

Workshops
on
"Literacy, Economy
and Society"

Hosted by:

WWestnet

The western Canada Workplace
Essential Skills Training Network

sponsored by:

The National Literacy Secretariat

*The Palliser Hotel
Calgary, Alberta*

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Introduction

WWESTNET recognizes that many workers do not have the essential skills they need to cope with changes in the workplace or to participate fully in union and community activities. This is always a problem for the individual worker who is shut out of technical training opportunities, passed over for promotion, or prevented from making the transition to new employment when the old plant is closed. It is also a problem for employers who find that the present workforce is unable to meet the challenge of new processes, new equipment, or radically different job tasks. For businesses, lack of essential skills can mean contracts are full of holes, procedures are misunderstood, and equipment is underutilized. For Canada, a poorly skilled workforce could mean the difference between prosperity and stagnation.

WWESTNET has been formed in the belief that many partnerships will be needed if the huge enterprise of workforce education is to succeed. Government has a large role to play in setting policy and instituting programs which will encourage more and better workforce training. Business and labour organizations are increasingly aware that cooperation is needed to face the challenges which ultimately threaten both. Literate, competent workers are essential in putting technology to work. Unions have also seen that their members may require some basic education if they are to take advantage of union training programs and other opportunities for development both in the workplace and in the community. Lastly, adult educators will have to use their expertise to ensure that education and training programs are effective and responsive to expressed needs.

The IALS workshops were organized to present the results of this very important literacy survey to key representatives from business, labour, government and education. Many people from across the region were able to attend and took this opportunity to share their expertise and insights.

On September 3rd and 4th, WWESTNET hosted the first of two workshops which addressed the International Adult Literacy Survey (IALS) and its Canadian component. The purpose of *the bottom line on basics: A Workshop on Literacy, Economy and Society* was twofold. The first goal was to bring together western and northern Canadian literacy and language umbrella groups to identify and examine relevant issues raised by the studies. The second was to facilitate the development of action frameworks targeting concerns raised.

The workshop opened with Jean Pignal of Statistics Canada, manager of the Canadian literacy study, presenting an overview of the IALS project its history, objectives, methodologies, findings and future directions. Margaret Robinson, a policy advisor with the National Literacy Secretariat, then explained the importance of IALS within a number of specific contexts, including the implications it holds for the workplace education and basic skills training communities. Dr. Bill Wong, Director of Evaluation with Alberta Advanced Education and Career Development, rounded out the background discussion by reviewing the recently released Canadian component of IALS - *Reading the Future: A Portrait of Literacy in Canada*.

Workshop delegates were also given the opportunity to consider the implications of IALS from the perspective of essential skills training in the workplace. Greg Maruca, Manager of the Union of Needletrades, Industrial and Textile Employees (UNITE) Local 459, outlined the challenges facing unions (both externally and internally) in the quest to improve employee literacy and language skill levels. Lloyd Campbell, Special Projects Manager with Syncrude Canada Ltd., outlined Syncrude's highly successful training model, Effective Reading in Context. ERIC is based upon a company-wide commitment to basic skills improvement and impressive 'bottom line' results. Delegates ended the first day with a series of round tables facilitated by WWESTNET business and labour representatives.



WWESTNET members and workshop presenters at the September gathering. Left to right: Bill Wong, Lloyd Campbell, Sue Turner, Jean Pignal, Margaret Robinson, and Carolyn Dieleman

Day 2 of the workshop concentrated upon information sharing and intrajurisdictional dialoguing. Delegates discussed burning issues arising from the IALS findings and possible strategies for tackling these concerns.

On November 4, representatives from business, labour, government and education gathered in Calgary to consider the results of the Canadian section of the International Adult Literacy Study (IALS). The day-long workshop featured presentations by the principal researchers for the IALS - Mr. Stanley Jones, from Carleton University, and Dr. Alfred Tuijnman, Principal Administrator of the Education and Training Division, Organization for Economic Cooperation and Development (OECD).

Delegates to the workshop were treated to a full day of presentations and round table discussions which started with a practical context. Al Shipton, Manager of Manufacturing Services at AltaSteel, spoke to the training needs of business, using the Job Effectiveness Training (JET) program at his company as an example of what can be done to address the need for basic skills training in the steel industry. Greg Maruca again talked about the pressing need for workplace education among his membership and about the programs operated by the union in response to that need. Finally, Brigid Hayes, Program Consultant with the National Literacy Secretariat, outlined the role of the Canadian government in supporting workplace training.

Dr. Alfred Tuijnman gave delegates an overview of the IALS research and summarized some of the more salient findings. The international perspective allows researchers to make comparisons which, for example, show that education and training policies can affect literacy levels in a significant way. He also indicated that the growing polarization between 'have' and 'have not,' a distinction increasingly related to basic workplace skills, should be of concern to all OECD members. Future labour adjustment will depend on the adequacy of workers' skills, but IALS reveals that many workers in declining industries do not have the skills to move to other employment.

Mr. Stanley Jones focused on the Canadian section of the study, identifying key findings which will have implications for workplace literacy policy and practice. For example, literacy profiles in Canada have shown little change over the past five years despite the fact that Canada's most recent graduates have stronger literacy skills than older age groups. About 22% of adult Canadians fall in the lowest level of literacy while an additional 24-26% fall in the second lowest category. (They read, but not well.) As Jones stressed, Canada must do more to improve literacy skills.

The afternoon sessions began with Dr. Harvey Krahn from the Department of Sociology at the University of Alberta. Dr. Krahn outlined his IALS-related research addressing the 'use it or lose it' nature of literacy. According to Dr. Krahn, IALS establishes a relationship between demand for literacy at work and adult literacy competency. Dr. Krahn was followed by Linda Fownes, who gave an overview of Human Resources Development Canada's Essential Skills Research Project. This project is producing an essential skills profile for lower-skill occupations in Canada. The result will be detailed information on what skills are required to be successful at an entry level in the Canadian workplace.

The conference ended with a Round Table discussion focusing upon IALS. Groups identified what IALS meant to them and what they planned to do with the information they had gained. Jim Page then summarized the results and reflected upon the important messages of the day.

Backgrounder

on the
International Adult Literacy Survey (IALS)*

IALS: The first of its kind

The 1994 International Adult Literacy Survey (IALS) was the first multi-country and multi-language assessment of adult literacy. Conducted in eight industrialized countries - Canada, Ireland, Germany, the Netherlands, Poland, Sweden, Switzerland, and the United States - the survey's goals were to develop scales for comparisons of literacy performance among people with a wide range of abilities, and to compare literacy across cultures and languages.

The results of the survey shed light on the social and economic impacts of different levels of literacy, the underlying factors which cause them and how they might be amenable to policy intervention.

The survey was sponsored by the National Literacy Secretariat and the Applied Research Branch of Human Resources Development Canada and was managed by Statistics Canada in cooperation with the OECD, Eurostat, and UNESCO. Key support was given by the U.S. Educational Testing Service, the U.S. National Center for Education Statistics, and survey and educational researchers in all the participating countries. The international results of the IALS were published in December 1995, and the Canadian results in 1996. Each participating country will be publishing its own data.

Reading the Future: A detailed picture

The Canadian report entitled *Reading the Future: A portrait of literacy in Canada* is a detailed study derived from the IALS results. The data are broken down by language, age, gender, and region. Most importantly, the report provides new information with which to judge Canadian policy on literacy, education and social and economic development. By opening a window on the life of Canadians at home, in the community, and in the workplace, the report gives Canadians a glimpse of their possible future.

** Thanks to Statistics Canada for permission to reprint this summary.*

Redefining literacy: Canada's pioneering role

The choice of Statistics Canada to design and manage the survey was a recognition of Canada's pioneering role in redefining literacy and its linkage to human resource development. In 1989, Statistics Canada was commissioned by the National Literacy Secretariat to produce the first Canadian profile of *Literacy Skills Used in Daily Activities (LSUDA)*. This survey dispelled the old notion that individuals are either literate or illiterate and introduced a new concept of literacy as a continuum of skills ranging from quite limited to very high. The IALS built on this new view of literacy, defining it as:

"the ability to understand and employ printed information in daily activities at home, at work and in the community, to achieve one's goals and to develop ones knowledge and potential."

The international dimension: Reading the results

The goal of this survey was not to rank countries from the most literate to the least literate. Rather, its aim was to compare, across cultures and languages, literacy performance among people with a wide range of abilities. Consequently, any direct comparisons across countries must incorporate an understanding of the social and economic characteristics of each country that underlie the observed literacy skill profiles. With this caveat, IALS makes it possible to place Canada in the international literacy continuum.

Literacy: A national and an international issue

The reintegration of the Central and Eastern European countries into the world economy, and the continuing rapid advance of industrialized countries in Asia and Latin America, have altered the economic status quo. The economies of the OECD countries now face large, well-educated and relatively low-wage labour forces in emerging competitive nations. While new forms of cooperation across borders have emerged, competition for investment capital has also intensified. New opportunities - as well as uncertainties and risks - are inherent in this situation. Certain countries, firms and individuals are well positioned to compete successfully in global markets; others may have difficulty taking advantage of the opportunities.

The emerging global economy is characterized by greatly increased flows of information and financial capital within, and among nations. The best way to exploit this new economic environment is to strengthen the capacity of firms and labour markets to adjust to change, improve their productivity and capitalize on innovation. But this capacity depends first and foremost on the knowledge and skills of the population. IALS shows that the literacy skills of individual citizens are a powerful determinant of a country's innovative and adaptive capacity.

Measuring literacy: More than one gauge

Literacy cannot be narrowly defined as a single skill that enables people to deal with all types of text. People in industrialized countries face many different kinds of written material every day, and they require different skills to understand and use the information. To reflect this complexity, IALS developed three categories of literacy:

1. **Prose literacy:** the ability to understand and use information from texts such as editorials, news stories, poems and fiction.
2. **Document literacy:** the ability to locate and use information from documents such as job applications, payroll forms, transportation schedules, maps, tables and graphs.
3. **Quantitative literacy:** the ability to perform arithmetic functions such as balancing a cheque book, calculating a tip, or completing an order form.

The specific literacy tasks designed for IALS were scaled by difficulty from 0 to 500 points. This range was subsequently divided into five broad literacy levels.

