Teacher Questionnaire

Integrating Computer Technology into the Curriculum at the Grade 4 and 5 Levels ONLINE QUESTIONNAIRE for Gr. 4 & 5 B.C. teachers (including computer teachers) only please. Teachers at ALL LEVELS of computer expertise are needed!

This questionnaire can be: (a) submitted directly from the website

http://intergate.bc.ca/personal/boekhout/technologyincurriculum

(if you are not sure about this capability, please access the Teacher Lesson on Surveys first!)

(b) printed out and mailed in,

(c) printed out and faxed to: 1-604-944-9551

(d) cut and pasted directly into an email message and returned via email

Please note that email attachments will not be accepted, due to the potential risk of viruses.

Please be reassured that your privacy will be respected. At no time will your name or school be revealed. Reference numbers are initially required in order to organize the data into groupings and to allow for the possibility of contacting a teacher for a further interview. (This interview would of course be entirely voluntary.) Data collected will remain protected in the researcher's possession and will not be distributed to any other persons or authorities. After the data has been analyzed, all data will be destroyed in order to maintain as complete privacy as possible. (Please refer to the SFU University Ethics Review Committee forms provided.)

** ONLINE PARTICIPANTS are instructed to provide only that information which the school would not consider confidential and to omit any answers which they feel would need permission of the school. This questionnaire is not intended to be invasive. NOTE: The use of this online questionnaire has been granted by the SFU Ethics committee, effective January 27, 2000.

The following questionnaire is divided into five sections:

** ALL participants must also complete an Informed Consent from the SFU Ethics board**

- A. Demographic information
- B. Specific uses of computer technology as related to curriculum areas
- C. Conditions connected with the use of technology
- D. General level of student computer usage
- E. School demographic information (Online version)

While Part B forms the major thrust of the data collection, the information garnered in Parts A, C, D, and E will be used to draw inferences regarding the successful integration of technology into the curriculum and to suggest areas of growth which could be supported by various levels of the education administration. It is very important that teachers at all levels of computer expertise are represented!

Your time and effort to complete this questionnaire is sincerely appreciated. The aim of this study is to provide a useful contribution to the working knowledge of the BC educational system.

If you would like to contact me in order to clarify any of the following directions, PLEASE do so!!!

Nora Boekhout (pronounced "book-out") Phone: 604 - 941-1126 Fax: 604 - 944 - 9551 Email: <u>boekhout@moody.bc.ca</u>

PART A: DEMOGRAPHIC INFORMATION

1.	Number of years teaching: total years
2.	Number of years teaching Grade 4 and/or Grade 5: years
3.	Grade levels taught recently: Current year:, Last year:, Two years ago:
4.	Number of years actively using computers with students (any grade): years (actively = leading educational computer activities, not just giving "free choice time")
5.	Number of years at this particular school: years
6.	Gender: Male Female
	Are you involved in any "extra" school computer responsibilities? No Yes yes, please put a check mark beside all the roles which you handle:
Ple K:	Classroom Teacher who teaches more than one class of "computers" ease note how many classes of each grade you teach (including your own) 1:2:3:4:5:others please specify: Computer Teacher: What is your total allotted time for computer duties:hours/week
Ple	<pre></pre>
wc Ple	 Computer Contact Person Computer Supervisor for out-of-school computer use Computer Club Supervisor Library Computers Supervisor. If you are the school librarian, please note your allotted time orking in the library: hours per week OR days per week. Other (please specify): ease note any additional pertinent information regarding your position, for example, if you are a part-time cher, if you job share, if you handle other specialty classes.
8.	Do you have a computer at home: No, Yes If yes, are you currently connected to the Internet at home? No, Yes
9.	Have you borrowed a school computer to take home within the past 12 months: No, Yes
	. How often have you personally (not with your class) used a computer (at home or school) in the st 14 days: Not at all, 1-4 times, 5-9 times, 10-19 times, 20+ times
	. How many technology workshops or seminars have you attended in the last two years: Pro-D Day workshops: District sponsored: Other (eg self-initiated):
12	. On a scale of 1 to 5, I would consider my personal use of the computer to be: (1=novice, 5=proficient)
13	. On a scale of 1 to 5, I would consider my teaching of computer technology to my class to be: (1=novice, 5=proficient)

