Compiled Responses

of LBS Teachers in Ottawa to a questionnaire about their numeracy teaching practices and needs

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June 2000

Created by the Ottawa-Carleton District School Board. Funded by the National Literacy Secretariat and the Ontario Ministry of Training, Colleges and Universities

Introduction

The project *Survey of Resources for Teachers of Adult Numeracy* aimed to contribute to the process of improving adult numeracy teaching in Literacy and Basic Skills (LBS) programs, by connecting teachers with resources. The first element of the project, the questionnaire, was designed to identify the resources that were most needed by teachers. Some questions in the questionnaire asked teachers directly what they feel they needed, while other questions sought to find this out indirectly, by asking teachers to describe their adult numeracy teaching and learning situations. The questionnaire had forty-five questions, and was administered to seventeen LBS teachers in Ottawa-Carleton.

This document contains the teachers' compiled responses to the questionnaire. In the tables, you will find an overall picture of the numeracy teaching context in Ottawa-Carleton LBS programs. The researcher on this project will use these data to establish priorities that will guide her search through existing adult numeracy resources. She will be looking for resources which are not currently well-known in Ottawa-Carleton, but which fill the needs of teachers and are of high quality. Should she find only a few such resources, she will suggest new resources that may usefully be developed. These recommendations for existing and new resources, as well as the questionnaire and the data compiled in this document will be presented to the Ministry of Training, Colleges and Universities, and shared with colleagues in the LBS field, so that the questionnaire may perhaps be administered elsewhere, and, in due time, existing highquality adult numeracy resources will become better known, and appropriate new adult numeracy resources will be developed.

You might like to read this document from beginning to end, or you might prefer to browse through it or use the table of contents to locate data that are of particular interest to you. Please feel free to contact the researcher if you have any questions or comments, or if you would like more information:

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Part 1: Teachers

What is the highest level at which you studied math?

	# of teachers	percent of teachers
high school	11	65 %
college	1	6 %
university	4	23 %
other (CEGEP)	1	6 %
total	17	100 %

Q 6

How did you feel about math when you were studying it at school?

	# of teachers	percent of teachers
I liked it and I excelled	4	23 %
I did fine	6	35 %
I disliked it and I struggled	6	35 %
other (I liked it but I struggled)	1	6 %
total	17	100 %

Please identify whether you feel your math skills are strong, satisfactory or rusty in each of the following areas:

	strc (2	ong ?)	satis (sfactory (1)		rusty (0)	mean
whole numbers	15	88 %	2	12 %	0	0 %	1.9
fractions	14	82 %	2	12 %	1	6 %	1.8
decimals	13	76 %	4	23 %	0	0 %	1.8
percent	11	65 %	4	23 %	2	12 %	1.5
measurement	10	59 %	5	29 %	2	12 %	1.5
geometry	8	47 %	2	12 %	7	41 %	1.1
data management	5	29 %	7	41 %	5	29 %	1.0
algebra	4	23 %	8	47 %	5	29 %	0.9

Please identify whether you feel your math skills are strong, satisfactory or rusty in each of the following real-life tasks:

	st	rong (2)	sati: (sfactory (1)	1	rusty (0)	mean
readmaps	15	88 %	1	6 %	1	6 %	1.8
estimate sales tax	12	71 %	5	29 %	0	0 %	1.7
check change	12	71 %	5	29 %	0	0 %	1.7
calc. trip distances and travel time	11	65 %	5	29 %	1	6 %	1.6
calc. trip distances and travel time	11	65 %	5	29 %	1	6 %	1.6
total groceries	10	59 %	6	35 %	1	6 %	1.5
determine tip	8	47 %	8	47 %	0	0 %	1.4
understand statistics in the news	9	53 %	5	29 %	3	18 %	1.4
income tax form	7	41 %	7	41 %	2	12 %	1.2

Which unit of measure are you more comfortable with, in each of the following contexts?

Cooking

	# of teachers	percent
cups	13	76 %
millilitres	0	0 %
both	3	18 %
no response	1	6 %
total	17	100 %

Building with Wood

	# of teachers	percent
inches and feet	13	76 %
millimetres, centimetres and metres	0	0 %
both	3	18 %
no response	1	6 %
total	17	100 %

Traveling

	# of teachers	percent
miles	1	6 %
kilometres	7	41 %
both	8	47 %
no response	1	6 %
total	17	100 %

Understanding Air Temperature

	# of teachers	percent
Fahrenheit	2	12 %
Celsius	11	65 %
both	4	23 %
no response	0	0 %
total	17	100 %

Sewing

	# of teachers	percent
inches and yards	7	41 %
millimetres, centimetres and metres	4	23 %
both	5	29 %
no response	1	6 %
total	17	100 %

Buying by Weight

	# of teachers	percent
pounds	7	41 %
grams and kilograms	2	12 %
both	8	47 %
no response	0	0 %
total	17	100 %

Measuring Curtains, Carpets

	# of teachers	percent
inches and feet	10	59 %
centimetres and metres	3	18 %
both	4	23 %
no response	0	0 %
total	17	100 %

Contexts Suggested by Teachers

	preferred unit	# of teachers
knitting	centimetres	1
flying	knots, metres and feet	1
body mass	pounds	2
people's heights	inches and feet	1

Summary of Responses to this Question

system of measurement that teachers report being more comfortable with	# of responses	% of all responses
Imperial	69	51 %
Metric	31	23 %
both	36	26 %
total	136	100 %

How do you feel about math now in your daily life?