- **Level 1** indicates very low literacy skills, where the individual may, for example, have difficulty identifying the correct amount of medicine to give to a child from the information found on the package.
- **Level 2** respondents can deal only with material that is simple, clearly laid out and in which the tasks involved are not too complex. This is a significant category, because it identifies people who may have adapted their lower literacy skills to everyday life, but would have difficulty learning new job skills requiring a higher level of literacy.
- **Level 3** is considered as the minimum desirable threshold in many countries but some occupations require higher skills.
- **Levels 4 and 5** show increasingly higher literacy skills requiring the ability to integrate several sources of information or solve more complex problems. It appears to be a necessary requirement for some jobs.

Between 2,000 and 3,000 adults (5,660 in Canada) in each of the eight countries - Canada, Ireland, Germany, the Netherlands, Poland, Sweden, Switzerland, and the United States - took part. All the respondents were tested in their national language and in their own homes. The prose and document literacy scales each comprised of 34 tasks and the quantitative literacy scale included 33 tasks. All the tasks were of varying difficulty. The following pages show some sample tasks, together with their levels and scores.

**The IALS results in a changing world:
A broad perspective**

If economies require increasing numbers of highly skilled workers to expand, then growth will be affected by existing practices of employers, individuals and governments: IALS has shown that instead of enlarging the pool of highly skilled workers, the tendency is to increase the skills of the already skilled. The reserve employment pool, made up of the unemployed and those working in declining industrial sectors, is low-skilled. Policies directed towards providing more educational opportunities and increasing skills in that pool must be a necessary part of any industrial growth strategy.

The distribution of literacy is also a good predictor of the magnitude of differences between social groups, making literacy an essential element for promoting social cohesion. Therefore, any view of literacy which is focused on economic objectives alone is untenable.

**IALS and LSUDA compared:
Little change where change was expected**

At the broadest national level, the IALS findings are consistent with those of its predecessor, LSUDA, conducted in 1989. There is considerable variation among Canadians in their literacy skill and the pattern of these variations shifts according to the different yardsticks used (region, language, age, educational attainment, occupation, and so on). Indeed, the differences between the two studies are not large. On the one hand, there appears to be little to support earlier predictions and present concern of a rapid erosion of either educational quality or of the adult skills base. On the other hand, some improvement was expected. Since LSUDA was conducted in 1989, those leaving the labour force have been replaced by an incoming cohort of young people who are collectively much better educated and more literate. The fact that no appreciable overall improvement was detected by IALS suggests that skills are being affected by other processes - processes that are of policy concern and need to be better understood.

Prose Level I

Score range: 0 to 225

Most of the tasks at this level require the reader to locate one piece of information in the text that is identical or synonymous to the information given in the directive. If a plausible incorrect answer is present in the text, it tends not to be near the correct information.

Tasks at this level require the reader to locate and match a single piece of information in the text. Typically the match between the task and the text is literal although sometimes a low-level inference may be necessary. The text is usually brief or has organizational aids such as paragraph headings or italics that suggest where in the text the reader should search for the specified information. Generally, the target word or phrase appears only once in the text.

The easiest task in Level I (difficulty value of 188) directs respondents to look at a medicine label to determine the "maximum number of days you should take this medicine." The label contains only one reference to number of days and this information is located under the heading "DOSAGE." The reader must go to this part of the label and locate the phrase "not longer than 7 days."

In Canada, 22% of adults are at this level

MEDCO ASPIRIN **500**

INDICATIONS: Headaches, muscle pains, rheumatic pains, toothaches, earaches.
RELIEVES COMMON COLD SYMPTOMS.

DOSAGE: ORAL: 1 or 2 tablets every 6 hours, preferably accompanied by food, for not longer than 7 days. Store in a cool, dry place.

CAUTION: Do not use for gastritis or peptic ulcer. Do not use if taking anticoagulant drugs. Do not use for serious liver illness or bronchial asthma. If taken in large doses and for an extended period, may cause harm to kidneys. Before using this medication for chicken pox or influenza in children, consult with a doctor about Reye's Syndrome, a rare but serious illness. During lactation and pregnancy, consult with a doctor before using this product, especially in the last trimester of pregnancy. If symptoms persist, or in case of an accidental overdose, consult a doctor. Keep out of reach of children.

INGREDIENTS: Each tablet contains
500 mg acetylsalicylic acid.
Excipient c. b. p. 1 tablet.
Reg. No. 88246

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1600 Industrial Blvd., Montreal, Quebec H8Z 3P1


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Tasks at this level tend to require the reader to locate one or more pieces of information in the text, but several distractors may be present, or low-level inferences may be required. Tasks at this level also begin to ask readers to integrate two or more pieces of information, or to compare and contrast information.

Like the tasks at Level 1, most of the tasks at Level 2 ask the reader to locate information. However, more varied demands are placed on the reader in terms of the number of responses the question requires, or in terms of the distracting information that may be present. For example, a task based on an article about the impatiens plant asks the reader to determine what happens when the plant is exposed to temperatures of 14°C or lower. A sentence under the section "**General care**" states that "When the plant is exposed to temperatures of 12-14°C, it loses its leaves and won't bloom any more." This task received a difficulty value of 230, just in the Level 2 range. What made this task somewhat harder than those identified at Level 1 is that the previous sentence in the text contains information about the requirements of the impatiens plant in various temperatures. This information could have distracted some readers, making the task slightly more difficult.

In Canada, 26% of adults are at this level

IMPATIENS		
<p>Like many other cultured plants, impatiens plants have a long history behind them. One of the older varieties was said to be found on grandmother's windowsill. Nowadays, the hybrids are used in many ways in the house and garden.</p>		
<p>Origin: The ancestors of the impatiens, <i>impatiens sultanii</i> and <i>impatiens holsti</i>, are probably still to be found in the mountain forests of tropical East Africa and on the islands off the coast, mainly Zanzibar. The cultivated European plant received the name <i>impatiens wallrobianus</i>.</p>	<p>Appearance: It is a herbaceous bushy plant with a height of 30 to 40 cm. The thick, fleshy stems are branched and very juicy, which means, because of the tropical origin, that the plant is sensitive to cold. The light green or white speckled leaves are pointed, elliptical, and slightly indented on the edges. The smooth leaf surfaces and the stems indicate a great need of water.</p>	<p>Bloom: The flowers, which come in all shades of red, appear plentifully all year long, except for the darkest months. They grow from "suckers" (in the stem's "armpit").</p>
<p>Assortment: Some are compact and low-growing types, about 20 to 25 cm high, suitable for growing in pots. A variety of hybrids can be grown in pots, window boxes, or flower beds. Older varieties with taller stems add dramatic colour to flower beds.</p>	<p>General care: In summer, a place in the shade without direct sunlight is best; in fall and spring, half-shade is best. When placed in a bright spot during winter, the plant requires temperatures of at least 20°C; in a darker spot, a temperature of 15°C will do. When the plant is exposed to temperatures of 12-14°C, it loses its leaves and won't bloom anymore. In wet ground, the stems will rot.</p>	<p>Watering: The warmer and lighter the plant's location, the more water it needs. Always use water without a lot of minerals. It is not known for sure whether or not the plant needs humid air. In any case, do not spray water directly onto the leaves, which causes stains.</p>
<p>Feeding: Feed weekly during the growing period from March to September.</p>	<p>Repotting: If necessary, repot in the spring in the summer in light soil with humus (prepackaged potting soil). It is better to throw the old plants away and start cultivating new ones.</p>	<p>Propagating: Slip or use seeds. Seeds will germinate in ten days.</p>
<p>Diseases: In summer, too much sun makes the plant woody; if the air is too dry, small white flies or aphids may appear.</p>		

Document Level 3

Score range: 276 to 325

Tasks at this level appear to be most varied. Some require the reader to make literal or synonymous matches, but usually the matches require the reader to take conditional information into account or to match on multiple features of information. Some tasks at this level require the reader to integrate information from one or more displays of information. Other tasks ask the reader to cycle through a document to provide multiple responses.

A third task, falling at high end of Level 3 (321), involves the use of a quick copy printing requisition form that might be found in the workplace. The task asks the reader to explain whether or not the quick copy centre would make 300 copies of a statement that is 105 pages long. In responding to this directive, the reader must determine whether conditions stated in the question meet those provided in the guidelines to this document.

In Canada, 30% of adults are at this level

QUICK COPY Printing Requisition		FILL IN ALL INFORMATION REQUESTED	
GUIDELINES: This requisition may be used to order materials to be printed BLACK INK only, and in the quantities that are listed at the right.		<input checked="" type="checkbox"/> SINGLE SHEET PRINTED 1 OR 2 SIDES — 3000 copies maximum <input checked="" type="checkbox"/> MORE THAN ONE SHEET UP TO 100 PAGES — 400 copies maximum OVER 100 PAGES — 200 copies maximum	
1. PROJECT TO BE CHARGED TO		2. TODAY'S DATE	
3. TITLE OR DESCRIPTION		4. DATE DELIVERY REQUIRED	
DO NOT MARK IN SHADED BOXES			
5. NUMBER OF ORIGINALS	X	NUMBER OF COPIES TO BE PRINTED	TOTAL NUMBER OF IMPRESSIONS
6. NUMBER OF SIDES TO BE PRINTED (Check one box.)	<input type="checkbox"/> One side	<input checked="" type="checkbox"/> BOTH sides	
7. COLOR OF PAPER (fill in only if NOT white)		AUTHORIZATION AND DELIVERY	
8. SIZE OF PAPER (fill in only if NOT 8 1/2" x 11")		10. Project Director (print name)	
9. Check any that apply:		11. Requisitioner (print your own name and phone no.)	
<input type="checkbox"/> COLLATE		12. Check one:	
BINDING: <input type="checkbox"/> One staple stapler left		<input type="checkbox"/> Requisitioner will PICK UP completed job.	MAIL STOP
<input type="checkbox"/> Two staples in left margin		<input type="checkbox"/> Mail completed	ROOM NO.
<input type="checkbox"/> BIND FAST: <input type="checkbox"/> Black		job to:	
<input type="checkbox"/> White punch			
<input type="checkbox"/> Other instructions			
		13. KEEP PINK COPY at least 3 months. When requesting information, you must refer to the requisition number printed here.	
		140468	
		<small>Quick Copy of St. John's, NL</small>	
		<small>01320-05116 • 00000 • 00000</small>	

Quantitative Level 4

Score range: 326 to 375

With one exception, the tasks at this require the reader to perform a single arithmetic operation where typically either the quantities or the operation are not as easily determined. That is, for most of the tasks at this level, the question or directive does not provide a semantic relation term such as "how many" or "calculate the difference" to help the reader.