PART B SPECIFIC USES OF COMPUTER TECHNOLOGY AS RELATED TO CURRICULUM AREAS

The curriculum areas are specified as the B.C. IRP mandates. These descriptions have been copied from the appropriate B.C. IRPs, which are now available on-line from the website: <u>http://www.bced.gov.bc.ca/irp/</u>. (The following lists on this page are for reference only.)

List of Six	Curriculum Areas – as aefinea by B.	C. IKPS
Information Technology	Language Arts	Mathematics
(nb. No longer a mandated area)	a. Comprehend and Respond	a. Number
a. Foundations (using IT in all areas)	Strategies and Skills	b. Patterns and Relations
Knowledge	Comprehension	c. Shape and Space
Skills	Engagement and Personal	d. Statistics and Probability
Attitudes	Response	
b. Process (using IT to solve	Critical Analysis	
problems)	b. Communicate Ideas and	Personal Planning
Selecting appropriate IT	Information	a. The Planning Process
Organizing	Knowledge of Language	Personal goals
Modifying	Composing and Creating	Monitoring Progress/Adjusting
c. Presentation (using various media)	Improving Communications	Goals
Communicating Ideas	Presenting and Valuing	Problem-Solving
	c. Self and Society	b. Personal Development
	Personal Awareness	Healthy Living
Social Studies	Working Together	Mental Well Being
a. Applications of Social Studies	d. Building Community	Family Life Education
b. Society and Culture	Science	Child Abuse Prevention
c. Politics and Law	a. Life Sciences	Substance Abuse Prevention
d. Economy and Technology	b. Physical Sciences	Safety and Injury Prevention
e. Environment	c. Earth and Space Science	c. Career Development

List of Six Curriculum Areas as defined by RC IRPs

1. Text processing tools		
a. Word processor (simple report	4. Programming and	7. Communications
or document, see also 6c)	Operating Systems	a. Within-School Group
b. Keyboarding (typing practice)	a. Operating Systems (Mac Os, Win)	collaborative projects (intranet)
c. Spell-Checker (with word proc)	b. LOGO, Microworlds (LOGO)	b. School-School (Internet)
d. Outliner (document structuring)	c. Cocoa	c. School-Home Communications
	d. HyperTalk	d. E-mail, Keypals etc
2. Instructional Software	e. HTML	e. On-line databases
a. Problem Solving Programs		f. On-line services, Ask-an-expert
b. Tutorial Programs	5.Games & Simulations	
c. Drill & Practice Programs	a. Simulations (eg SimCity)	8. Multimedia
(not in game format - see also 5b)	b. Instructional Games eg Math Blaster	a. Videodisc
d. Software accompanying a Textbook	c. Recreational Games or	b. Robotics
	Entertainment Programs	c. HyperCard
		d. HyperStudio
f. Internet research (searching)g. On-line instructional websites	6. Graphics & Operating Tools	e. Digital Chisel
g. On-line instructional websites	a. Ready-Made Art (eg clip-art)	f. PowerPoint
3. Analytic & Information Tools	b. Painting or Drawing	g. HTML webpage construction
a. Databases	c. Desktop Publishing, (a complex	
b. Spreadsheets	report, planned layout etc)	
c. Chart/Graphing	d. Drafting, Computer-Aided Design	** Note: The list of computer
d. Calculator (as part of computer)	e. Music Composition	applications, divided into 8
e. Lab Interfaces (science probes)		groupings, is based on the Sheingold
f. Statistical Programs		and Hadley study (1993).

