



The **power** to achieve

••••• ••••• ••••• •••••••••••

**A Professional Development Program  
for the Mountbatten Brailier  
Workshop One**

**Facilitator's Guide**

© October 2010  
Harpo Sp. z o. o.  
Poznan  
Poland

[www.mountbattenbrailier.com](http://www.mountbattenbrailier.com)

# Introduction

## the **power** to achieve

This Professional Development Program is a one-day course designed for vision teachers, class teachers and para-professionals or teacher's aides.

The methodology is instructor-led group-based training, using hands-on activities with the Mountbatten Braille, a PC keyboard, a laptop and a printer. During the day attendees will be asked to contribute to discussion and to share ideas.

Desired pre-requisites for the course are:

- some knowledge of Braille
- experience in using assistive technology in a learning environment.

The course structure in this Guide and the Participant's Workbook is the same. There is some additional information in the Easy Guide on the LS Options Menu, Music, Braille Graphics and the Calculator for the participants' information. Further workshops and courses are needed to cover these topics in depth.

Each attendee should leave the venue at the end of this course with a working knowledge of the features and functions of the Mountbatten Braille.

## Contents

Introduction.....	<u>2</u>
Preparation.....	<u>3</u>
Introduction.....	<u>5</u>
Session One: Getting to know your Mountbatten.....	<u>6</u>
Session Two: Producing Braille.....	<u>9</u>
Session Three: The Power of Connectivity.....	<u>13</u>
Attachment 1: The Emerging Braille Literacy Project.....	<u>18</u>
Attachment 2: A Framework for Braille Literacy.....	<u>21</u>
An Invitation To Participants.....	<u>23</u>
This Certificate is Awarded to.....	<u>24</u>

# Preparation

## Invitation:

- Include an Information Sheet - use the sample Invitation at the back of this Guide as a basis;
- Minimum requirements - what they need to know before they begin;
- What to bring - their laptop if they have one! MB, User Guide, Mimic, cables.
- Let us know of any special needs - access, dietary needs and so on.

## Preparation and Setting Up

### Hardware needed:

- One Mountbatten per 2 attendees
- 1 x Mimic for each Mountbatten
- 1 x PC Keyboard for each Mountbatten
- 1 printer for each four attendees.
- 1 laptop PC for each four attendees (or 1 laptop per 2 attendees if available)
- Mountbatten power adaptors
- Printer cables
- USB cables, 1 per Mountbatten
- Mimic connection cable
- Extension cables and power boards

### Room Setup:

- Depending on space and equipment availability, your attendees are best seated in pairs, facing a central point.
- Ensure that the space is accessible, that ergonomic seating is available and that all cables are secured.

### Reference Materials:

- Video 1      From CD – Select Video 1 - 12 minutes running time
- Video 2      From CD – Select Video 2 - 8 minutes running time
- Braille code card - available from Duxbury Systems or most large blindness agencies.
- SET-BC Lesson Plans (optional)

These can be downloaded in pdf format from:

<http://www.mountbattenbrailier.com/user-guides-and-downloads.html#setbc>

- Mountbatten User Guide and Command Summary - attendees can bring their own copies to annotate, but be prepared in case more copies are required.

The most current version for each model can be downloaded from here:

<http://www.mountbattenbrailier.com/user-guides-and-downloads.html#UserGuides>

### **Handouts:**

Each attendee should receive a materials pack containing:

- Participant's Workbook
- Easy Guide
- Student Evaluation (included at end of Easy Guide)
- Workshop Evaluation sheet
- Certificate (optional)

### **Samples:**

- Copies of relevant course exercises, already embossed (optional)

### **Attachments:**

#### **For Facilitator background information:**

- Attachment 1: SET-BC Pilot project
- Attachment 2: Notes from D McNear

Copies of these attachments can be made available to participants (optional).

#### **For producing Invitations and Certificates:**

- Participant Invitation
- Certificate of Completion

# Introduction

**Talk**

## Welcome the participants

- Initiate a round of introductions and / or provide name labels to participants

**Refer to Participant's Workbook p1**

## Describe purpose and learning outcomes

**Refer to Participant's Workbook p2**

- Go through the workshop programme and times of sessions and session breaks.
- Raise awareness of the supplementary materials.
- Indicate that an Evaluation Questionnaire will be given out at the end of the course, which must be completed and returned to the Facilitator.