Tasks around 350 on the quantitative scale tend to require the application of a single operation where either the quantities or the operation are not easily determined. One such task involves a compound interest table. It directs the reader to "calculate the total amount of money you will have if you invest \$100 at a rate of 6% for 10 years." This task received a difficulty value of 348, in part because many people treated this as a document rather than a quantitative task and simply looked up the amount of interest that would be earned. They likely forgot to add the interest to their \$100 investment.

In Canada, 16% of adults are at this level

		Compound Interest Compounded Annually									
Principal	Period	4%	5%	6%	7%	8%	9%	10%	12%	14%	16%
\$100	1 day	0.011	0.014	0.016	0.019	0.022	0.025	0.027	0.033	0.038	0.044
	1 week	0.077	0.096	0.115	0.134	0.153	0.173	0.192	0.230	0.268	0.307
	6 mos	2.00	2.50	3.00	3.50	4.00	4.50	5.00	6.00	7.00	8.00
	1 year	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	16.00
	2 years	8.16	10.25	12.36	14.49	16.64	18.81	21.00	25.44	29.88	34.56
	3 years	12.49	15.76	19.10	22.50	26.07	29.80	33.10	40.49	48.15	56.09
	4 years	16.99	21.55	26.25	31.08	36.05	41.16	46.41	57.35	68.90	81.06
	5 years	21.67	27.63	33.82	40.26	46.89	53.65	60.55	74.29	89.54	106.03
	6 years	26.53	34.01	41.85	50.07	58.69	67.71	77.16	97.38	119.50	143.04
	7 years	31.58	40.71	50.38	60.58	71.38	82.60	94.27	121.07	150.23	182.62
	8 years	36.86	47.75	59.58	71.82	85.09	99.26	114.36	147.60	185.26	227.64
	9 years	42.33	55.13	68.95	83.65	99.90	117.19	135.79	177.31	225.19	280.30
	10 years	48.02	62.89	79.08	96.72	115.89	136.74	159.37	210.58	270.72	341.14
	12 years	60.10	79.59	101.22	125.22	151.82	181.27	213.64	289.80	381.79	493.60
	15 years	80.09	107.89	139.66	175.90	217.22	264.25	317.72	447.36	613.79	826.65
	20 years	119.11	166.33	220.71	285.97	366.10	460.44	572.75	854.62	1,274.35	1,846.06

Quantitative Level 5

Score range: 376 to 500

These tasks require readers to perform multiple operations sequentially, and they must disembed the features of the problem from the material provided or rely on background knowledge to determine the quantities or operations needed.

One of the most difficult tasks on the quantitative scale (381) requires readers to look at a table providing nutritional analysis of food and then, using the information given, determine the percentage of calories in a Big Mac® that comes from total fat. To answer this question, readers must first recognize that the information about total fat provided is given in grams. In the question, they are told that a gram of fat has 9 calories. Therefore, they must convert the number of fat grams to calories. Then, they need to calculate this number of calories as a percentage of the total calories given for a Big Mac®. Only one other item on this scale received a higher score.

In Canada, 4% of adults are at this level.

Nutritional Analysis												
	Serving Size	Calories	Protein (g)	Carbohydrates (g)	Total Fat (g)	Saturated Fat (g)	Monounsaturated Fat (g)	Polysaturated Fat (g)	Cholesterol (mg)	Sodium (mg)		
Sandwiches												
Hamburger	102 g	255	12	30	9	5	1	3	37	490		
Cheeseburger	116 g	305	15	30	13	7	1	5	50	725		
Quarter Pounder®	166 g	410	23	34	20	11	1	8	85	645		
Quarter Pounder® w/Cheese	194 g	510	28	34	28	16	1	11	115	1110		
McLean Deluxe™	206 g	320	22	35	10	5	1	4	60	670		
McLean Deluxe™ w/Cheese	219 g	370	24	35	14	8	1	5	75	890		
Big Mac®	215 g	500	25	42	26	16	1	9	100	890		
Filet-O-Fish®	141 g	370	14	38	18	8	6	4	50	730		
McChicken®	187 g	415	19	39	19	9	7	4	50	830		
French Fries												
Small French Fries	68 g	220	3	26	12	8	1	2.5	0	110		
Medium French Fries	92 g	320	4	36	17	12	1.5	3.5	0	150		
Large French Fries	122 g	400	6	46	22	15	2	5	0	200		
Salads												
Chef Salad	265 g	170	17	8	9	4	1	4	111	400		
Garden Salad	189 g	50	4	6	2	1	0.4	0.6	65	70		
Chunky Chicken Salad	255 g	150	25	7	4	2	1	1	78	230		
Side Salad	106 g	30	2	4	1	0.5	0.2	0.3	33	35		
Croutons	11 g	50	1	7	2	1.3	0.1	0.5	0	140		
Bacon Bits	3 g	15	1	0	1	0.3	0.2	0.5	1	95		
Soft Drinks												
	Coca-Cola Classic®				diet Coke®				Sprite®			
	Small	Medium	Large	Jumbo	Small	Medium	Large	Jumbo	Small	Medium	Large	Jumbo
Calories	140	190	260	380	1	1	2	3	140	190	260	380
Carbohydrates (g)	38	50	70	101	0.3	0.4	0.5	0.6	36	48	66	96
Sodium (mg)	15	20	25	40	30	40	60	80	15	20	25	40



Jean Pignal Survey Overview

The International Adult Literacy Study provides a comparative picture of adult literacy profiles across seven industrialized countries - Canada, the United States, Germany, Poland, Sweden, the Netherlands, and Switzerland. It also examines the factors which contribute to differences within and among these nations. The definition of literacy used by the IALS is the ability to understand and employ printed information in daily activities to achieve one's goals and to develop one's knowledge and potential. Three types of literacy were targeted - prose, document, and quantitative literacy. Five levels of proficiency were identified with 5 being the most proficient. Individuals at Level 3 were considered able to meet most everyday literacy demands.

The key findings of IALS are:

- differences in literacy skills matter both socially and economically
- those adults with literacy skill deficits are less likely to receive skills training than those with high skills
- literacy directly affects employment stability, income level and economic opportunity
- literacy is associated with educational attainment, but there are surprising exceptions
- proficiency deteriorates if skills are not exercised
- adults with low literacy do not believe their skills present a problem
- literacy levels are linked to the economic and social importance a country attaches to them

The Canadian results of the IALS indicate that this country's literacy skill profile has neither improved nor deteriorated since the 1989 Literacy Skills Used in Daily Activities (LSUDA) study. It also shows that skills increase as one moves from east to west across Canada, Alberta having the highest skills. Although Quebec francophones initially appear to be less proficient than other Canadians, these differences disappear when results are controlled for educational attainment. In terms of age, the most recent school-leaving cohort (those aged 16-25) contains relatively few individuals at level 1 (approximately 11%), although this age group has a smaller proportion in the 4/5 range as well. In general, larger proportions of older Canadians (aged 56 and older) are found at Literacy Level 1.

The age group having the strongest literacy skills (when looking across the five levels) are those aged 36-45. Canadian immigrants are over-represented at the lowest and highest levels. The high proportion of Canadian immigrants at levels 4/5 is due in part to Canadian immigration policy.

Mr. Jean J.R. Pignal was educated at Queen's University and at the University of Windsor. He has spent the last 14 years conducting surveys for both the private and the public sectors; the last 5 of these have been at Statistics Canada in the Special Surveys Division. In 1993, Jean was asked to manage the First International Adult Literacy Study (IALS), a multi-country assessment of Literacy Skills. Since then, he has devoted his time to the pursuit of conceptualizing and operationalizing large skills-based assessments in a home interview setting. His current work includes Quality Management of future IALS rounds, Internet survey work and refining the application of IRT-based skills assessment techniques.

Margaret Robinson

Canadian Results

The IALS contains lessons for literacy advocates and practitioners, governments, business and labour organizations, the workplace education community, the voluntary sector, and individuals in western Canada. One of its most important messages is that there is a growing gap between the profile of the literacy skills required by the growing occupations and the skills of Canadians currently in the workforce, skills which are lower than those of many of their foreign counterparts. IALS also provides solid evidence of the benefits of literacy upgrading for Canada's labour force. In particular, it points out the importance of training for the large number of workers who read, but not well, and the benefits to business of increasing the literacy levels of these workers.

The Survey further indicates that seniors, some immigrants and older workers are in special need. Literacy is a social, a health, a justice and a citizenship issue, not only an economic one. Therefore, the IALS can be used to support the work of volunteer organizations which have come to appreciate the importance of ensuring that all Canadians can partake in society - not just those who read well.

Because literacy is at the heart of every aspect of Canada's social and economic environment, the IALS can inform education policy, economic policy, labour policy, training policy and social policy. The IALS encourages governments to think of literacy as the strategic asset that will allow Canada to prosper, to obtain its share of high wage, high skill jobs. It points out the costs of low literacy to Canada, which will not be on the cutting edge with more than one-third of its population with low or mediocre reading skills. It demonstrates the connections between education and literacy - educational attainment has been found to be at the heart of many literacy skill disparities across Canada.

It points out that individuals who have an opportunity to complete their education typically get the skills they need. IALS demonstrates the necessity for government policies that support training in the workplace, in particular, training programs that meet the needs of adults with low literacy levels. Those at greatest risk of losing their place in the workforce receive the least amount of training. The reserve workforce, those who are unemployed or employed in declining industrial sectors, is low-skilled.

Currently, the IALS is being taken up in initiatives in federal departments other than the NLS. Senator Fairbairn has taken the IALS messages to Cabinet. IALS will also be a platform for the NLS to further its work to strengthen literacy partnerships across Canada. The NLS will continue to study the IALS data and consult with partners across Canada to seek ideas for additional study, and it will trace how other countries are utilizing the IALS and learn from these experiences. Canadians must be made aware of the IALS and its importance to them, and it should be used to promote workplace literacy programs.

Because its economy is different from that in other areas in Canada and literacy rates higher, western Canada can respond to IALS differently. IALS offers an opportunity to examine the unique features of literacy, employment, education and practice in western Canada and to craft western responses to western Canadian literacy issues.