	# of teachers	percent
I love it and seek out opportunities to apply it	4	23 %
l use it easily when necessary	11	65 %
I feel uncomfortable with it and I avoid situations that involve it	1	6 %
other (somewhere between using it and being uncomfortable)	1	6 %
total	17	100 %

Q 1 and Q2

For how many years have you been teaching? For how many years have you been teaching adults?

years t	eaching adults	years teaching	percent of each teacher's teaching time spent teaching adults
	22	22	100 %
	20	20	100 %
	18	23	78 %
	16	38	42 %
	15	15	100 %
	14	23	61 %
	12	25	48 %
	12	15	80 %
	12	12	100 %
	11	20	55 %
	10	18	56 %
	10	10	100 %
	9	23	39 %
	8	11	73 %
	8	8	100 %
	8	8	100 %
	4	20	20 %
average	12	18	67 %

In which kind of place have you done most of your teaching of adults?

	# of teachers	percent of teachers
in a school-based classroom	11	65 %
in a college classroom	3	18 %
one-on-one teaching or tutoring in a variety of places	3	18 %
in a community classroom	2	12 %
total	17	100 %

What are the subjects you have taught to adults?

responses	# of teachers	percent of teachers
math	15	88 %
reading and writing	12	71 %
computers	5	29 %
life skills	4	23 %
spelling	3	18 %
grammar	3	18 %
history	2	12 %
work skills	2	12 %
General Educational Development (GED)	2	12 %
LBS in a variety of settings	2	12 %
English	2	12 %
English as a Second Language —		
business English		
parenting/family literacy		
linguistics at university		
basic communication		
study skills		
success strategies		
pre-employment		
career exploration		
personal development	> 1 each	6 % each
science	(
chemistry		
biology		
science grades 9-12		
health		
greenhouse		
childcare worker course		
lots of general knowledge)	
gliding		

Are you currently teaching math?

	# of teachers	percent		# of teachers	percent
yes,	13	76 %	as part of an LBS class:	9	53 %
			in a class that is for math only:	4	23 %
no,	4	23 %	but I have taught math in the past:	4	23 %
			and I have never taught math:	0	0 %
total	17	100 %		17	99 %

Q 12

Have you had training in how to teach math?

	# of teachers	percent	
yes	8	47 %	• within BEd (5)
			 professional development (2)
			 diploma (1)
no	9	53 %	
total	17	100 %	

Q 13

How confident do you feel about teaching math?

	# of teachers	percent
very confident	5	29 %
moderately confident	7	41 %
not very confident	5	29 %
total	17	99 %

Part 2: Students

Please rank these three general LBS student goals:

	# of teachers who ranked this as the most common goal (3)	# of teachers who ranked this as the second most common goal (2)	# of teachers who ranked this as the least common goal (1)	no response	mean
to prepare for high school or a training program	10	4	2	1	2.5
to go straight into work from LBS	2	9	5	1	1.8
to develop personally (not to prepare for more education or a job)	4	3	9	1	1.8

Why, specifically, do students want to study math?

		many students (3)		some students (2)		hardly any students (1)		no response (0)	mean
to get into high school or other further training	13	76 %	3	18 %	1	6 %	1	6 %	2.7
to manage money	8	47 %	7	41 %	2	12 %	0	0 %	2.4
to try again, for the challenge	3	18 %	8	47 %	5	29 %	1	6 %	1.8
to measure	2	12 %	8	47 %	6	35 %	1	6 %	1.6
to buy or sell	2	12 %	7	41 %	6	35 %	2	12 %	1.5
to start one's own business	1	6 %	8	47 %	7	41 %	1	6 %	1.5
to keep records	1	6 %	6	35 %	9	53 %	1	6 %	1.4
to understand the world better	1	6 %	5	29 %	9	53 %	2	12 %	1.3
to make or build things	0	0 %	5	29 %	10	59 %	2	12 %	1.2
no specific goal	1	6 %	5	29 %	6	35 %	5	29 %	1.1
to help children with their school work (appeared in 'other')	1	6 %	1	6 %	0	0 %	n/a	n/a	n/a
because they have to (appeared in 'other')	0	0 %	1	6 %	0	0 %	n/a	n/a	n/a

Which subject areas of math do you find yourself teaching often?

	# of teachers	%	specifically
fractions	15	88 %	 four operations form vocabulary
decimals	15	88 %	 four operations place value money problem solving converting to fractions and percent
whole numbers	14	82 %	 four operations times tables place value reading large numbers problem solving
percent	13	76 %	 all change among fractions, decimals and percent
measurement	11	65 %	 Metric linear measurement volume area converting
geometry	6	35 %	 perimeter area volume
algebra	5	29 %	 'pre-algebra' order of operations powers signed numbers
data management	4	23 %	simple tallies, charts and bar graphsmean, median, mode
other	1	6 %	 ratio and proportion

Which real-life tasks do you find yourself teaching often?

