the right to know about hazards in the workplace. | | |



WHMIS Learning Activity 7

7-3: WHMIS symbols

WHMIS has eight symbols for hazardous materials.

| Symbol | Class |
|--------|----------------------------------------------|
| | Class A: Compressed gas |
| | Class B: Flammable materials |
| | Class C: Oxidizing materials |
| | Class D.1: Poisonous materials |
| | Class D.2: Other toxic materials |
| | Class D.3: Biohazardous infectious materials |
| | Class E: Corrosive materials |
| R | Class F: Dangerously reactive materials |



| Symbol | Meaning | Examples |
|-----------|----------------------------------------------------------------------------|------------------------------------------------------------|
| Class A | Compressed gas: Can explode and take off like a rocket. | Oxygen, propane, aerosol cans |
| Class B | Flammable and combustible materials: Can suddenly burst into flame | Gasoline, heating fuel |
| Class C | Oxidizing materials: Give off oxygen that could help other materials burn. | Bleach, ammonium nitrate |
| Class D.1 | Poisons: Cause acute, serious toxic effects. | Cyanide, chlorine, hydrogen sulphide |
| Class D.2 | Other toxic materials: Cause slow poisoning and long-term illness. | Asbestos fibres, silica, PCBs, vapours from solvents |
| Class D.3 | Biohazardous materials: Cause infection from a virus or bacteria. | HIV, hepatitis, anthrax |
| Class E | Corrosive materials: Can seriously harm your eyes and burn your skin. | Car battery acid, lime |
| Class F | Dangerously reactive materials: Can burn or explode if handled wrongly. | Nitroglycerine, picric acid |

You often see these symbols on the labels of products you use around your home. Collect home products that have WHMIS hazard symbols on the label. Make a list of home products for each symbol and discuss why each is hazardous.

| Symbol | Examples of home products with this label |
|----------|-------------------------------------------|
| | |
| | |
| | |
| | |
| 1 | |
| ® | |
| | |
| R | |

Review WHMIS Symbols

Match the name of the hazard to the WHMIS symbol. Draw a line from the words to the correct symbol.

| from the words to the correct symbol. | | |
|---------------------------------------|---|----------|
| Biohazardous infectious | | |
| Poisonous | | |
| Other toxic materials | 0 | |
| Flammable and combustible | | 1 |
| Oxidizing | | |
| Corrosive | | ® |
| Dangerously reactive | | |
| Compressed gas | | R |
| | | |



Map skills **Learning Activity 8**

One handout

Ask learners to mark diamond mines, other development, and points of interest on a map. Brainstorm a list of things to mark on the map. For example:

- ✓ Ekati Diamond Mine
- ✓ Diavik Diamond Mine
- ✓ Snap Lake Diamond Mine
- ✓ Ice roads
- ✓ Communities
- ✓ Other points of interest?

Learners do research about available jobs in the mining industry. They think about what job they might like to do, why they'd like the job, and where and how to get training for the job.



Map skills Learning Activity 8

Mark diamond mines, communities, other development, and points of interest on the map.



Do research about what different jobs people do in the mining industry. Think about one job you might like to do.

| Why do you think you'd like to do this job? |
|----------------------------------------------------------|
| |
| |
| Where do people get training for this type of work? |
| |
| |
| What qualifications do people need to take the training? |
| |
| |



Resources

✓ Website: Discovering the Northwest Territories Through the Five Themes of Geography

Students work on-line. The website provides worksheets. http://atlas.gc.ca/site/english/learningresources/lesson_plans/elementary_school/nwt_es_student_worksheet.html

✓ Jobs in Mining

One of a collection of booklets about different jobs. Go to this website and click on 'Career Resources' http://www.ece.gov.nt.ca/Divisions/CollegeCareerDevelopment/index.htm

✓ Worker's Compensation Board

Box 8888, Yellowknife, NWT X1A 2R3

Phone: toll free 1-800-661-0792 and 920-3888 in Yellowknife Fax: toll free 1-866-277-3677 and 873-4596 in Yellowknife

Website: <u>www.wcb.nt.ca</u>

Email: Yellowknife@wcb.nt.ca

Resources for employers and workers, including these videos:

Safety and the Young Worker

Introduces learners to the importance of workplace safety.

It didn't have to happen and Silly Little Risks: Talking to Teens Raise awareness about health and safety hazards.

Steering Clear of Hazardous Materials

Part 2 - a quick review of WHMIS symbols and a look at consumer warning labels.

✓ NWT Bureau of Statistics

Go to their website at www.stats.gov.nt.ca and look for information about education, employment, housing, demographics, etc.

We used information from this website for many of the tables and charts in Learning Activity 5.