# Session One: Getting to know your Mountbatten

## Page 6: What is a Mountbatten Braille, and History

Briefly talk about the Mountbatten and what it can do and how it is being used in over 40 countries around the world, in multiple languages.

## Page 7: Activity One:

Introduce and show video number 1.

**Video time: 12 Minutes.**

- Encourage the participants to make notes on the page provided in their workbook.
- Lead the discussion based on the points participants have made.
- Encourage the sharing of ideas for 5 minutes only.

## Page 8: Why work with Electronic Braille Technology?

Guide their eyes over these three statements and reinforce where the quotes came from.

- Lead discussion towards considering their role as teacher.

## Page 9: Discovering the Mountbatten

Have all the items found in the box displayed and briefly show them.

- Emphasise the return of the Warranty Card
- Emphasise that they should keep the packaging
- Point out the need to remove the shipping lock from under the embossing head.

## Page 10: Resources at your Fingertips

Briefly show the resources.

- Ensure they have the contact details of their local distributor or know where to find them - point out the mountbattenbraille.com web address on the front cover of Easy Guide and Workbook.

## Page 11: Activity 2: Mountbatten Orientation: Parts

This is an activity to be done in pairs.

Explain they should identify the items and tick them when discovered. Move around the room and provide individual assistance where needed.

**Refer to Easy Guide p 2 & 3**

**Page 12: Activity 3: Mountbatten Orientation: Ports**

This is an activity to be done in pairs.

Explain they should identify the items and tick them when discovered. Move around the room and provide individual assistance where needed.

**Refer to Easy Guide p 4 & 5**

**Page 13: Loading Paper**

Show examples of types of paper, which can be used.

**Refer to Easy Guide p 6 & 7**

Point out all the critical parts of the Mountbatten for paper loading, ensuring the attendees can recognize them on the Mountbatten. Have the group talk their way through the steps for loading paper and address any questions.

**Page 14: Activity 4: Loading Paper**

Working in pairs - encourage the completion of this activity.



***Show SET-BC Lesson Plan as a resource they can use***

**Page 15: Starting Up the Mountbatten**

Address the notion of ergonomics - often overlooked in the classroom, but essential if we are to prevent strain or damage. Talk about noise control.

**Page 16: Activity 5: Start Up**

Demonstrate the correct way to plug in and start the Mountbatten.

Participants should follow instructions to do the same.

**Refer to Easy Guide p 8 & 9**

## Page 17: Battery Care

Indicate where the batteries are housed in the Mountbatten; draw attention to the embossing requirement that demands powerful and heavy batteries. Note that batteries are expensive but if re-charged regularly they will last for years.

Instruct participants to undertake Activity 6 in their pairs. Check answers.

**Refer to Easy Guide p 10**

## Page 18: The Mountbatten keyboard

Talk about the benefits of the key press action.

Show and raise awareness of the ergonomic layout.

Introduce Activity 7 and encourage sharing the activity.

**Refer to Easy Guide p 11**

## Page 19: Beginning Braille writing

Point out the relationship of the Braille keys to dots. Refer to the swing cell.

Complete Activity 8 by sharing information.

**Refer to Easy Guide p 11**



*Show SET-BC Lesson Plan on MB Pro Orientation*

## Page 20: Emergent Braille Exercises

Talk about the requirements for this activity and encourage participants to complete it.



*Show SET-BC Lesson Plan about Tactile Letter Recognition*

**Morning Tea**



## Session Two: Producing Braille

### Page 22: Introducing the Mountbatten Brailier to the classroom

Briefly talk about the next three topics:

- Involving the [class] students
- Collaborating with the classroom teacher
- Interacting with class mates

Encourage the group to identify three points they feel are important to the success of the above topics.

### Page 24: Activity 10 SET-BC Video

**Video runs for 8 minutes**

Ask participants to record their observations.

At the conclusion of the video, share ideas – 5 minutes only.

***Attachment 1: Background reading of the results of the SET-BC Pilot Project is attached.***

### Page 25: Using Learn Mode to write Braille

By way of introducing the technical capability of the Mountbatten the following two concepts are introduced at this stage:

- The concept of Learn Mode is introduced.
- Followed by the concept of Advanced Mode.