List of Various Applications - Computer Technology

**Please answer the following questions primarily with respect to your current situation. As this year's students will not have completed all areas of the curriculum, you may need to draw upon your previous teaching experience. Recent teaching is the most relevant.

Part B1: Language Arts Curriculum Area

14. Do you presently use any computer technology to implement your Language Arts program?

No ____ Yes ___

15. If yes, please elaborate on the activities and projects in which computer technology has helped you achieve learning outcomes in Language Arts. (Please specify the computer programs that you used).

16. What computer technologies or projects (in Language Arts) do you see yourself moving towards in the next 2 years?

Part B2: Math Curriculum Area

- 17. Do you presently use any computer technology to implement your Math program? No ____ Yes ____
- 18. If yes, please elaborate on the activities and projects in which computer technology has helped you achieve learning outcomes in Math. (Please specify the computer programs that you used).

19. What computer technologies or projects (in Math) do you see yourself moving towards in the next 2 years?

Part B3: Personal Planning Curriculum Area

20. Do you presently use any computer technology to implement your Personal Planning program?

No __ Yes __

21. If yes, please elaborate on the activities and projects in which computer technology has helped you achieve learning outcomes in Personal Planning. (Please specify the computer programs that you used).

22. What computer technologies or projects (in Personal Planning) do you see yourself moving towards in the next 2 years?

Part B4: Science Curriculum Area

- 23. Do you presently use any computer technology to implement your Science program? No ____ Yes ____
- 24. If yes, please elaborate on the activities and projects in which computer technology has helped you achieve learning outcomes in Science. (Please specify the computer programs that you used).

25. What computer technologies or projects (in Science) do you see yourself moving towards in the next 2 years?

Part B5: Social Studies Curriculum Area

26. Do you presently use any computer technology to implement your Social Studies program?

No ____ Yes ___

27. If yes, please elaborate on the activities and projects in which computer technology has helped you achieve learning outcomes in Social Studies. (Please specify the computer programs that you used).

28. What computer technologies or projects (in Social Studies) do you see yourself moving towards in the next 2 years?

Part B6: Information Technology Area

Please answer the following questions primarily with respect to your current situation. As this year's students will not have completed all areas of the curriculum, you may need to draw upon your previous teaching experience. Recent teaching is the most relevant.

Put a **check mark** if you have used the following for what you consider to be a **'substantial project'** using the computer as a tool. (*"If in doubt... leave it out!"*)

29. Text processing tools	Lang.Arts	Math	Personal Plan	Science	Social St.	Other
1a Word processor (including a simple report or document, see also 6c Desktop publishing)						
1b Keyboarding (where primary objective is typing practice)	n/a	n/a	n/a	n/a	n/a	
1c Spell-Checker (used in conjunction with Word Processing)						
1d Outliner (document structuring and planning used with word proc.)						
1e Others (please specify):						

30. Instructional Software	Lang.Arts	Math	Personal Plan	Science	Social St.	Other
2a Problem Solving Programs (primary objective is thinking skills)						
2b Tutorial Programs2c Drill & Practice Programs (not in						
game format - see 5b instruct. games) 2d Software accompanying a Textbook						
2e CD-ROM research						
2f Internet research (search engines, directories, catalogues etc)						
2g On-line instructional websites						
2h Other (please specify:						

31. Analytic/Information	Lang.Arts	Math	Personal Plan	Science	Social St.	Other
Tools						
3a Databases						
3b Spreadsheets						
3c Chart/Graphing						
3d Calculator (as part of computer)						
3e Lab Interfaces (scientific probes connected to the computer)						
3f Statistical Programs						
3g Other (please specify):						