Ms. Margaret Robinson has been with the National Literacy Secretariat since November 1993 as a Policy, Planning and Coordination Officer. Her responsibilities include policy development and research coordination, and as such, she has been a member of the interdepartmental working group for the International Adult Literacy Survey. Prior to joining the National Literacy Secretariat, Margaret held a variety of positions in the Secretary of State and the Department of Multiculturalism and Citizenship. Her responsibilities have included Policy and Planning Officer for the Citizenship Sector, Chief of the Grants and Contributions Secretariat, and Chief of the Access to Information and Privacy Secretariat.

Dr. Bill Wong
An Alberta Perspective

Western Canada scored higher on the International Adult Literacy Survey than the other Canadian regions, a fact attributable to the west's young and well educated population. However, the west still lags when compared to the IALS European results. International comparison shows western Canada with 17% of the tested population at level 1 while Sweden has only 8% operating at this level. This result is due in part to better home literacy practices in Sweden. Generally, Canada has an unacceptably high percentage of the tested population functioning at levels 1 and 2 (approximately 38%).

Higher literacy levels are associated with higher wages and longer periods of employment. Of the Canadian unemployed, 26% operate at level 1 while only 4% operate at levels 4/5. Because most people practice literacy on the job as opposed to at home, those who are unemployed or on social assistance for long periods develop an added handicap due to the "use it or lose it" nature of literacy skills. Clearly literacy issues carry significant human, economic, and social costs.

Future labour market trends show growth in trade, personal and financial services - areas which demand high levels of literacy. In decline are agriculture, transportation and manufacturing, all of which require lower literacy skills. The conclusion is that in order to remain competitive, Canada's workforce must focus on improving its literacy levels.

There is also no evidence that schools are failing with respect to literacy, at least in terms of relative numbers at the low end of the literacy scale. This means young people are prepared to enter the workforce or higher learning establishments and to increase their literacy levels. It is if they are unable to continue to use their literacy skills that levels fall.

Dr. William H. Wong has been employed with the Province of Alberta since 1973, serving as a Research and Planning Officer in the Manpower Planning Secretariat, as Director of Demography and Immigration with Advanced Education and Manpower, as Director Policy Projects and Evaluation with Career Development and Employment, and more recently, as Director of Evaluation with Advanced Education and Career Development. Throughout his professional career, Bill has conducted numerous studies relating to the Alberta labour market, demographic analyses and projections, immigration studies and evaluation of employment training social services projects including literacy and ESL projects. Bill has also represented Alberta on many interprovincial task teams and joint projects and has represented Canada at various International Conferences. Bill is a member of the Canadian Population Society and the Canadian Evaluation Society.



Lloyd Campbell The Business Perspective

Canada is entering an era of unprecedented opportunity; however, without a serious change in Canada's approach to training, the country will be unable to take advantage of this opportunity. According to Mr. Campbell, it has been estimated that 70% of the technology which will be used in the year 2000 has yet to be invented, strong proof of the essential role which training and restraining must play in Canada's workplace.

Without barrier-free access to such training, Canadian society will become polarized between the 'have' and 'have not', the 'know' and 'know not'. Lloyd Campbell also stressed that there must be a major shift in attitude toward trades and technical training. The number of young people pursuing high skills trades and technological careers has declined sharply over the last few decades. The average age of new apprentices in Alberta is now 27 while the average age of journeymen is 47, a situation which will produce a serious shortfall of machinists, technologists and trades people in the future. Similarly, Canada currently graduates about 5000 engineers per year when it is predicted that the country will require 26,000 by the turn of the century. If Canada is to remain competitive in the global market, workplace training will have to become a priority. This means Canadian companies, which currently spend about 1% of budgets on training, will have to change.

Syncrude Canada has taken some major steps to address the looming skill deficit. Following re-structuring and a move to decentralized management, it was discovered that employees required training to make the decisions they were now being asked to make. When managers were tested, 25% had some difficulty reading and comprehending documents. Other employees lacked the numeracy skills required to make team budget decisions. As a result, Syncrude made a commitment to implement a company-wide literacy initiative. Currently, Syncrude invests 7% of its operating budget in human resource development. The results speak for themselves. Giving workers the tools to operate more effectively and to adapt to change more easily, has resulted in the per employee production of oil increasing from 11,500 barrels in 1988 to 20,200 in 1995, a 37% improvement. The "bottom line" according to Lloyd Campbell is that investing in human resource development has huge payoffs.

Mr. Lloyd G. Campbell is responsible for the introduction and management of Syncrude's Effective Reading In Context program. He is a member of the Canadian Institute of Mining and Metallurgy, American Society of Training and Development, AVC-Calgary Literacy Advisory Committee "Asking the Right Questions," Alberta Association for Adult Literacy, Alberta Adult Education Policy Committee and ABC CANADA's Workplace Education Council. Lloyd is also a Conference Board of Canada Employability Skills Forum Member and Co-Chair of WWESTNET.



Greg Maruca

The Labour Perspective

The IALS indicates that literacy is far more than simply being able to read and write: it should be empowering; it should be part of developing strategic workplace advantages, it should help individuals to manage their personal lives better, it should allow them to help their children with their homework, and help them to maintain their jobs or compete for advancement. From a union perspective, it has to help remove barriers that keep members from participating in their unions. These goals require a holistic approach to training.

However, most workplace training programs are run by management only to increase competitiveness. Unions must work to ensure that the decision-making process related to literacy training is participatory and that workers have equal access to the programs. Unions must also ensure that the curriculum content and program structure reflect workers' diverse needs and learning styles and that the programs are part of the workplace culture and not stand-alone responses to crisis situations. Efforts to achieve these goals are underway. For example, the Canadian Labour Congress (CLC), with funding from the National Literacy Secretariat, is carrying out an organizational needs assessment and examining programs across the country for good practices, including cooperative efforts between labour and business.

While some unions have won the right to participate in training committees either through negotiation or invitation, unions still have to ensure that they participate fully, that they have the ability to veto inappropriate programs, that they negotiate wage support for hours spent in training, and that the training will have long term benefits not only for employers but for workers. And where joint programs cannot be developed, unions must be prepared to go it alone.

Mr. Greg Maruca is Manager of the Union of Needletrades, Industrial and Textile Employees, Local 459 and has worked in the Union movement for 17 years in various positions in the public and private sectors. Greg has been active in workplace training initiatives for the past 5 years and currently sits on the Workplace Education Manitoba Steering Committee and WWESTNET. Greg is also part of a Canadian UNITE project and recently has been asked to be a committee member for the 1997 Workplace Learning Conference in Milwaukee.



Jim Page

Challenging the Myths about Adult Literacy

In this article, I want to discuss the International Adult Literacy Survey (IALS) and its implications for Canadians. I will begin with two bold statements. The first of these is that IALS has already proven to be the most important study on literacy undertaken in Canada to date. The second is that as an international collaborative study, it will affect the way that other nations of the world think about literacy. As I said, these are bold statements. But the two IALS reports summarize bold studies. First came *Literacy, Economy and Society*, the international comparative report which was produced by the OECD and Statistics Canada and released in Paris, Bonn, Washington and Ottawa last December. It was followed in September by *Reading the Future: Portrait of Literacy in Canada*, released in Ottawa by Statistics Canada and the National Literacy Secretariat.

IALS is revolutionary because it demonstrates, again through the power of international comparisons, that literacy is 'policy amenable.' IALS offers a unique opportunity to compare and contrast the concrete effects of specific types of policy in six other nations as well as our own. By comparing and contrasting literacy policies in these countries, we get a better understanding of how public policy affects the acquisition of literacy skills. IALS is also revolutionary in its scope. This is not a study for statisticians or researchers. Rather, it speaks to every Canadian, not only those who care about this issue, but particularly to those who have ignored literacy in the past. IALS says to macro-economists, to senior policy makers, to politicians, to bureaucrats, to business people, and to the media that literacy matters more to individuals and to countries than anyone ever thought possible, certainly more than people have been willing to recognize until now.

I said that IALS is revolutionary because it debunks myths, and challenges conventional views about the importance of adult literacy. You have heard this folklore, but allow me to go over a few myths as a way to highlight some key IALS messages.

Myth # 1: Immigration is one of the key contributors to literacy problems in Canada. The IALS reports show that significant numbers of immigrants, in all seven IALS countries, are at the lowest two levels of literacy skill. However, Canada is unique in that more than 25% of our immigrant population tested at the highest literacy levels. This is due to our bimodal immigration policy. Attracting professionals and investors has meant that we have attracted highly literate immigrants.

No other country in the survey has as many immigrants at the highest level of the IALS scale. The proportion of our immigrant population at the highest IALS level is greater than the proportion of the Canadian-born population at that same level. Immigrants raise the Canadian mean; they do not lower it.

Myth # 2: Your either read or you don't read; you are either literate or not. When IALS refers to the 'lowest literacy level,' or level 1, it does not mean the absence of the ability to read. The study concludes that the overwhelming majority of Canadians can read. But it poses the question: "Can they read well enough to deal with the range of difficulty found in tasks they encounter in their daily lives?"

The answer to that question is very important - and we have to get the message straight. The problem in Canada is not that there is a vast army of people who are completely illiterate, although there are some adults who are unable to read and they are a priority. But most people with literacy problems are people with poor literacy skills - IALS level 1, about 22% of the prose scale. Or they are able to read but not particularly well - IALS level 2, about 26% of adult Canadians. The majority of these people are not 'illiterate' in the commonly used sense of that term. And that is why, in Canada, we have focused on 'the literacy issue' rather than 'the illiteracy problem'. Many countries still focus on illiteracy.

More than simply the ability to read, IALS defined literacy in relation to a person's skills in doing everyday things - the ability to deal with daily life, particularly in the workplace. But that is why it is very important to distinguish among IALS levels, and not to add them up. Each level tells us something quite different or discrete about the skills of persons at those levels.

Myth # 3: Literacy is like riding a bicycle - once you've got it, you never lose it. In fact, the study argues quite the opposite: "If you don't keep using your literacy skills, you will lose them." The report contends that the erosion of literacy skills is inevitable if they are not maintained through practice. For example, some sub-populations of Canadians who were included in the study - seniors or people on social assistance - were people who had experienced some longer-term detachment from the workplace. The longer away from work the more likely they would show signs of deterioration in literacy skill.