Learn Mode is explored and used long before we explore the notion of Advanced Mode.

### Page 26: Activity 11: The Braille Code

Refer to the diagram of the Braille Code to support the activities to come.

Explain that this has been included as a support for those who are not expert in the code, but need to use the Mountbatten.

### Page 27: Erasing and Correcting

Erasing and Correcting introduces the notion of functions.

This function demonstrates one of the values of electronic technology.

**Refer to Easy Guide p 12**

Use the Easy Guide and go over the way function keys are written, in symbol form and where two are together, they use a plus sign.

Following this, instruct the group to complete Activity 12.



***Show SET-BC Lesson Plan about  
Backspace Delete***

### **Page 28: Moving Around the Page**

Discuss how it is possible to move around the page without Braille. This is helpful when correcting work, inserting words in exercises or just checking what has been already Brailled.

Following this, instruct the group to complete Activity 13

**Refer to Easy Guide p 12**



***Show SET-BC Lesson Plan of a Navigation  
Activity***

### **Page 29:**

Activity 14: Braille Writing Practice

Having looked at the commands, it is now time to formalise formatting. This exercise uses a repeat pattern of letters to make it easy for those not proficient in Braille.

### **Page 29:**

Activity 15: Braille Writing Practice – Maths

### **Page 30:**

Activity 16: Braille Writing Practice – Columns

These two exercises reinforce the commands just covered and provide an opportunity for participants to ask questions as well as build skills.

## Page 31: Using Commands

This is an introductory section. Emphasise the value of commands.

Before commencing the Activity turn to the Easy Guide and introduce the concept of Learn Mode.

Now discuss and demonstrate how to activate the Command Key, and reinforce the sequence of entering commands.

Activity 17: Entering Commands

Check the Activity results.

Work through **Command Hints: Participant Workbook p. 30, Easy Guide p. 14**

Go over Commands in Learn Mode and introduce Commands in Advanced Mode.

Emphasise the concept of the 'toggle command'.

**Refer to Easy Guide pp 13 & 14**

## Page 32: Mountbatten Speech – Learn Mode

Discuss the use of audio response as a support to learning.

Raise awareness of the Default Setting and Commands.

**Refer to Easy Guide p 15**



***Show SET-BC Lesson Plan about Brailing  
without Embossing***

## Page 33: Word wrap, Centring, Margins, Line Spacing

Discuss these terms as they are used with a word processor and indicate their availability on the Mountbatten. Talk about the value of Word Wrap for beginning Braille readers: no hyphenation, braille not produced till end of word, speech easier to hear.

Activity 18: Entering Formatting Commands.

Activity 19: More exercises in using these functions.

**Refer to Easy Guide p 15**

## Page 35: Creating a File in Memory and Brailing the File

Talk about saving files to the Mountbatten memory.

Go to the Easy Guide and point out which commands will be used during the next activity.

Reinforce the sequence used for Commands.

Activity 20: Creating files on the Moutbatten

**Refer to Easy Guide p 17**



***Show SET-BC Lesson Plan about Creating  
a File***

**LUNCH**

# Session Three: The Power of Connectivity

## Page 39: Technology and Learning

This section deals with empowering the user, or, using the Mountbatten to support Braille literacy development.

This position may challenge Vision Teachers. Completing this Workshop will go some way to bringing about change.

***Refer to Attachment 2 – an extract of Donna McNear’s “A Framework for Braille Literacy: Integrating Assistive Technology Tools in the Literacy Curriculum”, (2001).***

## Page 40: Connecting External Devices – Introduction

This section seeks to demonstrate how forward and back translation expands the usage of the Mountbatten.

You may need to refer to Orientation – Ports to refresh the options available.

## Page 41: Connecting to the Mimic

Explain how to connect the Mimic and availability of the text display.

Discuss and demonstrate the audio response in Learn Mode to the Mimic.

Draw attention to the *Easy Guide page 19* and indicate we are only covering down to ‘Scroll Up’.

Activity 21: Connecting the Mimic in Learn Mode

This activity on connecting the Mimic should be done in pairs.

**Refer to Easy Guide p 22.**

When completed lead a discussion on the ideas they have listed.



***Show SET-BC Lesson Plan on teaching children about the Mimic***

## Page 43: Using the PC keyboard with your Mountbatten

Introduce the concept and possibilities of using the PC keyboard.