	# of teachers	%	specifically
Using math to manage and understand money	12	88 %	 shopping working with cash budgeting banking estimating verifying pay cheque
Using math in home-making	8	88 %	measurementarea and volumeword problems
Using math to understand data that describe society	8	82 %	 read graphs conduct survey create graph
Using math to determine location, distance and time	5	76 %	timedistancemap skillsspeed
Using math to build and make things	4	65 %	measurementarea and volumeword problems
other	4	35 %	 use a calculator measure density and specific gravity weather
Using math to sort and organize things	2	29 %	use a calendar or date bookuse cheque recordbar graph
none of the above	2	23 %	 we don't teach real-life tasks often, "except as they occur in word problems. However, our department sees a big need for a real-life math program at LBS levels 2-4 or 5."

Do you think that some of your students have number sense and math skills that are strong but usually not recognized in a math class?

	# of teachers	%	comments, summarized
yes	9	53 %	 four teachers said that a significant number of students can perform mental calculations well (including estimating, totaling, adding and subtracting, especially with money (e.g., sales tax)) in day-to-day tasks in their real lives, but can't transfer that to math in a classroom ("have no concept of the written form of math", "can't tell how they get their answers or apply this to a written question", "people can estimate, figure out real-life math but cannot transfer it into a classroom setting", "given a word problem, will be flummoxed and unable to estimate")
			strong "survival skills" and "coping strategies" to deal with the math in their daily lives.
			 students have organizational skills, memory skills, skills with fractions from cooking, and number sense.
no	5	29 %	 maybe I don't know occasionally n/a
no response	3	18 %	
total	17	100 %	

Have you found that students need to learn the language of math?

	# of teachers	%	
yes	16	94 %	Can you think of some examples?
			 vocabulary of math: sum (2), product (5), quotient, divisor (2), decrease, increase, greater than, less than, equals, equivalents, fraction words, numerator (2), reduce, lowest terms, lowest common denominator, lowest common multiple, simplify, placement, decimal, place value, value, perimeter, averages, rationalize, standard form, profit, (compiled from the responses of six teachers) ESL students have general language problems (4) reading, understanding and solving word problems (3)
			 organization/presentation: use of equals sign; brackets; clear, organized solutions in a normal layout (1)
			 expressing division, e.g., 33 divided by 3 is understood, but 3 into 33 is not (1)
			 reading money amounts (1)
no	0	0 %	
no response	1	6 %	
total	17	100 %	

Have you found resources to help students learn the language of math?

	# of teachers	%	
yes	7	41 %	Can you think of some examples?
			 the text "Coming Together: Integrating Language and Math" (levels I and 2) (2)
			 glossaries of terms (two teachers)
			Algonquin College's math units and chosen text (1
			 "Math Language" (1985) by Susan Echaore and Winifred Roderman – a booklet (1)
			 real-life materials (e.g., money, calculator, cash register) (1)
			 having student explain how they are doing their math (1)
			 much explaining by the teacher (1)
no	7	41 %	
no response	3	18 %	
total	17	100 %	

How do students reveal their positive attitudes toward math?

summarized responses	# of rsps.	%	verbatim responses
they act like conscientious, independent 'good students'	10	26 %	 seek to complete/correct every question self-program their time in class to work independently and set their own goals settle down quickly and want to finish task before leaving class check their won work with the answer key work quietly for long periods attend class regularly and use class time to work on math follow introductions re: format for writing out work and completing assignments/tests try to meet deadlines/time goals do homework attend regularly
they feel good about their success and when they understand	9	23 %	 satisfied when a goal has been accomplished express things like, "In school I used to hate math but now:" or "In school I never was good at math but now" are happy when they are finally able to understand fractions or whatever express pride in test marks when they can make sense of it (aha!) without pressure when they pass a review or a test pride in good marks joy when they succeed glee when successful
they are eager, enthusiastic and willing to try new things	5	13 %	 excited during a hands -on activity – talking, active, laughing enthusiasm curiosity about how to solve a problem or how a tool can help willingness to try a new skill or apply a skill in daily life eagerness to work on it
they relate their math to real life and themselves, take ownership	5	13 %	 bring in their math questions by understanding and relating to children's work buy a calculator or text of their own see how it can be directly applied ask questions
they spend more time than is required doing math	5	13 %	 work through break work on math in study time work at break/lunch, etc. ask for additional time complaining they don't have enough math time
they ask for extra work	3	8 %	request cashier dutyrequest more math workask for homework
they help others	2	5 %	eagerness to help othershelp other students
total	39	101 %	

How do students reveal their negative attitudes toward math?