32. Programming and Operating Systems	Lang.Arts	Math	Personal Plan.	Science	Social St.	Other InfoTech
4a Operating Systems	n/a	n/a	n/a	n/a	n/a	
4b LOGO, Microworlds (LOGO)	n/a	n/a	n/a	n/a	n/a	
4c Cocoa	n/a	n/a	n/a	n/a	n/a	
4d HyperTalk	n/a	n/a	n/a	n/a	n/a	
4e HTML	n/a	n/a	n/a	n/a	n/a	
4f Other (please specify):	n/a	n/a	n/a	n/a	n/a	

Part B6: Information Technology Area continued

33. Games & Simulations	Lang.Arts	Math	Personal Plan.	Science	Social St.	Other
5a Simulations (eg SimCity)						
5b Instructional Games (eg math or spelling practice in a game format) 5c Recreational Games/Entertainment Programs						
5d Other (please specify):						

34. Graphics & Operating Tools	Lang.Arts	Math	Personal Plan.	Science	Social St.	Other
6a Ready-made art (eg. Clip-art)						
6b Painting or Drawing						
6c Desktop Publishing (a complex report with graphics, planned layout etc. See also 1a – simple reports)						
6d Drafting, Computer-Aided Design						
6e Music Composition						
6f Other (please specify):						

35. Communications	Lang. Arts	Math	Personal Plan.	Science	Social St.	Other
7a Within-School Group collaborative projects (intranet)						
7b School-School Communications (Internet)						
7c School-Home Communications						
7d E-mail, Keypals etc						
7e On-line services, Ask-an-expert						
7f On-line databases						
7g Other (please specify):						

36. Multimedia	Lang.Arts	Math	Personal Plan.	Science	Social St.	Other
8a Videodisc						
8b Robotics						
8c HyperCard						
8d HyperStudio						
8e Digital Chisel						
8f Power Point						
8g HTML webpage construction						
8h Other (please specify):						

PART C: CONDITIONS CONNECTED WITH THE USE OF TECHNOLOGY

NOTE: Some questions will not be applicable to your situation, these may be rated "N/A". COMPUTER TEACHERS: Omit Questions 37, 38, &40. Please answer Question #39 as to how you communicate with the grade 4/5 teachers whose students you teach computers.

 37. Check all that apply to your situation: a- I teach my own class "computer time" for minutes per week b- a computer teacher takes my class for "computer" minutes per week c- a computer teacher and I team-teach my "computer" minutes per week d- another teacher takes my class for "computer" minutes per week e- another teacher and I team-teach my "computer" minutes per week
38. Do you receive computer lab time as a prep time? No:Yes:If yes, how many minutes per week
 39. If your school has a computer teacher, check all that apply to your situation: a- N/A b- we don't have meetings

- 40. If another teacher teaches your class "computer", or if you team-teach your class along with another teacher. Check all that apply to your situation:
- _____ a- N/A
- _____ b- we don't have meetings
- _____ c- we have regular meetings _____ minutes/week OR _____ minutes/month
- _____d- we meet in my prep time _____minutes/week OR _____ minutes/month
- e- we have funded release time _____minutes/week OR _____ minutes/month
- _____ f- we talk at out-of-school times _____ minutes/week OR _____ minutes/month
- _____g- other modes of communication (please specify): ______ _____minutes/week OR _____ minutes/month
- 41. Does your school provide any means of support for using technology in your teaching curriculum? No_____ Yes _____

Check all that apply:

- _____a- school sponsored training sessions/workshops for using technology
- _____b- school sponsored training sessions/workshops for integrating technology into the curriculum
- _____ c- books or pamphlets for using the school software
- _____d- an Information Technology resource library of commercial books
- _____e- commercial lesson plan instruction books
- _____f- teacher generated lesson ideas in binders or folders
- _____ g- grade groupings of technology teaching ideas in binders or folders
- _____h- videos regarding the use of technology
- _____i- Other (please specify) ______