Talk about it's use in Learn Mode and Advanced Mode. And how the Mimic can be used to support non-Braille users.

## **Page 44: Using the PC keyboard in Learn Mode**

Activity 22: Plug in the PC keyboard and Braille a sentence by following the steps.

Remind the participants of the pitfalls in Learn Mode: no translation so numbers, capitals and punctuation will not be correctly translated to Braille. Simple text only!



***Show SET-BC Lesson Plan on using the QWERTY keyboard***

## **Page 45: Using the PC keyboard in Advanced Mode**

This section introduces Advanced Mode and Forward Translation. Ensure the concepts are clear and understood before proceeding!

Draw attention to the automatic back translation used by the Mimic!

Activity 23 can be done in pairs working their way through it. One could use the Qwerty keyboard, the other could use the Mountbatten, each completing the exercise separately.

Discuss Grade 2 Braille, and the differences between translated and untranslated text.

**Refer to Easy Guide p 25**

Activity 24: Complete the following table

This can be done in a question and answer session.

Encourage the use of the PC keyboard with the Mimic.

Activity 25: Discuss the opportunities presented by the PC keyboard

This could be a Facilitator-led open discussion.



***Show the Lesson Plan from SET-BC about Learn and Advanced Mode***

## **Page 49: Connecting the Mountbatten to a PC or Netbook with MB-Comm**

Discuss MB-Comm and its possibilities. Raise the potential to have MB-Comm installed on any PC in a school or resource center.

Show the group the connection before you ask them to make it. Have them follow the steps in the Participant Workbook.

Identify the relevant ports and cables before the connection exercise.

Activity 26: Connect the MB to the computer

Discuss each step as you demonstrate, and repeat when participants make the connection. If Participants have laptops or netbooks with the latest MB-Comm installed, have them try the connection on their own laptop or netbook. Have them disconnect again so they re-connect before they begin Activity 27.

Discuss the differences they see on the MB-Comm screen when connected and disconnected.

**Refer to Easy Guide p17**

### **Page 51: Using Chat Mode with MB-Comm**

Discuss with the group the automatic change of translation that makes this feature useful in the classroom, especially for classmates doing an activity together - no commands are required once it is running.

Activity 27: Write Braille on the Mountbatten

Point out the translation that is happening - particularly numbers, capitals and punctuation.

Activity 28: Write text on the computer

Point out again the translation - capital signs, number signs, the correct punctuation.

**Refer to Easy Guide p 19**

### **Page 53: Embossing a file from the PC using MB-Comm**

Activity 29: preparing the file

Point out the differences between a text file and the file saved by a Word Processor so participants don't try embossing from Word or OpenOffice.

Note the correspondence of curly braces { and } to the Esc and End keys or the `command` and `enter` keys

Activity 30: sending the file to be embossed

They should be connecting to MB-Comm easily by now. Suggest extra sessions for people who are having problems with this.

Activity 31 Creating an empty embossing template

Remind the participants that they will have to use Save As each time they use the template, or they will write over it and have to make it again.

**Refer to Easy Guide p 20**

### **Page 55: Sending the Mimic contents to the PC**

Activity 32: preparing the Mimic for a transfer

Talk about setting and jumping to a bookmark

Activity 33: Connecting and transferring

Note the requirement for a Port Speed change - stress this!

**Refer to Easy Guide pp 23 & 24**

### **Page 56: Connecting the Mountbatten to a printer**

Discuss the notion of back translation. Raise the issue of the Mimic. Have the group switch off the Mountbatten, unplug the Mimic and turn it off.

Activity 34 Connect a printer

This session can be done as a whole group or in pairs, depending on the availability of printers. Ensure the correct procedure is followed and complete the activity.

Draw attention to the Note on Output!

**Refer to Easy Guide p 28**

Activity 35: Print a file saved in memory

This could be a demonstration using one participant.

### **Page 56: Print only copy**

This is a simple but useful step to ensure all participants can do.

Activity 36 of producing a print copy only of the file you have just used, could be done as a group.

**Refer to Easy Guide p 28**

### **Page 58: Workshop Summary & Evaluation**

Walk the group through all the tasks covered today.

Draw attention to the implications for teaching and learning.