summarized

responses	# of rsps.	%	verbatim responses
they avoid it or are reluctant to do it	14	39 %	 attendance miss classes skipping math class frequent absences, etc. skipping class, taking long breaks lots of 'bathroom breaks' reluctant reluctance to work on it "Do I have to do this?" refusing to do it object to task assigned working on other subjects or other activities during class chatting with peers re: non-math discussions they'll use their math time to do other work
they express that they don't like it or don't find it interesting	8	22 %	 bored by groaning when it's math time verbalizing they don't like math "This is boring" groaning math is stupid 'mild' aggression – huffing/puffing "I hate problem-solving."
they say it is too hard	5	14 %	 "I can't do it." say they don't understand comments – too hard "Problem solving is hard." "I never could do math."
they don't see why they should do it	3	8 %	"I won't ever need this.""Why do we need to know this?"when will I ever use this?
they use an answer key or calculator inappropriately, or cheat outright	3	8 %	 check answer keys by hiding a calculator and using it cheating by looking at the answer key
they don't attempt to understand, just go through the motions	3	8 %	 many operate on "auto-pilot' – it's a chore keep doing the same exercises and still don't get the problem right but don't seem to be aware of the fact they've done this section already tendency to rote learning rather than understanding
total	36	99 %	

4.10	Have you found re	esources to ne	eip students improve their attitudes and seir confidence?
	# of tchrs.	% (/17)	highlights of responses, grouped
yes	7	41 %	Materials that involve real-life • budgeting using flyers • using a calculator • hockey math quiz • newspaper math (graphs, temp., stats) • balancing the cash after coffee shop • inexpensive calculators and tape measures • some group work that has real-life application, e.g., working out sales tax • relate to real world
			 <u>Time and attention from the teacher</u> individual attention from the instructor spending time with learner I encourage and praise a lot working on a one-to-one basis (at own pace, get teacher's time, not embarrassing) the resource is me, 1:1 time small group work with the teacher
			 <u>Opportunities for feedback and success</u> short units of work with frequent tests for frequent feedback and success success success when students are successful or have a breakthroughs of cartoons
			<u>Other</u> • use of puzzles, esp. in pairs or teams • journaling process
no	3	18 %	 What do you think is needed? anything that can help here – this is a crucial area! I'd love to see prepared resources texts with examples showing real-life situations more material related to their own lives Canadian content in money exercises banks to develop user friendly material for low literacy levels balance of practical with concept/skills teacher support and feedback seems to be what is working well anything that allows students to have success in their work (small steps, clear explanations, more than just answers in the back) something visual – a video perhaps that demonstrates how "math" is used in daily life make it fun! time management materials
yes and	no 5	29 %	(Responses appear in the 'yes' and 'no' lists above.)
no respo	nse 2	12 %	
total	17	100 %	

Part 3: Planning and Assessment

Do you have a diagnostic test that you use regularly?

_	# of teachers	percent
yes	12	71 %
no	5	29 %
total	17	100 %

Teachers who said they do have a diagnostic test were asked, "Are you satisfied with it?"

	# of teachers	percent
yes	5	42 %
no	7	59 %
total	12	101 %

Teachers who said they do not have a diagnostic test were asked, "Would you like one?"

	# of teachers	percent
yes	4	80 %
no	1	20 %
total	5	100 %

Teachers' responses to the two supplementary questions can be combined to answer the question, "Do you need a new diagnostic test?", regardless of whether or not the teacher already has one.

	# of teachers	percent
yes	11	65 %
no	6	35 %
total	17	100 %

	# of teachers	%	
yes	4	23 %	How have you come to be able to do this?
			 most students' goals are to go on to high school/college, so their goals are the same (2)
			practice (1)
			 students' needs are basic and clear (1)
			 time is a huge problem – but I just do it (1)
			• it's part of the program (1)
no	8	47 %	Why not?
			 not enough time (6)
			 not enough knowledge of skills required for a student's goal (3)
it depends	5	29 %	On what?
			 whether their goal is further formal math education (in which case the training plan is straightforward), or to acquire particular life skills or job skills (in which case the training plan "has to be worked out", "is much more difficult", "takes a lot of time"; "my knowledge would be the weak link in this sort of situation") (5)
			materials available (1)
total	17	99 %	

Do you feel that you have the knowledge and time necessary to create a math training plan that is suited to a student's goal?

How do you use the Ministry of Training, Colleges and Universities' learning outcomes for numeracy?

	# of teachers*	percent
They are fully integrated into our program.	1	6 %
I use them when I am setting up and reviewing training plans.	6	35 %
I am waiting to see the level descriptions that the Ontario Literacy Coalition is writing.	6	35 %
I don't use them.	1	6 %
other: They are somewhat integrated into our program.	3	18 %
total	17	100 %

	# of teachers	%	
no	12	71 %	Why not?
			 use tests from existing textbooks or curriculum units (5)
			 don't have time (3)
			 develop tasks when needed (2)
			 working on it (2)
			 would use pre-developed tasks (1)
yes	2	12 %	How would you describe this process?
			 challenging finding authentic materials for higher levels, comfortable with process (1)
			 when a student appears ready to test his o her skill, they are given a review (1)
other	3	18 %	 yes and no (2)
			 occasionally (1)
total	17	101 %	

Do you regularly develop demonstration tasks for students?

Do you have achievement tests that you use regularly?