42. Approximately how many computer training sessions/workshops in the last two years have been provided by your school (apart from those offered by the district) sessions
43. How many of these school sponsored training sessions have you attended? sessions
44. Rate the following on a scale of 0 to 3 to show how these resources have helped you in integrating technology into the curriculum . (Please circle only one number.)
0 indicates that you have not tried this particular resource or that it is not available at your school.1 = minimally helpful2 = of some help3 = very helpful
 0 - 1 - 2 - 3 a- Resource books or pamphlets for using specific software 0 - 1 - 2 - 3 b- Ministry Publications regarding technology 0 - 1 - 2 - 3 c- Your school's Information Technology resource library (not including specific software) 0 - 1 - 2 - 3 d- Books you have purchased or borrowed on your own
 0 - 1 - 2 - 3 e- School sponsored training sessions/workshops for using technology 0 - 1 - 2 - 3 f- School sponsored training sessions/workshops for integrating technology into the curriculum
 0 - 1 - 2 - 3 g- Commercial lesson plans for teachers 0 - 1 - 2 - 3 h- Teacher generated lesson ideas in binders or folders 0 - 1 - 2 - 3 i- Grade groupings of technology teaching ideas in binders or folders 0 - 1 - 2 - 3 j- Videos regarding the use of technology
 0 - 1 - 2 - 3 k- District workshops after school 0 - 1 - 2 - 3 l- Workshops you have attended on your own (ie. not provided by school district) 0 - 1 - 2 - 3 m- Professional Day workshops 0 - 1 - 2 - 3 n- Professional Development time allotted to technology 0 - 1 - 2 - 3 o- Lesson plans provided along with software programs
 0 - 1 - 2 - 3 p- Support from a computer teacher 0 - 1 - 2 - 3 q- Support from other teachers 0 - 1 - 2 - 3 r- Support from district groups or networks 0 - 1 - 2 - 3 s- Support from a district coordinator or technician
 0 - 1 - 2 - 3 t- Internet resources/lesson ideas 0 - 1 - 2 - 3 u- District Library resources/lesson ideas 0 - 1 - 2 - 3 v- District Internet resources/lesson ideas 0 - 1 - 2 - 3 w- Other (please specify) 0 - 1 - 2 - 3 x- Other (please specify)

45. In your own words, what would be the best assistance to integrating technology into your curriculum studies?

<u>PART D –</u> <u>GENERAL LEVEL OF STUDENT COMPUTER USAGE</u>

D1: Peripheral devices

46. Which devices have you used for or with your class (within last 2 years)? (Check all that apply.)

- _____a- Printers Colour (or colour laser)
- _____ b- Printers Laser
- _____ c- Printers Other (not laser or colour)
- _____d- Camera (regular camera with photos scanned or converted through Internet or on CD ROM)
- e- QuickCam (digital photos or video but camera stays attached to computer)
- ______f- Portable Digital camera (with corresponding software)
- ______g- Video camera (regular video with tape converted to digital format)
- h- Digital Video Camcorder (with corresponding software)
- ______i- Computer screen display (using an LCD panel with overhead projector)
- _____j- Computer screen display (using a projector, eg. LitePro, Proxima etc.)
- _____k- Computer screen display (viewing on a TV monitor, eg. AverKey)
- _____l- Scanner
- _____ m- Audio (digital recordings: voice, music, sound effects etc.)
- ______n- Music (using midi equipment or other types of audio software)
- ______ o- Scientific probes attached to the computer
- _____ p- Robotics (eg. Lego-dacta)
- _____q- other (please specify): ______

D2: Computers in the Classroom

47. How many computers do you have in your classroom?

• Teachers WITHOUT A CLASS COMPUTER may skip questions 48 to 53.

older but satisfactory, modern, other (please specify):	48. How would you rate	your class comp	uter(s). Check <u>one</u> only.	outdated,	
	older but satisfactory _	, modern	, other (please specify):		

49. How many computers in your classroom have a CD-ROM?

- 50. What networking options are available in your classroom?
 - _____a- None
 - _____ b- Not sure
 - _____ c- Networked to use computer programs from a school server
 - _____d- Intranet (can send messages to other computers within the school only)
 - e- Quickmail system (can send messages within the school district only)
 - _____ f- Internet (complete WWW access)
 - _____ g- Email (with WWW access)
 - _____h- other (please specify): ______

51. Is the classroom computer(s) used by the students? No _____ Yes _____

If yes, how do your students save their classroom work or projects? Check all that apply.