Pass out the Evaluation Questionnaire and request it is completed prior to leaving. Participants are asked to complete the Evaluation privately so noise should be limited for this period of 10 – 15 minutes.

Collect all Evaluations prior to participants departing. The Certificate included in the Facilitator Pack may be used where appropriate.

**WORKSHOP CLOSE**

# Attachment 1: The Emerging Braille Literacy Project



## Special Education Technology British Columbia

SET-BC is a Provincial Resource Program designed to assist school districts in British Columbia in meeting the technology needs of students with physical disabilities and visual impairments.

### Emerging Braille Literacy Project 2001 - 2002

SET-BC is pleased to announce the Emerging Braille Literacy Project for 2001 - 2002. This project will provide timely educational and technological support for Braille-using students who need to develop reading and writing skills in the primary grades. BC vision teachers will be able to request the long-term loan of Mountbatten Braille from SET-BC for these students, starting in the fall of 2001.

This project follows a 2-year investigation of the use of the Mountbatten Braille as a tool for Braille literacy development. The results of this study (see attached summary), which included 16 primary age students, show that this technology is an effective teaching and learning tool for literacy development.

What is the Mountbatten Braille?

The Mountbatten Braille is an electronic Braille notetaker and embosser with features that include an ergonomic keyboard, memory, speech feedback and forward and backward print/print translation. A qwerty keyboard can be connected to the Mountbatten to produce contracted or uncontracted Braille and a printer can be connected to produce a print translation of Braille output.

The current version, the MB Pro, now has both digitized and synthetic speech providing a multi-sensory approach to learning Braille. You can combine typing and touching Braille with the audio reinforcement of real speech confirming the letters or dot combinations you have Brailled. The synthetic speech features enable a student to create an assignment, edit text, modify, delete, block text and then produce a copy of the assignment in Braille.

Which students might benefit from using the Mountbatten Braille?

Consider the following descriptors to determine whether a student might benefit from use of a Mountbatten Braille:

- Primary age students, including students entering kindergarten in September 2001, who have emerging Braille literacy needs
- Students who, due to changes in their visual function, may need to learn Braille as a supplementary reading modality
- Students who are learning to use Braille for functional literacy activities (to accomplish daily tasks in home, school or community settings).
- Students who receive direct instruction from a vision teacher for Braille literacy

How do students participate in the Emerging Braille Literacy Project?

BC school districts may put forward students for this project as part of SET-BC's Cycle 1 in the fall of 2001. The process of requesting an MB Pro for a student will follow the normal SET-BC process, with the addition of a CAP supplement form designed for the project.

- With consultation from SET-BC regional staff as needed, BC vision teachers, SET-BC district partners and distinct planning/screening teams will determine which students will be put forward for the Emerging Braille Literacy Project.
- Districts will obtain Request for Service forms from SET-BC Regional Centres for these students.
- As this is a special project, these Requests for Service will be in addition to each district's usual allocation for SET-BC services.
- School-based teams will hold Collaborative Action Plan (CAP) meetings for students, completing a special CAP Supplement form to provide details on student need for this technology.
- A small screening committee, made up of SET-BC staff and BC vision teachers, will review all requests for this project.
- Training and resources that support the classroom use of the MB Pro will be provided for participating teams in the fall of 2001 - dates and locations to be announced in September.

Emerging Braille Literacy Research Project 1998 - 2000

### **Summary of Results**

Over the past two years Special Education Technology - British Columbia (SET-BC), the Provincial Resource Centre for the Visually Impaired (PRCVI) and the University of British Columbia's Program for Visual Impairment have collaborated on a research project to investigate and evaluate the impact of the Mountbatten Brailier on literacy development and inclusion.

Sixteen primary age students, who are learning to use Braille as their primary or secondary literacy medium, and their teachers participated in the project. Results demonstrate that the Mountbatten Brailier positively affects the development of reading and writing skills in Braille. Based on these findings it is proposed that the Mountbatten Brailier be made available on a broader basis to all students in British Columbia who can benefit from this technology.

#### **The Mountbatten Brailier**

The Mountbatten Brailier is an electronic Braille notetaker and embosser with features that include an ergonomic keyboard, memory, speech feedback and forward and backward print/print translation. A qwerty keyboard can be connected to the Mountbatten to produce contracted or uncontracted Braille and a printer can be connected to produce a print translation of Braille output.