	# of teachers*	percent
yes	10	59 %
no	7	41 %
total	17	100 %

Teachers who said they do have achievement tests were asked, "Are you satisfied with them?"

	# of teachers*	percent
yes	9	90 %
no	1	10 %
total	10	100 %

Teachers who said they do not have achievement tests were asked, "Would you like some?"

	# of teachers	percent
yes	6	86 %
no	1	14 %
total	7	100 %

Teachers' responses to the two follow-up questions can be combined to answer the question, "Would you like some new achievement tests?", regardless of whether or not the teacher already has some.

	# of teachers*	percent
yes	8	47 %
no	9	53 %
total	17	100 %

* one teacher responded, "satisfied with current achievement tests, but would also like some new ones". She is recorded as a 'yes' in the first and second tables, not at all in the third table, and as a 'yes' in the fourth table.

Do you have an exit test that you use regularly?

	# of teachers*	percent
yes	7	41 %
no	9	53 %
no response	1	6 %
total	17	100 %

Teachers who said they do have an exit test were asked, "Are you satisfied with it?"

	# of teachers*	percent
yes	7	100 %
no	0	0 %
total	7	100 %

Teachers who said they do not have an exit test were asked, "Would you like one?"

	# of teachers	percent
yes	8	89 %
no	1	11 %
total	9	100 %

Teachers' responses to the two follow-up questions can be combined to answer the question, "Would you like a new exit test?", regardless of whether or not the teacher already has one.

	# of teachers*	percent
yes	9	53 %
no	8	47 %
total	17	100 %

* one teacher responded, "satisfied with current exit test, but would also like a new one". She is recorded as a 'yes' in the first and second tables, not at all in the third table, and as a 'yes' in the fourth table.

Part 4: Resources

What are the resources you use to teach math?

general response	# of responses	% of all responses	specific responses
textbooks	38	53 %	 Essential Mathematics for Life (7) Number Power (6) Breakthrough to Math (5) Basic Skills with Math (4) High School texts (3) 'a textbook' (no title given) (3) Math for the Real World (2) Math for the World of Work (2) The Metric Unit, Math you Need, Coming Together, Understanding Numeracy, Working with Cash, Money Makes Sense (1 each)
adult-appropriate manipulables or authentic documents	15	21 %	 measuring cups and spoons (3) calculator (2) tape measure (2) tally sheets and cash register receipts, actual cash drawer with coins, money (1 each) oven thermometer, thermometer (1 each) timers (1) battery tester (1) order forms and tax forms (1)
commercially produced materials that aren't textbooks	9	13 %	 ALBSU Math Pack (puzzles for memorizing Times Tables) (1) Strength in Numbers (1) Multiplication Bingo (1) flash cards (1) puzzles from discoveryschool.com; puzzles from a book; logic and math puzzles from various books, the internet, newspapers and magazines (1 each) Numbers in Our Lives – Numeracy methods and materials (1) CD ROMs (1)
resources made by the teacher or the teacher's program	7	10 %	 develop own materials, instructor-made materials, create resources as needed (1 each) Math Modules prepared by Career and College Prep Faculty at Algonquin (3) math journaling, written assignments mostly written by me (1)
other	3	4 %	 estimating time and amounts (1) pull bits/pieces from various math resources (1) 3-D (measurement) (1)
	72	101 %	

What do you like about the resources you use, and what are their shortcomings? (Presenting the responses to this question as comments on specific resources would have resulted in an atomistic compilation – no compilation at all, actually; therefore, strengths and weaknesses of the resources used have instead been grouped according to the resource's feature to which they refer. This way, one sees a list of strengths to look for in a resource, and a list of weaknesses to avoid.)

resource feature	strengths	weaknesses
application of math skills	 authentic, real-life familiar appropriate, relevant to students' lives useful, practical, tie-in with daily use, related to a life-skill manipulable, hands -on, kinesthetic creative, involving problem solving 	 no application of skills no word problems not enough applications applications are not practical or life-skill oriented applications are very difficult no hands -on not enough mixed word problems not creative in approach
explanations	 clear and simple minimal writing best way of doing something is presented (e.g., finding LCD, calculating with %) plenty of examples a lot of real-life examples easily demonstrated 	 present a way of doing the math that is not the best way (e.g., complicated way of calculating with %) not enough examples explanation is more complicated than exercise
practice	 a lot repetition read measuring devices over and over 	 not enough not enough drill-type and practice too much practice too drill-oriented
assessment	includes testsgood reviewsanswer key	 students can do all of a section but not feel confident that they know it no remediation
level of math	 starts at the very beginning basic, simple levels 1 and 2 useable by all levels low level 	• too basic
content	 group work teaches place value integrates calculators Canadian! has graphs, charts and diagrams Metric units made for specific tasks 	 Imperial units only not Canadian outdated not relevant for all students too 'cutsy' not on exactly what is needed not for adults

