

The background of the slide is a photograph of several people's hands interacting with various pieces of technology. On the left, a hand is holding a white mug. In the center, a hand is holding a smartphone. On the right, a hand is holding a tablet. The entire image is overlaid with a semi-transparent purple gradient. The text is centered in a white, serif font.

Assistive Technology for Beginning Braille Readers



— ✕ —
Introductions

Who am I?

Who are you?



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Do you want to talk?  
Duckie, I'm working.  
Who's Duckie?  
I'm waiting.  
Do you know who I am? █
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(picture from the movie Pretty in Pink of two characters in a computer lab)



What technology means to me...

What technology means to our students...

FAMILY

LOVE

CONNECTION



(picture of two hands with tattoos of the words joy and strength)

ACCESS

VOICE

EMPOWERMENT



A SYSTEMS ANALYSIS OF THE BEGINNING BRAILLE READER'S ENVIRONMENT

THE TEAM



THE TASK



THE TOOLS





The Team



THE BRAILLE READER'S INSTRUCTIONAL TEAM

Parents

Home environment, bedtime stories, first experiences of reading

The student

Strengths, struggles
Motivation, preferences

Classroom teachers & teaching assistants

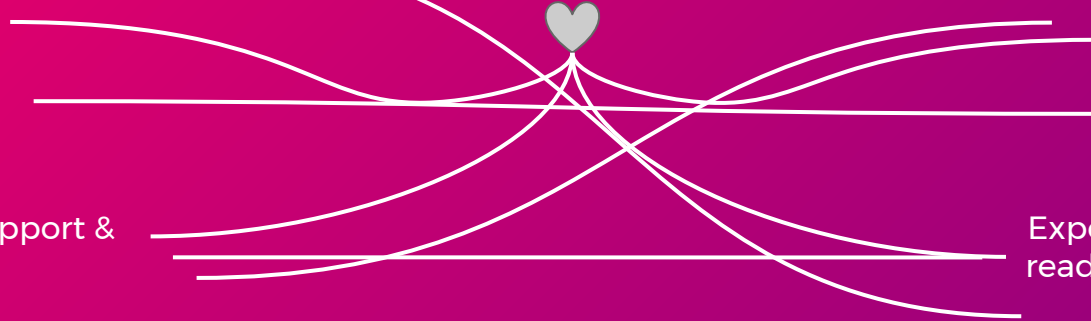
Typically new to working with a braille reader
Content experts

Peers

Sources of support & partnership

TVI

Experience with braille, reading instruction, AT?
Materials expert





The Task



COMPONENTS OF READING

Phonemic Awareness

Ability to manipulate
segments/phonemes

Phonics

Sound+Symbols
correspondence

Fluency

Reading Rate

Vocabulary

Knowledge of words & their
meanings

Comprehension

Constructing meaning from
text

***Braille Contractions**

200+symbols
Rules of usage
Discrimination

BOOKS on BRAILLE READING INSTRUCTION

Beginning with Braille

Reading Connections

I-M-Able, Braille Literacy: A Functional Approach

Enough to Know Better

Guidelines & Games for Teaching Efficient Braille Reading

Instructional Strategies for Braille Literacy

RESOURCES for BRAILLE READING INSTRUCTION

Braille Fundamentals, Un's the One

Building on Patterns

Mangold Basic Braille Program

Read Naturally

Wilson Reading System

The same curriculum used by the classroom teacher!

CONSIDERATIONS FOR BRAILLE READING INSTRUCTION

Explicit vs. incidental methods

Introduction of contractions

Guided reading integration

Paths to Literacy



The Tools

THE ROLE OF ASSISTIVE TECHNOLOGY IN BEGINNING BRAILLE READING

For most people, technology makes things easier. For people with disabilities, technology makes things possible.

~ Mary Pat Radabaugh, IBM

Remember your TEAM & your TASK when choosing your TOOLS

Students and their devices do NOT exist in a vacuum

Support is one of the key factors of progress

Consider ease of use, learning curve of device

Consider experience & engagement of team (& lack thereof)

Consider strengths and struggles the student brings to both the task and the tool

PERKINS BRAILLE WRITER



(Picture of a Perkins Braillewriter with a Daredevil action figure on top)

—*— Perkins SMART Braille

Auditory input

Visual input

Tactual input

*USB port for saving items

<https://www.youtube.com/watch?v=pl5qV2NdF0M>

—*— Discussion Points

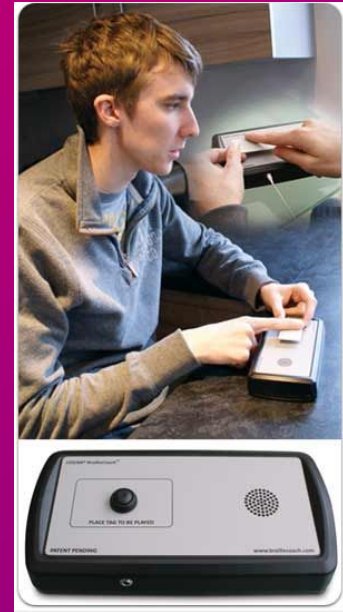
What are some advantages/disadvantages of this tool?

Which members of the team would it support?

What's an example of a task using this tool?

—*— Logan Braille Coach

Endlessly customizable braille flashcards
Can be adapted to any level of student
Headphone jack for private use
Perfect for an independent activity
Easy to use by adults and children alike!
Additional tags can be purchased
Best kept secret!!



Picture of boy using device

—*— Discussion Points

What are some advantages/disadvantages of this tool?

Which members of the team would it support?

What's an example of a task using this tool?



Mountbatten Braillewriter...aka *Braille Whisperer*

Tactual, auditory, & visual feedback (through amazing app!)

Keyboard for non braille users to type messages and/or classwork

Nemeth, music, & more!

Easy to press keys for little fingers

Many beginning notetaker functions

[Intro Video](#)

[Cute Video](#)

[Mimic Video](#)

—*— Discussion Points

What are some advantages/disadvantages of this tool?

Which members of the team would it support?

What's an example of a task using this tool?

—*— Refreshable Braille Displays

Must either be paired with phones, tablets, or computers using screen reader software

Example: Braille Study Mode with JAWS screen reader

Modular, mainstream

Multiple advantages to starting young!

Examples include VarioUltra, HIMS Edge, Focus 40-->EIBraille, Brailiant, and more

—*— Discussion Points

What are some advantages/disadvantages of this tool?

Which members of the team would it support?

What's an example of a task using this tool?

—*— Braille Notetakers

Proprietary-made specifically for braille users
Stand-alone device with multiple capabilities
Examples include Pronto, BrailleSense Polaris,
Brailnote Touch, APH Braille Plus and more
Some have visual input, some do not

Student Review

—*— Discussion Points

What are some advantages/disadvantages?

Which members of the team does this device support?

What's an example of a task using this device?



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Stay in Touch!

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