Myth # 4: Literacy and education are the same thing. In fact, in some parts of Canada the attainment of Grade 12 is considered more than simply a proxy for literacy. It is, if you like, a 'literacy qualification'. While the study makes the link between education and literacy, it is not a definitive connection. Thirty percent, or one in three people tested, had literacy skills either above or below what their educational attainment would indicate. Some people with little formal schooling, the IALS discovered, can acquire quite sophisticated literacy skills outside of school through life experience or simply personal initiative. Others who have relatively high levels of educational attainment, however, did not do as well as expected on the IALS questionnaires. So education is important as a springboard for developing literacy skills, but it is not the sole determinant of a person's literacy. Literacy skills are obtained in a variety of different ways, some outside the formal educational system.

Myth # 5: If I can hide it, my lack of literacy skills will not have an impact on my life.

Reading the Future notes many ways low literacy skills affect people. People with poorer literacy skills are more often unemployed than those with better skills. They earn less income than those with higher levels of skill.

Myth # 6: It doesn't matter what you read, so long as you read. People with the highest literacy skills invariably had the greatest variety of reading materials in their homes. They use this variety of materials consistently.

Of all literacy activities practiced on a daily or weekly basis, newspaper reading was the most common activity in all seven countries studied. The IALS research data show some correlation between the literacy skills of readers and the parts of the newspapers they read. Editorial pages and insight sections appealed to the higher skilled readers who, not surprisingly, tended to devour the whole of the paper. Lower skilled readers tended towards a mix of sports, the comics, ads, and some of the entertainment and lifestyle material, depending on their needs and tastes.

Myth # 7: Literacy is developed at home. This is not a myth when it applies to children. A child's ability to develop literacy skills at an early age depends on the home learning environment. For adults, however, the workplace, more than the home, affords more frequent opportunities to practice literacy skills. This gives employers a larger role to play in the development and maintenance of the literacy skills of Canadians than previously assumed.

Myth # 8: Since we are collectively better educated than our parents, the literacy rate in Canada must be getting higher. We must be winning the battle against illiteracy. On this one, the research says both yes and no. Yes, our young people are better educated and they do stay in school longer (despite public perceptions to the contrary) and, yes, more people between the ages of 16 and 24 are in the higher literacy categories than ever before. But no, statistics show a surprising lack of change in the overall Canadian literacy rate since 1989. Why? Because low literacy levels are very common with people over 44 years of age.

Although young, more literate entrants to the labour force are replacing older, less-literate workers, the literacy rate of the adult population remains stubbornly flat. The report has no answer as to why this is so. The authors conclude that social and economic forces outside of formal education must be having profound effects on the literacy skills of the older cohorts. Obviously, this will be the subject for considerable further research.

IALS does allow us to speculate about some of the causal factors for this phenomenon. IALS shows that the workplace is the key to maintaining literacy skills and improving literacy competence. IALS puts it simply. When all else is taken into consideration, "jobs cause literacy as much as they require it." The IALS also suggests that North American shop floors are less literacy-rich than those of some of our European competitors. Could the lack of literacy practice on the job be the key factor in the decline of skills of the older cohorts in the Canadian workforce?

Myth # 9: It is a better investment to train the best and forget the rest. Or, to put it another way, with scarce resources, it makes the most sense to spend money on those best able to take advantage of development opportunities, those with sufficient literacy skills to be trainable. Perhaps this is more attitude than myth. Whatever it is, it is the wrong strategy, says the research. The provision of training opportunities to those already skilled is common among the seven nations studied. We ignore the literacy training needs of our whole labour force at our peril. Nor can we afford to neglect the deteriorating literacy skills of the short and longer term unemployed. As IALS says, the Canadian skill supply cannot be taken for granted if it is to meet the higher skill demands of global competition and economic expansion.

Those are some of the myths surrounding adult literacy. Let me now pose a different question. Why does IALS stress the economic importance of literacy so much? The simple answer is that the researchers who brought us IALS also brought us the 1989 Canadian Survey of Literacy Skills Used in Daily Activities, and they learned a bitter lesson from LSUDA. People who make key decisions in Canada - finance ministers, finance officials and business leaders - ignored the 1989 study. Literacy was not seen as an issue for the economy, so the pitch adopted for IALS is in the language of macro-economists. Macro-economists are powerful people these days. Politics is being driven by the bottom line. The authors of IALS have targeted that audience. IALS tells finance departments about the costs of low literacy - in terms of lost jobs, lower economic growth and weaker international competitiveness. As Senator Fairbairn often remarks, "this country will not be on the cutting edge of very much if we have a large percentage of our adult population with poor reading skills." Companies which require highly literate employees capable of reading and of being able to grasp the significance of information quickly, increasingly will have greater difficulty finding the people they need in order to be, and to remain, competitive.

IALS says clearly to business that the literacy of their workers is an asset that must be nurtured as carefully as all other assets if Canada and Canadian-based enterprises are to be competitive.

In conclusion, let me quote from the final paragraph of IALS: "literacy is important: it rewards those who are proficient and penalizes those who are not. For the individual, literacy affects employment success, income and life chances; literacy is both enriching and empowering." (*Reading the Future*, p. 79). It is hard to disagree with this sentiment. The issue is how do we get this message out to all Canadians? How do we convince people to read this work carefully and to think through how it affects their families, their friends, their relatives, their colleagues at work and the very fabric of their communities? Was IALS worth the cost and the effort? You be the judge.

Mr. James E. Page is the Executive Secretary of both the National Literacy Secretariat (since April, 1994) and the Office of Learning Technology (since August, 1995). He has been Director General, Education Support Branch, Secretary of State (1989-1994) and Director, Canadian Studies (1984-1989). In addition, James was founding President of the International Council for Canadian Studies (1981-1983); three-time President of the Association for Canadian Studies (1978-1983); and a Member of the Commission on Canadian Studies (1973 - 1983). He taught at Seneca College from 1969 to 1983 and served for two years (1975 and 1976) with the Association of Canadian Community Colleges as the founding Director of both its Canadian Studies and International Offices. James has published extensively in the area of Canadian Studies.

Al Shipton

The JET Program

Since 1990, AltaSteel has experienced a 45% reduction in salaried employees and a 31% reduction in unionized staff. The average age of AltaSteel's current 275 employees is 45 and the average educational level of unionized employees is grade 9. Recently, AltaSteel asked itself if its employees had the skills necessary to implement change and to operate the business into the next century. The answer was no. As a response, AltaSteel introduced the Job Effectiveness Training (JET) Program, an initiative developed by AVC-Edmonton. JET accommodated shift work schedules and addressed the employees' fear of classrooms and learning. Initially, there was strong opposition to enrollment, resistance now replaced by a culture of lifelong learning.

JET is successful because it is based on trainee interests and the results of a company-wide needs analysis. It encourages employee buy-in and commitment by asking trainees to pay one half of the expenses and to attend sessions outside of personal work hours. To facilitate employee access, JET now boasts an on-site learning centre. This facility is equipped with 11 PCs and is open daily for learners. AVC-Edmonton instructors staff the centre 12 hours/week and augment individualized modules with prepared classes on common topics. JET curricula includes only what employees want to pursue, and familiar workplace materials are used whenever possible. Currently, topics include math, computers, steelmaking, interpersonal relationships, WHMIS, and financial planning.

The overwhelmingly positive results appear to be long-term; trainees demonstrate a 22% improvement in basic skills as well as high employment satisfaction as "turned on" employees. The enhanced self-confidence and self-esteem of workers is also reflected in improved personal lives. As AltaSteel manager, Al Shipton, reported, "this is a win/win situation for everyone - employees and employers."

Mr. A.F. (Al) Shipton has been the Manager of Manufacturing Services (Personnel, Industrial Relations, Medical, Security, Purchasing, Information Systems) for AltaSteel since 1988. He has a background in applied mathematics and Human Resource Development. Al worked as a systems analyst for a number of years before moving to the Human Resources area in the early 1980's, beginning as a Supervisor of Personnel and Industrial Relations for a major employer in Ontario.



Brigid Hayes

The National Literacy Secretariat

Created in 1988, the NLS was the federal government's response to the growing understanding, at that time, that literacy was not just about whether one could read or write. What was beginning to be understood was that literacy reflects a range of skills that depend not just on levels of education but on a number of complex factors, including what happens in the workplace.

The NLS recognized two important Canadian realities. The first reality was that constitutionally, education is the responsibility of the provinces. Rather than engage in a discussion of whether literacy is an education issue, a training issue or a citizenship issue, the NLS has chosen not to provide funding for the direct delivery of literacy programs. It does work, however, in partnership with the provinces and territories to match their spending on literacy. This is done through the funding of projects with community-based literacy groups, community colleges, school boards and other community partners. These projects address the need to raise public awareness around the issue, increase research, improve access to and outreach of literacy programs, facilitate information sharing and coordination, and develop learning materials which speak to adult learners.

The second reality faced when creating the NLS was that literacy is everybody's business. No one sector of society is responsible for literacy; it must be everyone's concern. The government recognized that what was needed was a collaborative effort. And so, the NLS acts as a catalyst and facilitator to bring the various sectors of Canadian society together around the literacy issue. It helps these sectors to explore how best to deal with literacy issues. NLS partners include business associations, labour, national voluntary organizations and other interest groups.

Today, the NLS is situated within the Department of Human Resources Development Canada. However, given the government's commitment to literacy, the NLS reports to the Minister with Special Responsibility for Literacy, the Honourable Joyce Fairbairn. Although the Senator was unable to attend this conference, she did spend several hours with WWestnet discussing IALS and related workplace literacy issues.

Any discussion of workplace literacy is by definition a discussion that takes place among partners. In the workplace, there are no advantages to spending a great deal of time looking to the youth education system to find someone to blame for apparent low literacy skills. As many Canadians know, even the very best of credentials will grow stale if skills are not practiced and reinforced. The answers to redressing low literacy and basic skills lie completely within workplace structures. Working jointly, business and labour can develop programs and supports to ensure that workers have the necessary skills to tackle today's and tomorrow's jobs. And they can do this with the support of governments, workplace literacy practitioners and educators.