- _____ a- they don't save, they just print it out
- _____ b- on floppy disks
- _____ c- on the local hard drive
- _____d- on a classroom server disk (eg. Individual student folders)
- e- on a school network server disk (eg. Individual student folders accessible throughout school)
- _____ f- other (please specify): ______

52. Do you ever designate computer time on the classroom computer(s)? No _____ Yes _____

If yes, what would be an average time that EACH student is <u>scheduled</u> on a classroom computer.? _____ minutes per week OR _____ minutes per month

53. On the average, how much unscheduled time do students spend on educational activities or projects on the classroom computer during class time? estimate for avid users : ______ minutes per week OR ______ minutes per month estimate for novice users: ______ minutes per week OR ______ minutes per month

D3: Computers in the Computer Lab

54. How much scheduled computer lab time does your class receive per week?

• Teachers WHO DO NOT HAVE A COMPUTER LAB may skip question #55 - 57.

55. How much extra (unscheduled) computer lab time does your class take on the average? _____ none OR ______ minutes per week OR ______ minutes per month OR ______ minutes per school year

56. Do your students have access to BOTH a classroom computer and to a computer lab? No _____ Yes ____

If yes, how much classroom computer time would you estimate that your students spend on designated classwork or projects, as compared to classwork done during "computer lab time"? Check <u>one</u> only.

- _____a- negligible classroom computer time
- _____ b- more lab time than classroom computer time for most students
- _____ c- approximately equal amounts of both classroom and lab time for most students
- _____ d- more classroom computer time than lab time for most students
- 57. How do your students save their computer lab work or projects? Check all that apply.
 - _____ a- they don't save, they just print it out
 - _____ b- on floppy disks
 - _____ c- on the local hard drive
 - _____d- on a lab network server disk (eg. Individual student folders)
 - _____e- other (please specify): ______

Part E - school demographic information (Online version)

58. Please indicate your school district:
59. Please indicate your school
60. How many students are currently enrolled in your school?
61. How many teachers at your school are at: grade 4 level (including 3/4) grade 4/5 split grade 5 level (including 5/6)
62. How would you characterize your school according to socio-economic standing? very poor poor middle class relatively affluent very affluent
63. Does your school have: no extra help a full-time computer teacher a part-time computer teacher a teacher who assists with computers other (please specify)
64. Does your school have a computer lab? No Yes If yes, how many computers
 65. How would you generalize the average age of your schools' teacher/student (ie. not office) computers? mainly outdated models (limited capabilities for today's modern software) fairly even combination of outdated models and older models mainly older models with a few newer models and some outdated models fairly even combination of older models and newer models fairly even combination of older models and newer models mainly newer models (equipped with CD-ROM etc.)
66. About how many of the teacher/student computers (ie. not office) are equipped with CD-ROM?
67. How long has your school been connected to the Internet? months years
68. About how many of the teacher/student computers are connected to the Internet?
 69. How would you generalize your overall staff commitment to integrating technology? lesser priority than most school goals equal priority than most school goals equal priority with most school goals but not currently the foremost goal greater priority than most goals
70. Are there any comments regarding the integration of computer technology into the curriculum which have not been addressed to your satisfaction in this questionnaire? Please let me know here!

71. Where did you learn about this online questionnaire?

The End! Please remember to complete the SFU Ethics form. Thank you for your participation!