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resources feature	strengths	weaknesses
size and sequence of 'chunks' of content	 short, small manageable steps appropriate size so that students feel progress good sequence well structured 	 chunks are too big too many chunks too extensive
appearance	 good layout clear simple	 too simple hard to read out-of-date pictures graphs, diagrams not clear or polished not well-spaced looks homemade, not professional
language	 not too high level appropriate okay for ESL simple 	too hard for low-level readerswordy
study skills	 encourages students to reflect on their learning self-directed self-paced self-reliant allow for and encourage independent work helps students become familiar with next stage of education 	 large room for error when students work alone requires a lot of teacher supervision and guidance requires an independent student, so is not good for students who are not independent
variety	 a variety of tasks computer activity is a good break calculator activities are a good break culturally varied 	inconsistent
support for teacher	 good "methodology" suggests strategies	 not enough explanation to teacher of how to explain concepts
students' perception	 appeals to adults, maybe because it 'feels' academic fun 	 students think it is only for children
miscellaneous	 inexpensive lightweight made for adults, by adult educators 	 very time-consuming to prepare labour intensive to keep current

How often do you get LBS resources from the following places?

	ofte (3	en 3)	som (etimes ′2)		rarely (1)	n	ever (0)	resp	no Donse	mean
my program's resource centre	13	76%	3	18%	3	18%	0	0%	0	0%	2.8
my own collection of resources	9	53%	5	29%	2	12%	0	0%	1	6%	2.4
authentic documents, e.g., a newspaper	10	59%	3	18%	3	18%	0	0%	1	6%	2.4
my colleagues	1	6%	11	65%	3	18%	0	0%	2	12%	1.9
professional development activities	0	0%	10	59%	5	29%	1	6%	1	6%	1.6
the internet	0	0%	8	47%	5	29%	3	18%	2	12%	1.4
personal acquaintances	0	0%	4	23%	9	53%	2	12%	2	12%	1.1
the public library	0	0%	4	23%	5	29%	7	41%	1	6%	0.8
AlphaPlus	0	0%	4	23%	4	23%	7	41%	2	12%	0.8
my program's administrators	0	0%	3	18%	4	23%	7	41%	3	18%	0.7
volunteers	1	6%	2	12%	2	12%	7	41%	5	29%	0.5
other (from students)	-	-	1	6%	_	-	-	-	-	_	n/a

Have you borrowed any LBS resources from AlphaPlus?

	# of teachers	percent
yes	6	35 %
no	11	65 %
	17	100 %

Q 37

Are you registered on AlphaCom?

	# of teachers	percent
yes	9	53 %
no	8	47 %
	17	100 %

Q 38

Have you used the AlphaPlus index to web resources?

	# of teachers	percent
yes	4	23 %
no	13	76 %
	17	99 %

Do you have access to a computer that has an internet connection?

	# of teachers	percent
yes, as often as I like	15	88 %
sometimes	2	12 %
no	0	0 %
	17	100 %

Q 35

How would you describe your internet-using skills?

	# of teachers	percent
fabulous	1	6 %
satisfactory	10	59 %
rudimentary	6	35 %
non-existent	0	0 %
	17	100 %

Q 36

Are you interested in becoming more comfortable using the internet?

	# of teachers	percent
yes	14	82 %
no	3	18 %
	17	100 %

Have you looked at the National Adult Literacy Database (NALD) web site?

	# of teachers	percent
yes	7	41 %
no	10	59 %
	17	100 %

Q 40

What would help you to find and use LBS resources more easily?

	# of teachers	percent
handy resource centre	13	76 %
written notice about where to find resources	13	76 %
the address of a web site that organizes literacy resources on the internet	12	71 %
a resource person	11	65 %
some free time	9	53 %
some paid time	8	47 %
an internet connection	2	12 %
other (training, resources that have been reviewed and rated by a knowledgeable person)	2	12 %
a computer	0	0 %

aummarized response	# of roomonooo	% of all	
summanzed response	# or responses	responses	specific responses
provide me with them	10	48 %	 via the internet, a web site (3) put them in an existing program resource centre (2) demonstrate hands on activities
			give opportunity to test in classroom; PD Day (2)
			 give access to a handy resource centre, or give the ability to keep resources in the classroom (2)
			 provide them as ready to use as possible, photocopiable for student use, and tied to the demonstrations (1)
tell me about them	9	43 %	• a newsletter (3)
			 tell me where and how to get them (2)
			• put together a catalogue (2)
			• e-mail (1)
			written notice (1)
other	2	10 %	 I prefer to talk with someone rather than getting info from computer (1)
			• make it possible for us to purchase resources that have been reviewed and recommended (1)
	21	101 %	

If someone wanted to make numeracy resources available to you, how should they do it?

Would you like to know more ways to...