From its inception, the NLS recognized that labour and business often need support to explore new ideas, research best practices and build experience in this new and exciting area. The NLS has worked with groups across the country to help them to devise their own solutions. However, the staff at the NLS are not the experts. The expertise needed to resolve literacy and basic skills issues can be found within business and labour organizations themselves. As many business and labour leaders have noted, workplace literacy is the one issue that consistently brings both sides to the table to work cooperatively.

The bottom line is that workplaces across the country must be places of ongoing and lifelong learning. The job of the NLS is to create opportunities for those involved in workplace change to respond to the literacy issues facing workers and customers and the communities in which they operate. This is not a process that has a clear conclusion, a time when one can say, "Yes, our workforce is now completely literate." If one accepts, as the NLS does, that literacy skills are found along a continuum, that they can deteriorate if not used and that they vary depending on the material one is asked to read; if one accepts, as we do, that the demands for literacy skills placed on workers, on customers, on our communities, will change as society and work become more complex; if one accepts these assumptions, then one must also accept that the path will be ever changing, the goals ever shifting and the journey never finished.

Ms. Brigid Hayes has been a Program Consultant with the National Literacy Secretariat Human Resources Development Canada since 1989. She is responsible for NLS partnerships with business and labour, workplace literacy, and policy issues. Brigid served with the Department of the Secretary of State from 1984 as a policy officer for youth, aboriginal people and voluntary action, and from 1987 as Director of the Voluntary Action Directorate. Before entering the federal public service, she worked for several years as a consultant in program and policy development with clients from the criminal justice field, women's organizations, aboriginal women's organizations and the voluntary sector.



Dr. Albert Tuijnman

An International View of IALS

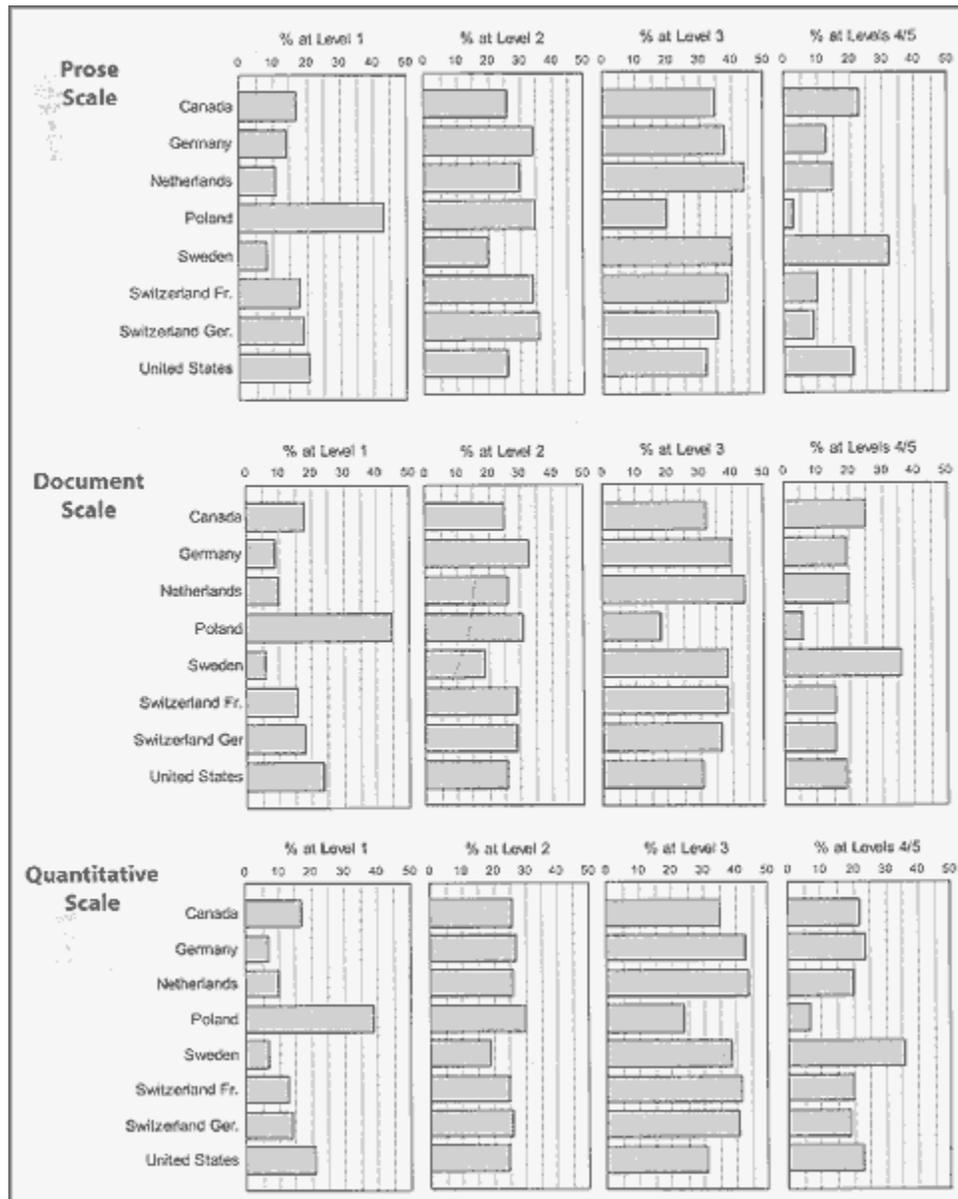
Dr. Tuijnman gave an overview of the International Adult Literacy Survey and pointed to several findings which should have an impact on educational policy among Organization for Economic Co-operation and Development (OECD) members. IALS data are being released at a time when most member countries are coping with turbulent economic changes which include rapid shifts in manufacturing processes, the internationalization of markets, and more fluid patterns of employment. He noted the growing awareness in OECD nations of the rising skill demands in the workplace and other trends in reaming economies worldwide. The survey will undoubtedly have an impact on the way that adult education and workforce training are conceptualized.

He first pointed out that Canada and the United States are leaders in carrying out this kind of research, and that the National Literacy Secretariat and Statistics Canada were important contributors to the success of the project. In the United States, the National Adult Literacy Survey and the Young Adult Literacy Survey demonstrated the advantages of using a strong cognitive model to set the difficulty levels for the open-ended tasks used in literacy studies. For Canada, previous experience with the 1989 Literacy Skills Used in Daily Activities Survey paved the way for participation in the larger International Adult Literacy Survey. Statistics Canada took a lead role in collecting data and analyzing the survey results.

Before IALS, the 29 OECD countries had generally considered literacy to be a dichotomous attribute; one was either 'literate' or 'illiterate.' Following the accepted practice of judging anyone with four years of primary education to be literate, most countries did not consider literacy to be an issue. As Dr. Tuijnman pointed out, by this minimal educational standard, 98% of citizens living in OECD countries were judged 'literate.'

IALS presents a much more complex picture of literacy, one of individuals stretched along a continuum of ability. Increasingly, those with fewer skills are finding that they are being excluded from a job market which offers employment only to the highly skilled. The survey also showed that literacy ability is strongly correlated with earnings when all other variables are held constant. The gap between 'skilled' and 'unskilled' has significant implications for social cohesion in all OECD member countries. For individuals, the consequences of poor literacy skills are fewer job opportunities and limited earning capacity; for nations, the lack of a highly skilled workforce can mean an inability to take advantage of the new global marketplace.

IALS - International Comparison of Literacy Distribution



As the IALS data illustrates, there is considerable variation in the distribution of literacy among the seven OECD nations which took part in the study. (See the graphs on the previous page.) The numbers of people in skill levels 1 and 2 show that limited literacy skill is a significant issue in all the participating countries. Swedish policy makers, for example, are concerned that approximately 25% of their population falls into the two lowest levels on the IALS scales; by comparison, Canada has about 40% of its population in these two levels. Most troubling is the fact that few of the people with limited ability feel that they have a problem.

The survey also drove home the point that literacy skills can be gained and lost in adulthood. Survey data reveal that 10% of the Canadian population has more, or less, skill than predicted by years in school. Some adults manage to achieve high levels of literacy without the benefit of much schooling, while others are evidently unable to maintain the level of literacy attained in their childhood. Dr. Tuijnman also indicated that the use of literacy skills in the workplace is probably the most important factor in maintaining adult literacy. However, he also pointed to the data from the Swedish part of the survey and suggested that, "Some countries evidently do a better job of educating adults."

Dr. Albert Tuijnman is the Principal Administrator in the Educational and Training Division of the OECD. Prior to joining the OECD, Albert was an associate professor at Stockholm and Twente Universities. He has expertise in a number of areas of study, including education economics and comparative education. He has edited or written 18 books and 75 articles or chapters in his field of interest, the most recent publication being the *International Encyclopedia of Adult Education and Training*. Albert has served on government committees, research councils and on the boards of scholarly journals in different countries. Presently he is the Associate Director of the International Academy of Education.