#### **Project Description**

Five beginning Braille readers and their vision teachers from across British Columbia were selected to participate in the research project in the fall of 1998. Positive preliminary findings and a demand to expand the project resulted in SET -BC accessing additional funding to add a further 11 primary-age students to the project in the fall of 1999. All the students attend their neighbourhood school and have regular support from a teacher of students with visual impairments. Eleven of the students have little or no useful vision and use Braille as their primary literacy medium. Five of the students have varying degrees of useful vision and are learning to read and write in both Braille and print. Three of these students have additional physical and/or learning disabilities.

Vision teachers and other support personnel were trained in the operation of the Mountbatten Braille. They also learned implementation strategies to enhance the development of Braille literacy and arithmetic skills.

Students in the project were brought together several times to share their experiences, demonstrate their expertise, learn some new skills, and provide feedback.

#### Results of the Emerging Braille Literacy Investigation 1998 - 2000

Vision teachers and students provided feedback via surveys, questionnaires and focused discussion groups. Findings are summarized as follows:

##### 1. Impact on Literacy Development - Writing.

Teachers reported that their students made better progress in the acquisition of Braille writing skills because of the Mountbatten Braille. They noted that beginning Braille readers often do not have adequate finger strength to produce readable dots on a manual Braille writer. When using the Mountbatten Braille, these children can produce well-defined, raised, Braille dots that they can tactually discriminate and read. Students were more motivated to write for longer periods of time when using the Mountbatten Braille, compared to a manual Braille writer. The speech feedback feature is not only very helpful for students who require multi-sensory feedback, but also reinforces learning new Braille contractions. It made writing more "fun" for most students.

##### 2. Impact on Literacy Development - Reading.

The Mountbatten Braille contributed to improved progress in the development of Braille reading skills in 15 of the 16 students involved in the project. Students were better able to tactually discriminate and read the well-defined, consistent, raised dot output of the Mountbatten. The 'hard copy' Braille output provides immediate tactile feedback and facilitates editing on the spot. The print-to-Braille translator provides students with increased access to "on the fly" classroom teacher developed reading materials in Braille.

##### 3. Impact on Inclusion.

Most of the vision teachers and students reported that the Mountbatten Braille provided more opportunities to be included in a wider range of classroom activities. Sighted primary age classmates are drawn to the 'user friendly' appearance of the Mountbatten. Using the qwerty keyboard and the Mountbatten's print-to-Braille and print-to-print translation features, cooperative group writing projects can be composed simultaneously in Braille and print. In addition, the use of regular paper makes Braille less 'different' and more readily accepted. The print-to-print translation feature and the Braille visual display allow the regular classroom teacher to have instant access to the student's Brailled work. In some classroom settings, however, the embossing and beeper noise from the Mountbatten was found to be disruptive from time to time.

##### 4. Impact on Development of Basic Technology Skills.

In general, teachers report that the technology-related skills their students develop while using a Mountbatten Braille can serve as a foundation for learning more complex technologies, such as Braille notetakers and computers. These basic skills can be taught to young students who are still at a concrete level of reasoning, as the Mountbatten produces immediate and "real" hard copy Braille.

# Attachment 2: A Framework for Braille Literacy

## A Framework for Braille Literacy: Integrating Assistive Technology Tools in the Literacy Curriculum.

Developed by Donna McNear

for Humanware Inc (2001)

### Braille assistive technology tools increase the capacity of teachers to provide quality instruction in braille literacy tasks.

Educators who use braille assistive technology tools in teaching and learning improve the quality of instruction to students because they can *immerse* students in braille, *individualize* braille instruction, and *immediately* provide information in braille. These are clear benefits in using braille assistive technology tools and remove some of the traditional challenges and barriers teachers have coped with throughout the years. These instructional benefits can be thought of as the 3 I's for instruction with assistive technology tools in the braille literacy curriculum. The 3 I's are:

- Immersion
- Individualization
- Immediacy

#### Immersion

Braille instruction is provided in the context of a variety of approaches to reading such as basal, whole-language, and phonetic, and in a variety of educational settings such as the general education classroom, resource room, or special school for the blind. Regardless of the reading methodology or setting, assistive technology is essential in providing a "braille rich" environment.