	Yes, I <u>I</u> would I know moi to do t (3	<u>really</u> ike to re ways this.)	Yes , be i know way t	it would nice to w more s to do his. 2)	No , knov ways	I alread w enoug to do th (1)	ly Ih is. no re	esponse	mean
 use adult-appropriate manipulables and real life materials in the classroom?	- 12	71 %	3	18 %	0	0 %	2	12 %	2.8
 make math relevant a meaningful?	nd 12	71 %	4	23 %	0	0 %	0	0 %	2.6
 break down real-life numeracy tasks into learnable chunks?	9	53 %	7	41 %	0	0 %	0	0 %	2.4
 diagnose and evaluate students' ability and understanding?	e 9	53 %	6	35 %	1	6%	0	0 %	2.4
 encourage effort, excellence and independence?	8	47 %	7	41 %	1	6%	0	0 %	2.3
 find or make learning activities?	7	41 %	8	47 %	0	0 %	1	6 %	2.3
 explain and demonstrate concepts and processes?	6	18 %	9	53 %	0	0%	1	6%	2.3
 manage a multi-level group of students who learn at different rates	4 ?	23 %	7	41 %	1	6%	4	23 %	2.1
 do something else? (g students a review prio them writing a placeme test)	ive 1 r to ent	6 %		n/a	n/a	a		n/a	n/a

Do you need the kinds of resources listed below?

	Yes! I really need this! Many	students would benefit right away! (3)	Yes. It would be nice to have this. Some students might benefit. (2)		No. I have enough of this. (1)		No! I have never used this in a math class and I don't think I ever will. (0)		no response		mean (of all responses)	mean (taking failure to respond as an indication of no need)
adult-appropriate concrete materials	12	71 %	5	29 %	0	0 %	0	0 %	0	0 %	2.7	2.7
units of related activities	9	54 %	7	41 %	1	6 %	0	0 %	0	0 %	2.5	2.5
software	7	41 %	8	47 %	0	0 %	0	0 %	2	12 %	2.5	2.2
theme units	6	35 %	6	35 %	0	0 %	0	0 %	5	29 %	2.5	1.8
computer activities	7	41 %	10	59 %	0	0 %	0	0 %	0	0 %	2.4	2.4
internet sites	6	35 %	10	59 %	0	0 %	0	0 %	1	6 %	2.4	2.2
calculator activities	7	41 %	7	41 %	1	6 %	0	0 %	2	12 %	2.4	2.1
sample demonstration tasks	6	35 %	9	53 %	0	0 %	0	0 %	2	12 %	2.4	2.1
ideas for managing multi-level classes	5	29 %	9	53 %	0	0 %	0	0 %	3	18 %	2.4	1.9
stand-alone activities	7	41 %	7	41 %	0	0 %	1	6 %	2	12 %	2.3	2.0
curriculum for specific goals	4	23 %	9	53 %	0	0 %	0	0 %	4	23 %	2.3	1.8
oral drills	3	18 %	7	41 %	1	6 %	0	0 %	6	35 %	2.2	1.4
diagnostic tests	5	29 %	7	41 %	3	18 %	0	0 %	2	12 %	2.1	1.9
puzzles	4	23 %	8	47 %	2	12 %	0	0 %	3	18 %	2.1	1.8
written drills	4	23 %	8	47 %	2	12 %	0	0 %	3	18 %	2.1	1.8
teacher training	3	18 %	8	47 %	2	12 %	0	0 %	4	23 %	2.1	1.6

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	Yes! I really need this! Many	students would benefit right away! (3)	Yes. It would be nice to have this	Some students might benefit. (2)		No. I have enough of this. (1)	No! I have never used this in a math	class and I don't think I ever will. (0)		no response	mean (of all responses)	mean (taking failure to respond as an indication of no need)
games	2	12 %	8	47 %	1	6 %	0	0 %	6	35 %	2.1	1.3
modules	4	23 %	4	23 %	1	6 %	1	6 %	7	41 %	2.1	1.2
support for using learning outcomes	1	6 %	13	13 %	1	6 %	0	0 %	2	12 %	2.0	1.8
group-work activities	4	23 %	8	47 %	1	6 %	1	6 %	3	18 %	2.0	1.6
word problems	4	23 %	6	35 %	4	23 %	0	0 %	3	18 %	2.0	1.6
videos	3	18 %	4	23 %	1	6 %	1	6 %	8	47 %	2.0	1.1
experts to consult	0	0 %	10	59 %	1	6 %	0	0 %	6	35 %	1.9	1.2
theory and research on adult numeracy	1	6 %	8	47 %	3	18 %	0	0 %	5	29 %	1.8	1.3
context-free, paper-and- pencil exercises	3	18 %	5	29 %	4	23 %	2	12 %	3	18 %	1.6	1.4
textbooks	1	6 %	6	35 %	7	41 %	2	12 %	1	6 %	1.4	1.3
other (pre-placement review)	1	6 %	-	_	-	-	-	_	-	_	-	-
other (critical thinking skills)	-	_	1	6 %	-	-	-	_	_	_	_	-

In the following table, the resources from the previous page have been sorted according to the mean expressed need for them ('no response' is not included). If a resource's mean is close to 3, that resource is written in the first column, and so on.

very much needed			not at all needed		
I really need this! Many students would benefit right away!	It would be nice to have this. Some students might benefit.	l have enough of this.	I have never used this in a math class and I don't think I ever will.		
 adult appropriate concrete materials units of related activities software theme units 	 computer activities internet sites calculator activities sample demonstration tasks ideas for managing multilevel classes stand alone activities curriculum for specific goals oral drills diagnostic tests puzzles written drills teacher training games modules support for working with learning outcomes group work activities videos experts to consult theory and research on adult numeracy context-free, paper-and-pencil exercises 	• textbooks			