Stanley Jones

IALS and the Canadian Workplace

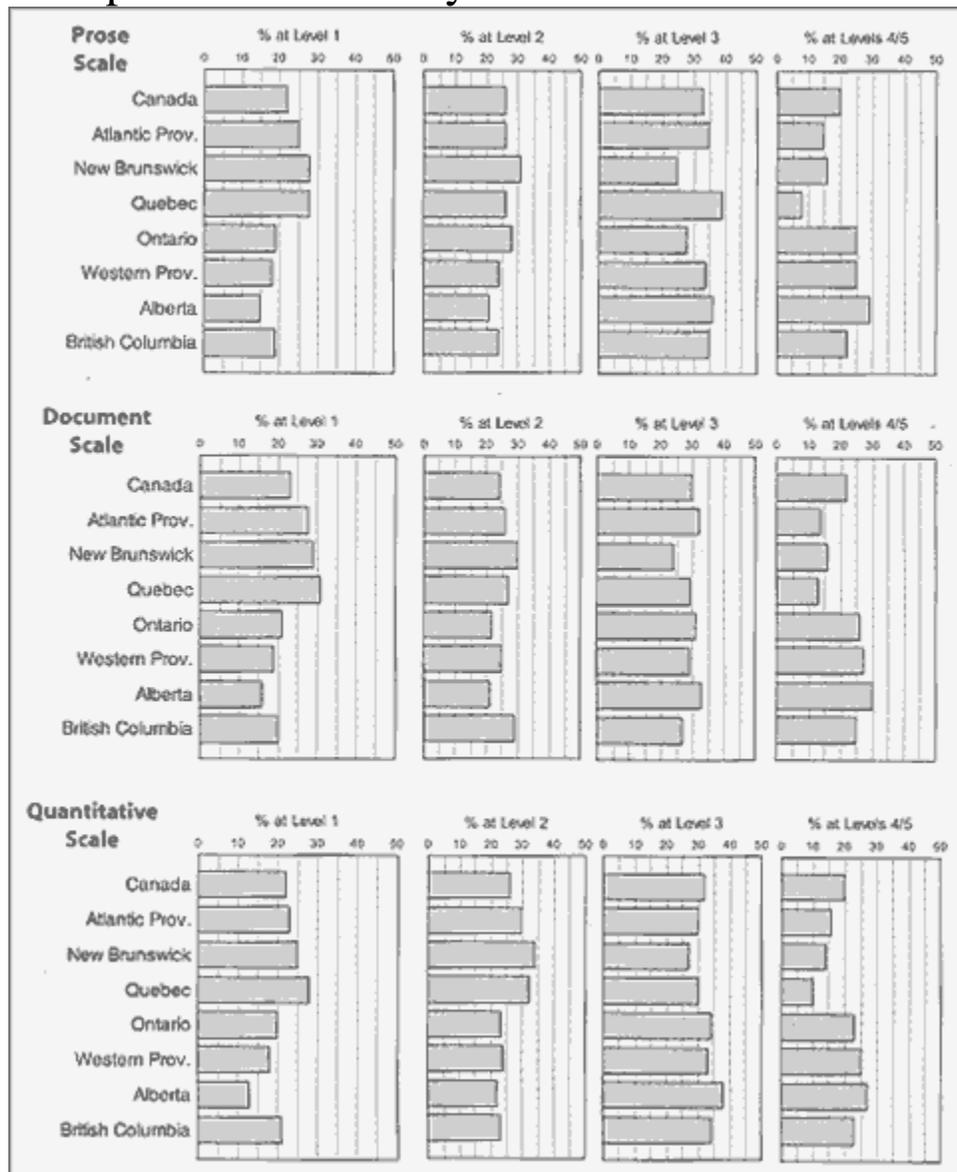
Stanley Jones was responsible for much of the analysis and reporting of the IALS data and so was able to illuminate the findings of the Canadian section of the survey. He first explained the conceptualization of literacy which underlies the IALS survey. The survey consists of a number of everyday tasks which require the use of literacy skills. The tasks vary in difficulty according to factors such as number of specifics required to answer a question, the degree to which inference is needed to match search term to given categories, and the plausibility of distracters. These factors were identified in previous research (Kirch and Mosenthal, 1990) as being strongly correlated with document difficulty. Individuals are assigned to the IALS ability levels according to the highest level of tasks they are able to complete successfully. An important consequence of this view of literacy is that skills are placed on a continuum; it recognizes that some people have more skill and some have less, but avoids identifying any point of the scale as being the literacy 'benchmark.'

The distribution of literacy skills in Canada for adults sixteen and older is shown in the graphs on the facing page. The data for individual provinces are only reported if the population is large enough to provide a reliable sample, except in the case of Alberta and New Brunswick where provincial governments purchased extra sampling. As has been noted before, adults in the western provinces have more schooling and higher levels of literacy than their eastern counterparts.

While the gross distribution of literacy skills in the Canadian population is interesting, it is the connection between jobs and literacy which captures the attention of policy makers. Jones pointed to the relationship between employment growth and literacy ability. He noted that the areas where employment is growing Personal services, finance, and trade - require workers with high levels of literacy. Workers in sectors such as manufacturing, transport and agriculture, where employment is shrinking, tend to have lower levels of skill. IALS shows that the people being displaced by current economic shifts are often those least able to make the transition to available jobs. In other words, unskilled work is a thing of the past.

Literacy is strongly correlated with attachment to the labour market. Canadian results show that people at level 1 on all scales are more likely to be unemployed or out of the labour force than their more skilled neighbours. A weaker attachment to the labour market also means that lower literacy levels are correlated with use of support programs such as employment insurance and social assistance. At work, a high level of literacy is directly associated with higher levels of income; highly literate people tend to have well paying jobs, where, not surprisingly, they read and write a lot more than their less able co-workers.

IALS - Comparison of Literacy Distribution in Canada



Mr. Jones closed on a theme which resonated with many of the delegates in the room. He put up a chart which showed that those with the lowest level of ability also get the least training. Workers at the highest literacy levels (level 4/5) are three times as likely to get training than those at level 1.

Mr. Stanley Jones was consultant on literacy for both the Survey of Literacy Skills in Daily Activities (Statistics Canada, 1989) and the IALS (Statistics Canada, 1995). With colleagues from the Educational Testing Service, he designed the survey test used. He was responsible for the analysis of the data for both the IALS report (*Literacy, Economy and Society*) and the IALS Canadian report (*Reading the Future*), and wrote the analysis chapters for both. He also designed the framework for Human Resource Development Canada's basic skills analysis project, a framework which is the basis for discussions of an international job skills survey. He is a frequent consultant on school-to-work transition projects. Most recently, he has been involved with the re-design of the Test of English as a Foreign Language for the Educational Testing Service.



Dr. Harvey Krahn

Literacy: Use it or Lose it

In response to the release of the IALS data, Dr. Harvey Krahn from the Department of Sociology at the University of Alberta along with a colleague, Dr. Graham Lowe, is embarking on a research study to investigate the proposition that adult literacy skills are the result of the way that individual adults live and particularly the kind of jobs they have. While use of literacy skills in leisure and community activities can help to maintain and build those skills, demand for literacy at work has been found to be a significant factor in predicting adult literacy competence. Dr. Krahn intends to analyze IALS data and other studies to establish a relationship between occupational demand for literacy and demonstrated skill. This research arises from the observation that a history of employment in low skill jobs is associated with lower levels of adult literacy. Dr. Krahn suggests it is time to stop placing all the blame for poor adult literacy skills on the education system. Popular wisdom has always implied that low-skilled jobs result in workers with lower levels of skill. Adam Smith noted in the *Wealth of Nations* (1776), "The man whose whole life is spent performing a few simple operations . . . has no occasion to exert his understanding, or to exercise his invention . . . He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become." However, as late as 1992, the Economic Council of Canada was still blaming the public school system for the state of adult literacy when it commented: ". . . if these figures (results from the Literacy Skills Used in Daily Activities study) do not improve, our school system will produce well over one million new functional illiterates over the next ten years." IALS, on the other hand, suggests that Adam Smith was right - Adult competencies are, in part, the result of using literacy skills at work and in other adult contexts. Dr. Ivan Fellegi, Chief Statistician for Canada, cautiously notes that the IALS data are "at least suggestive of the hypothesis that regular use of acquired literacy might be a factor in its retention." Dr. Krahn will use a variety of sources to investigate the 'use it or lose it' literacy hypothesis. First among these sources will be the IALS data, but studies of other related research on the link between complex environments (like the workplace) and learning skills will also be reviewed.

Dr. Harvey Krahn has served as a consultant to Statistics Canada, Human Resources Development Canada, and several provincial government departments. His publications include a widely-used textbook in the sociology of work, a recent book on high school dropouts, a research monograph for Statistics Canada, and more than 50 research papers in academic journals and books.



Lynda Fownes Basic Skills at Work

The Essential Skills Research Project, begun in 1994 by Standards, Planning, and Analysis, is a national initiative funded by Human Resources Development Canada. The goal of the project is to produce an Essential Skills profile for each lower-skill entry-level occupation, reflecting the actual requirements of the Canadian workplace. Each profile will be developed on the composite of 20 or more open format interviews conducted across the country. Once an occupation is targeted for study, employers or union representatives identify workers who are fully competent. These individuals are asked to discuss in detail what they do at work and what skills are required to be successful. Results are then recorded in a standard information format.

For the purposes of this study, essential skills are defined as those skills considered fundamental, the Velcro to which occupational or technical skills stick. Essential skills are also viewed as enabling skills; that is, they enable an employee to perform the tasks demanded by the job, though they are not necessarily "the job" itself. The Essential Skills Research Project has identified the following as essential skills: reading, document use, writing, numeracy, oral communication, thinking skills (problem solving, decision making, planning and organizing), computer skills, and continuous learning. When the study is completed in 1997, it is expected that results will be used to make workplace training more effective, set standards for entry into occupations, enhance health and safety training, streamline restraining programs and provide career information for youth and those considering career changes.

Ms. Lynda Fownes is the Manager of the BC Construction Industry Skills Improvement Council (SkillPlan). Lynda joined the organization in 1992 as Research Director and has designed and managed a wide range of projects involving employers, unions, government and educators. Since then, Lynda has contributed to the development of Literacy Task Analysis, now known as Workplace Basic Skills Analysis. Her lifelong association with the construction industry and her experience as a teacher and consultant to the Ministry of Education, Curriculum Development Branch, have provided her with expertise in the field of education combined with a knowledge of and sensitivity to industry issues. She was invited to join the Human Resources Canada Advisory Committee for the Basic Skills Research Project in 1994.

Evaluation Summary - September



Evaluation Form Comments

September

Bouquets

- A valuable opportunity to meet counterparts from other areas
- A great chance to broaden perspectives re: the implications of IALS
- A wonderful opportunity to network across disciplines
- Excellent organization of the conference and attention to detail
- Outstanding speakers
- Great location, rooms and facilities
- The best conference I've ever attended, and I've been to many
- Great starting point
- Very useful materials provided

Brickbats

- There was too much smoke in the lobby / snack area
- Group reporter added a political bias to her presentation
- Time was too short for the breakout sessions
- Time constraints weakened the development of action plans
- Wish we had established a focus and long range plan
- Facilitators talked too much

Next Time . . .

- Meeting and presenting in sector groups and then splitting into mixed groups may have been valuable
- Groups were too large, especially given the time constraints
- Should have been more background discussion and fact finding
- Should have been a full two day workshop
- We need to network like this on an annual basis. Please!