Assistive technology tools give teachers a greater capacity of "immersing" students in braille. They can provide a greater volume of material in braille and the student can create a greater volume of braille. Teachers and students can also create a greater variety of braille materials with assistive technology tools such as tactile graphics. Duplicate materials can be created and provided in both the school and home environments if they are created electronically.

By increasing the volume and variety of braille and tactual materials for students, teachers can "immerse" students in braille leading to increased opportunities for achieving learning outcomes.

#### Individualization

One of the greatest benefits of assistive technology is the ability to provide learning materials to students that are based on their individual needs. Teachers are varying their instructional approaches with students with greater frequency and they want the capability to provide braille materials for individual students. For example, more and more teachers

#### The 3 I's

The instructional benefits of integrating assistive technology tools in braille reading and writing tasks:

- Immersion
- Individualization
- Immediacy

are introducing students to reading and writing braille in less traditional formats. Teachers may want the flexibility to teach beginning braille readers in grade one braille and then gradually introduce grade two braille. They may also introduce the braille contractions differently to different students depending on their needs. Assistive technology allows teachers to individualize in this manner.

Assistive technology also allows teachers to create learning materials based on each student's individual educational plan to meet the specific goals and objectives. Teachers also have a greater capacity to create materials to vary instruction for re-teaching and reinforcing particular braille reading and writing concepts.

### **Immediacy**

One of the key components of effective instruction is providing frequent and immediate feedback to students (Algozzine, Ysseldyke, & Elliot, 1997). Previously blind students have not had the same benefit as sighted students in this aspect of instruction. With the use of appropriate assistive technology this is no longer an issue. Now students can receive feedback on their assignments and work at the same time as their sighted peers. Students can print out their assignments immediately in print for their teachers and teachers can provide information to their students in an electronic format.

Students also have a greater capacity to efficiently and effectively retrieve information from the World Wide Web, which greatly enhances their ability to immediately access information.

The Guiding Principles for teaching and learning activities using assistive technology are:

- ALL students who are learning braille literacy tasks benefit from braille assistive technology.
- Braille assistive technology tools increase the capacity of teachers to provide quality instruction in braille literacy tasks.
- Braille reading and writing tasks are viewed as dynamic and integrated literacy tasks.

# An Invitation To Participants

You are invited to attend a One Day Workshop to build competency standards for using the  
***Mountbatten Brailer***

at \_\_\_\_\_ on \_\_\_\_\_

commencing at \_\_\_\_\_

The day will cover three informative and interactive sessions:

## **Session 1: What is a Mountbatten Brailer**

Discover the benefits of electronic Braille technology; Learn about parts, ports and battery care; Find out how to load paper, and how to use the reading support feature; Experience how easy it is to use a well designed electronic keyboard!

## **Session 2: Producing Braille**

Get ideas on introducing the Mountbatten to users, teachers and the class; Find out how recorded voice response assists Braille beginners; Try out such features as automatic erasing and correcting and page movement; Learn about the magic of commands and utilise word wrap to enhance reading; Find out how to set up line spacing, change margins or centre words.

## **Session 3: The Power of Connectivity**

Understand the power of the Mimic with its visual display in text; Connect a PC keyboard and use the QWERTY keys to produce Braille; Meet synthetic speech and the power of audio support; Store a file in memory and emboss it; Connect a printer to the Mountbatten and print text documents;

## **Do all this as well as ....**



Uncover the brilliant lesson plans developed for teachers in British Columbia!



Take home materials to help you set up a skills development program for your student, and enough ideas to get you started with the Mountbatten!

## **What to bring:**

Please bring your Mountbatten, the User Manual and a Mimic if you have one, and a laptop if you have one. Please call the Course Facilitator to verify that you are able to do this.

At the completion of the session you will be asked to complete an Evaluation Questionnaire which will enable you to be certified as having completed Workshop One.

Course Facilitator: \_\_\_\_\_

Tel: \_\_\_\_\_

Fax: \_\_\_\_\_

email: \_\_\_\_\_

RSVP BY: \_\_\_\_\_

**This Certificate is Awarded to**

*for the successful completion of*

**the **power** to achieve**



**Workshop One**

A Professional Development Program  
for the  
**Mountbatten Brailier**

Date

Course Facilitator