SIMON FRASER UNIVERSITY

INFORMED CONSENT BY SUBJECTS TO PARTICIPATE IN A RESEARCH PROJECT OR EXPERIMENT

The University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection and full understanding of the procedures. Your signature on this form will signify that you have received a document which describes the procedures and benefits of this research project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Any information that is obtained during this study will be kept confidential to the full extent permitted by law. No personal information will be divulged, unless required by a court or other legal body. Knowledge of your identity is not required. You will not be required to write your name or any other identifying information on the research materials. Materials will be held in a secure location and will be destroyed after the completion of the study.

Having been asked by NORA **BOEKHOUT** of the **Faculty of Education of Simon Fraser University** to participate in a research project experiment, I have read the procedures specified in the document.

I understand the procedures to be used in this study and the personal risks to me in taking part.

I understand that I may withdraw my participation in this study at any time, even if I sign this consent.

I also understand that I may register any concern I might have about the study with Dr. Robin Barrow, Dean of Education of Simon Fraser University (Email: <u>barrow@sfu.ca</u>) Faculty phone: 604-291-3148).

I may obtain copies of the results of this study, upon its completion, by contacting: Nora Boekhout Email: <u>boekhout@moody.bc.ca</u> Phone: 604- 941-1126

I have been informed that the research material will be held confidential by the Principal Investigator.

I understand that my supervisor or employer may require me to obtain his or her permission prior to my participation in a study such as this.

I agree to participate by: answering questions and offering opinions regarding the issue of the integration of computer Technology

into the Grade 4/5 curriculum, either in writing, by email, or by answering in person on audio tape, as to be determined by myself

and the researcher, Nora Boekhout,

during the time period February 2000 to June 2000,

at my school of employment or an alternate place as determined by myself and the researcher, Nora Boekhout.

NAME (please type or print legibly): _____

ADDRESS:

SIGNATURE: _____ WITNESS: _____

DATE:

SIMON FRASER UNIVERSITY INFORMATION SHEET FOR SUBJECTS

This form describes the proposed tests involving physical, psychological, or invasive testing, a description of the procedures to be followed, and a statement of the risks to the subjects and benefits of the research.

Title of Project: The Integration of Computer Technology into the Curriculum at the Grade 4 and 5 Levels

Over the last two decades, teachers in the B.C. school system have been understandably perplexed about the role that computers should play in a student's daily education. Current literature recommends a move from an isolated study of computer science to an integration of computer technology into the standard curriculum. If this "invisible" integration is to be facilitated, we need to first determine exactly where and how computer technology is currently being used. Furthermore, this documentation needs to come from within our own British Columbia educational system.

This research study addresses the question "How are teachers using computer technology to implement the major curriculum areas at the Grades 4 & 5 Levels?"

Several issues are involved: (a) which curriculum areas are being most consistently addressed via computer technology? (b) which computer technologies are being most consistently used across different curriculum areas? (c) are there particular groups of teachers who are using computer technology more than others? (d) which kinds of conditions (facilities, time, training/support, networking) are correlated with evidence of successful integration of computer technology?

Participating in this study requires the answering a series of questions relevant to your particular use of computer technology in implementing the curriculum at the Grade 4 and/or 5 levels. Many of the questions require only a short yes/no or single word answer. Some questions give you the chance to provide a more detailed explanation of your experience and/or opinions. Five curriculum areas have been chosen: Language Arts, Math, Personal Planning, Science, Social Studies. The area of Information Technology will also be addressed. Relevant demographic information, such as school size, scheduling of computer lab time, availability of computers etc., will also be collected.

The information you provide will be held in strict confidence. Coded numbers, available only to the researcher, will be used instead of any references to you or your school. After all questionnaires and interviews are completed, even these coded references will be destroyed. The data itself will be used as part of a master's thesis publication. In the final publication no personal references, not even the school district name, will be divulged.

The researcher will be readily available, in person, by phone, or by email, if you have any further questions regarding the format or purpose of this study.

Sincerely, Nora Boekhout Phone: 604- 941 –1126 Email: <u>boekhout@moody.bc.ca</u>