Evaluation Form Comments

November

Bouquets

- Speakers extremely knowledgeable on topics.
- Nice mix of business, education and labour-great networking opportunity.
- Very well organized - materials very attractive.
- Speakers well chosen and coordination first rate - I found the whole event very worthwhile.
- Excellent location, fine environment and very positive atmosphere.
- Good first step with the IALS; what next is on everyone's mind.
- A wonderful professional development opportunity.
- Wonderful hand-outs and very polished, professional presentations.
- The Round Table opened my eyes to the talent in the room. Today has been a great kick-off to a longer discussion regarding "where to go from here."
- Most excellent idea and professionally executed. This symposium has been essential and effective in bringing IALS forth to business, labour and government. I learned a great deal even though I already knew a great deal about IALS.
- A great return on my investment of time.
- Excellent time management and pacing. A very well planned day.

Brickbats

- Would have been significantly improved by breaking up the stand and talk presentations with some other medium - video? audience participation?
- the government and education sector seemed to be more aware of IALS than business and labour, and this tended to slant the discussion period.
- excellent speakers but too little time to dialogue with them - one day session too short.
- For the wrap-up, I would have preferred a quick recap of Round Table discussions - even if each table just read them out.

Next Time . . .

- It would have been great if we could have heard more about the successes of implementing programs in western Canada.
- More on formulation of partnerships for workplace literacy programming would have been welcome from my point of view.
- There is a need to involve the K-12 education sector a little more fully in such events/work.
- Would have been helpful to have had more employer information e.g. types of workplace initiatives and employer training.
- Provincial groupings at some stage would have been helpful.

Recommendations for Next Steps

- More case studies at the next phase.
- Make the report more readily available to and readable for small business and non-unionized workers.
- Take the next step and bring more people together to hear about the study results. We need to make plans and take appropriate action to address issues raised in the study.
- We need to meet as provinces or areas.
- We need to focus on a future symposium that addresses the barriers to change (for employers, employees, unions, education/training providers and governments) and new practices and institutional arrangements that can overcome these barriers.

Round Table Discussion Feedback

What does IALS say to you?

- IALS points out the lack of value that is placed on continuous learning in Canada, that is, the role Canadian culture plays in terms of the relatively low literacy levels in Canada. How do we change the culture?
- Stop pointing fingers, laying blame; literacy - is everyone's responsibility.
- The biggest strength of IALS is that it provides substantial ammunition to move from awareness to action.
- It is clear that there is a whole cultural dimension to literacy. It is probably the most critical issue.
- It is important that as a society we do not become divided (the hour glass effect) based on our literacy skills. We must develop a process based on barrier-free access.
- The enhancement of literacy blurs the process of formal and informal learning. It raises the question of what activities contribute to literacy attainment.
- We need to know as a society what is required to move people from level 2 to level 3 in a way that starts to develop a culture of learning.
- The Canadian education system is giving adults what they need in the short term but it may not be effective in the long term.
- A major problem is that individuals at the low end of the literacy ability scale do not consider this an impediment.
- Literacy is a continuum and it is important to determine how the education system fits into this continuum.
- We are all potentially life-long learners; appropriate motivation for learning must always be a consideration.
- Literacy skills are multi-dimensional and can be acquired in non-formal learning situations.
- Literacy is not static - levels can go up and down.
- Worker literacy solutions need to be integrated into the bigger workplace picture.
- A life-long learning culture exists for a few but must be made accessible to all. We need to develop an agenda that addresses social/economic renewal, an agenda that includes lifelong learning and literacy. These two systems cannot be exclusive of each other.
- A higher level of education is no guarantee of a literate workforce because if you don't use it, you lose it.
- The major question arising from IALS is whose responsibility is it to deal with literacy in the workplace?
- We need to participate continually in comparative analysis for 2 reasons - to develop external benchmarks and to foster a better understanding of where we are. Both should result in a promotion of dialogue.
- There is a growing gap between the "haves" and "have nots" in terms of literacy skills. There is a need for greater cohesion within the workforce and consideration of this aspect of the workplace.

What do you plan to do with the IALS information you have received today?

- take it back to the K-12 education system
- use it to foster a culture of lifelong learning in my workplace and community
- lobby to have IALS measures become industry standards for assessing literacy rates
- put more energy into developing a learning culture in the post-secondary education system
- inform government education policy makers and make the IALS findings a consideration when training initiatives are developed
- incorporate it into research work involving cross-cultural comparisons in areas such as the apprenticeship system, the education system, etc.
- use it to improve workplace ethics. Workplace ethics is the number 1 issue in the Yukon. Increasing literacy levels increases self-confidence and this, in turn, improves workplace ethics.
- bring it to people's attention through professional associations such as the Canadian Mining Association, the Chamber of Commerce, etc. Today's information is the ammunition they need to start effecting change - IALS offers a more scientific basis for promoting change.
- establish a Yukon workplace literacy steering committee to undertake workplace needs assessments (college, business, community based)
- present findings to our Human Resources department to see what can be done in my workplace raise the awareness of rural organizations such as the Wheat Pool
- make presentations to sectoral labour councils and apply findings to present labour training programs
- examine how jobs are designed in my sector with an eye to guarding against de-skilling and to promoting a more effective school to work transition process
- attempt to get the message to the largest Canadian business audience - small business
- lobby government to increase funding to northern literacy initiatives
- work with literacy advocates and practitioners to develop a literacy program for our company
- raise the awareness of politicians re: economic development/community and social development and how literacy is an important part of this
- examine whether adequate wage rewards exist at my workplace to encourage individuals to pursue lifelong learning
- examine how Canada can introduce basic skills training in the context of job-specific training, that is, not allow essential skills training to be perceived as separate, "unto itself" training - give it a relevant, over-arching and on-going role

Jurisdictional Action Plans

British Columbia

- create a coordinating body in BC to address workplace literacy issues
- identify an influential MLA to be responsible for workplace literacy
- approach WWESTNET to meet with key people in the province to try to influence policy development re: program funding, and to propose a suitable model such as Manitoba's
- ensure there is provincial financial support for any workplace literacy initiatives
- try to ensure workplace training contractors are aware of IALS and apply its findings to workplace literacy

Teachers of English as a Second Language (TEAL)

- make presentations to institutions
- put IALS on the agenda of the BC TEAL conference
- talk to the BC TEAL executive - ask for NLS support
- conduct mini-workshops and breakfast meetings on IALS and English in the Workplace
- plan a marketing workshop for English in the Workplace trainers

BC Labour Force Development Board (BCLFDB)

- arrange a Board presentation for the LFDB for October or December to raise awareness of IALS
- add IALS to the agenda of the meeting of Deans and Directors of developmental studies
- adopt *use it or lose it* as a slogan
- try to obtain COPS funding for an IALS-related project (the COPS program provides \$80,000 to colleges to develop programs which build community awareness of socio-economic issues)

Literacy BC

- have Jim Page speak about IALS at the October 25 annual general meeting
- be involved in four breakfast meetings with business and labour, and four regional meetings all focusing on IALS
- train staff and regional coordinators regarding IALS findings
- request meetings with government ministers to raise awareness of the implications of IALS
- press the Minister to form a department addressing workplace literacy issues
- send a "did you know" to MLAs and MPs and to business and labour contacts every three months
- from the Community Skill Centres and the Foundation Skills Project, respectively, to be used as a forum for IALS themes

General plans of action include:

- creating "champions of the cause"
- compiling a database of workplace literacy practitioners and participating employers
- developing a pool of trained practitioners
- implementing a 1-800 line

Alberta

- encourage umbrella organizations such as the Literacy Coordinators of Alberta, Alberta Teachers of English as a Second Language, Alberta Association for Adult Literacy to provide IALS information to their respective members
- hire a contract person to make presentations to select audiences not already reached - Alberta Teachers Association, community groups, social services
- provide information to universities and colleges (Kjersti Powell)
- provide WWestnet panel presentations for Alberta Association for Continuing Education

Alberta Teachers of English as a Second Language (ATESL)

- relay IALS information at a conference panel presentation October 24 - 26 (Carolyn Dieleman)
- target forums including college newsletters, local newspapers and local English as a Second Language organization meetings

Literacy Coordinators of Alberta (LCA)

- assist in the organization of an IALS session at the LCA conference (Marnie Schaetti)
- promote IALS through Nancy Steel's literacy field work
- introduce IALS via new coordinator training and the WWestnet newsletter

Alberta Association for Adult Literacy (AAAL)

- present a report at the next board meeting
- report about IALS via the newsletter
- make a presentation to the conference coordinator re: possible conference topics

Saskatchewan

1. What has happened regarding public awareness in Saskatchewan to date?

- display boards for conferences have been created
- there have been presentations to the Rotary Club, university groups and teachers' organizations
- an in-service for the Network board has been provided and a presentation kit has been developed
- meetings with department administrators and officials and the provincial cabinet have taken place

2. To do in the future

- develop colour overheads with the help of the National Literacy Secretariat (NLS)
- develop handouts for presenters (NLS kits)
- recruit November delegates strategically and perhaps brief them prior to the symposium

3. Goals for the November meeting

- develop a strategy for workplace evaluation in small business define the roles of business, labour and educational institutions in workplace literacy plan for follow-up after November

Manitoba

1. First Step

- form an action committee comprised of attendees plus other interested parties
- make presentations, an important way to provide opportunities for face-to-face dialogue
- carry out piggyback mail-outs
- develop a matrix of interest groups and characteristics
- develop group-appropriate materials
- translate the IALS levels 1 - 5 into business terms and mass media usable forms
- create a "Coles Notes" version of the information, including questions and answers
- coordinate sessions for the various groups so it is possible to facilitate cross-group discussion
- be positive about the opportunities IALS presents
- be future-oriented and try to articulate future skills requirements

2. Second Step

- develop an interim agenda for effecting changes to the training culture, an agenda which would encourage training needs to be viewed as long-term and cumulative, from needs assessment through to final evaluation; as incorporating literacy issues

3. Third Step

- create a culture which actually views workplace training as long term and cumulative

NWT and the Yukon

Discussion revolved around a way to generate interest and create a circle of stakeholders in the north. Past efforts have met with limited success. Suggestions for overcoming this problem were to:

- develop programs which are relevant and appropriate
- find models and mentors
- through research and evaluation, find out what works
- push the Government to ensure the north is included in any future surveys
- look for people to be contacts in business, government and education
- network
- share information with others involved in projects and with the media
- arrange presentations to the Chamber of Commerce, Rotary Club, College Advisory Council, Literacy Coalition, Department of Justice, and the Learning for Life Conference (October 24 -26)
- find out what materials are available from the NLS