The following table again sorts the resources, but this time it considers a teacher's lack of response to mean that he or she doesn't need that particular resource.

very much needed			not at all needed
l really need this! Many students would benefit right away!	It would be nice to have this. Some students might benefit.	l have enough of this.	l have never used this in a math class and l don't think I ever will.
 adult appropriate concrete materials units of related activities 	 computer activities software internet sites calculator activities sample demonstration tasks stand alone activities ideas for managing multi-level classes diagnostic tests theme units curriculum for specific goals puzzles written drills support for working with learning outcomes teacher training group work activities word problems 	 oral drills context-free , paper- and-pencil exercises games theory and research on adult numeracy textbooks modules experts to consult videos 	

Decide which resource you need the most and write 1 beside it. Then choose the next most-needed item, and write 2 beside it. Continue until you have ranked the 5 resources you need the most.

	# of teachers who ranked this 1st	# of teachers who ranked this 2nd	# of teachers who ranked this 3rd	# of teachers who ranked this 4th	# of teachers who ranked this 5th	<pre># of teachers who put this in their top five</pre>
adult-appropriate concrete materials	5	2	1	_	_	8
diagnostic tests	2	-	1	1	-	4
units of related activities	2	_	_	1	2	5
word problems	1	1	_	_	_	3
computer activities	_	3	_	1	_	4
ideas for managing multi-level classes	_	3	_	1	-	4
sample demonstration tasks	2	-	_	1	1	4
teacher training	1	-	1	_	1	3
theme units	_	-	_	3	2	5
curriculum for specific goals	_	1	1	_	-	2
group-work activities	_	1	1	_	_	2
textbooks	_	1	1	_	-	2
software	_	-	2	_	1	3
calculator activities	_	1	_	_	1	2
oral drills	_	-	_	2	-	2
context-free, paper-and-pencil exercises	_	-	1	_	1	2
internet sites	-	-	-	2	-	2
stand-alone activities	_	_	1	_	_	1
written drills	_	_	1	_	_	1
support for using learning outcomes	_	_	1	_	_	1
puzzles	_	_	_	_	2	2
modules	_	-	_	_	1	1
other (pre-placement review exercises)	1	-	-	-	-	1
# of teachers who ranked a resource in this place*	14	13	12	12	12	

The following four resources were not on any teacher's list of his or her five most needed resources:

- videos
- games
- theory and research on adult numeracy
- experts to consult

*The numbers in this row are not all the same, because one teacher identified only her one most needed resource, and another teacher identified only her two most needed resources. None of these numbers is the expected 17 (all teachers), because three teachers did not rank their top-five most needed resources; two of these teachers didn't have any 'really needed' resources to rank, and the third one had two, but didn't rank them.

To teach math, I wish I had...

summarized responses	# of rsps.	%	verbatim responses
real-life adult material	7	17 %	 more real life theme oriented units, e.g., money management,, metric measurement more real life math (integrated) activities relevant to our students materials that are relevant to adults we need a collection of generic math demonstrations based on "real-life" activities as this is the next ministry requirement more demonstration activities real-life adult material some good contextual resources that reflect the adult world, needs and experiences
Canadian content	7	17 %	 Cdn content textbooks with Canadian content CANADIAN CONTENT more Canadian based materials Canadian content! Canadian Canadian content is very important
manipulatives for adults	6	14 %	 manipulatives for adults lots of manipulables 5 cash registers manipulatives to teach measurement a lot more manipulables tools
computer-related resources	3	7 %	 Adult-oriented software for times tables, etc. I really want some high quality, easy to access math software more computer automated learning materials
materials on specific subjects	2	5 %	 better material on teaching place value and order of operations a resource that teaches percent using ratio and proportion and 'mixes up' the word problems and has more review

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miscellaneous (general)	8	20 %	 students who could remember what they learned last week and could recognize that they can apply what they do in class to their lives outside more confidence teaching math (I have forgotten most of my algebra and geometry) a million dollars more time! I'd like to be able to spend a lot more time with each student as their numeracy gaps are so different a variety of tried and true resources choice – a shopping cart of (sic) resources need to be cheap – money is a huge problem!
miscellaneous (specific)	8	20 %	 simple adult math games to make math more fun a review package of basic math skills for new students before they write the placement testjog their memoriesIn this way, students would be placed more appropriately, which would avoid other problems such as boredom, frustrations something that addresses the language of math as it teaches math skills [paraphrased] more enrichment learning activities a textbook with the answer worked out but not in the same book as the questions a revision to Jerry Howatt's Basic Skills series or a resource that is very similar, to use as a pre-placement review [paraphrased] ready-made materials that were broken down into 3 subgroups for the same task: (1) for a very weak student who needs small steps and lots of support, (2) an average student who can move through material with a lot of practice, and (3) a strong student who simply needs a resource to work on their own with [paraphrased] a better understanding of the thinking concepts behind the skills, strategies to teach these, activities to use, and Cdn content exercises for reinforce these skills

42 100 %

N.B. Two teachers did not respond to this question.