

BLC TEACHING AND LEARNING COMMITTEE Presents Virtual teaching with the focus on braille: strategies across Canada

Glenda Parsons: Director of Programs for Students who are Blind or Visually Impaired, APSEA

Overview: Atlantic Provinces Special Education Authority – were offering some programs through online learning prior to COVID-19, but ramped up their delivery of programming in response to the need to offer programs to students throughout Atlantic Canada beyond the support being provided in their local schools. Programs have been developed to support all areas of the Expanded Core Curriculum through a virtual learning series, each one running for 6 weeks for 30-60 minutes. . Participation from all 4 provinces and the numbers are high.

On-going program called APSEA Connect – <https://apsea.ca>, for families to learn and discuss a variety of topics including independent living, organization and labelling, panel discussions, etc. APSEA CONNECT classes are open to all interested across Canada; not just for those in the Atlantic provinces.

Strategies that seem to foster success when using a virtual platform:

1. Pre-planning is essential: students get package of materials before lessons. Front end loading by making sure information to the students, tools and materials are there before the lessons start.
2. Work very closely with parents. Benefits to have the whole family learning braille together.
3. Fostering independence with student. TSVI has 'hands off' on student and is required to 'talk through' the lesson
4. Use of language, careful with how you are explaining things.
5. Take the time to make sure that the student is ready, familiar with the platform. Tech skills for students help to build independence. APSEA uses Zoom platform - 'Zoom Health' which is private and secure. Technology pairing is important: Braille note touch and the ZOOM platform seem to work best.
6. Take the time to ensure the required technology is in place before you set up the lessons. IT is key, communicate in advance.
7. Think about developing a kit prior to the lessons and going over it with the family before the lessons start.

Laurie Linseman: Teacher of Students who are Visually Impaired. Bluewater Dist. School Board

1. Challenge of instruction; it is important to look at the whole assignment and work through it using solid access strategies and imagination.
2. Teaching braille in an integrated context is motivating and authentic (as demonstrated through student work on coding unit)
3. Important to have family support for those who are learning at home. If the family happens to have an embosser, this is a great way to provide materials.
4. Remote learning can bring Expanded Core Curriculum learning opportunities, such as navigating new tech software and learning keystroke commands
5. Important to have on-going and open communication with family: strategize and problem-solve together – think ahead.
6. Be flexible, sometimes the virtual platform isn't sufficient and speaking directly on the phone is required. Teaching sessions might be recorded.

An excellent example of creative teaching was provided by the student's ability to synthesize the school assigned lesson on coding. This curriculum unit required the student to use arrow symbols and transcriber notes to complete the tasks. The student then applied their knowledge of braille conventions to the demonstrate their understanding of the learning outcomes and fully participate with peers in the TEAMS lesson framework. The student reported back to the classroom teacher with a

'coding' opportunity to create a heart shape in sim-braille. The student led coding directions and the teacher used hollow sim-braille sheet to create a heart shape. This is a powerful message of the importance of communication and working with materials that are relevant and meaningful to our students. Skills required for this process were taught by the TSVI and supported by the family; cooperative de-bugging of instructions. An excellent example of how teaching braille in an integrated context can be authentic and motivating... best of all the classroom teacher and peers had an opportunity to learn more about braille.

You too can make a heart

Line one: S – E – I – (WH)

Line two: (GH)-space-space-(AR)

Line three: space- E – I -space

Daphne Hitchcock: Teacher of Students who are Visually Impaired, Greater Victoria School Dist.

Practical considerations: set-up the student work station:

1. Must have app on device, and camera capability.
2. Private space/ strong wifi/ student headset if needed
3. Optional devices to use on hand, ipad and/or iphone / braille note touch (with camera)
4. Workspace: Is the table/chair height correct? Not always the case when the child is at home
5. Looking to build independence:
 - Child needs to be part of set-up of the workstation, so they know where their tools are
 - Paper supply at hand
 - Braille at proper height, on stable surface.
 - Load their own paper
 - Reading materials stored in an organized location, responsible for getting the things
 - Less is more when talking to the student, especially as zoom platform can cut out
 - Electrical outlet close by: recharging devices.
 - 3 drawer cabinet, slipped under the table/desk
6. Using the braille reading shelf or platform over the top of the student work. This set up works very well for the TSVI; enables clear viewing of student's work on a braille, reading in a book or working on a Math Window board (<http://mathwindow.com>)
 - Wooden and plastic or plexiglass stand is placed over student work area.
 - Dimensions of the stand are approx. 20.5 inches wide, 10 inches deep and 9.5 inches high.Some commercially produced stands are available

NOTE: the distance of the camera from the work area needs to be 'test run'. Before taking the materials/equipment to the home, make sure that you have figured out the placement of the device. To help older students with place, tape can be added to the surface of the table top to aid with alignment of device. The older students can readily move their devices to help enable good viewing for the TVI while on zoom.

7. Lesson Considerations
 - Ensure that the student has all the materials available before the lesson begins
 - need to have single focus: be aware of zoom fatigue, movement from one subject to the next is difficult, unless the student is older. So keep your focus specifically on braille writing or on reading braille.
 - 30-60 minutes – flexible, going with teachable moments. If device connectivity goes down be prepared to continue with using a phone or by texting.
8. Parents are an important part; communicate clearly with them. If working with student in the home, siblings can be included in the work needing to be done.
9. Include opportunities for student to do independent braille writing – letters back and forth with teacher (or if possible a penpal). Teacher letters can reinforce braille reading, specific contractions, formatting etc.
10. These lessons need to be fun – use knock knock jokes, or fun facts to liven things up.

Betty Nobel: Teacher of Students who are Visually Impaired, retired

Working with adults learning braille, through use of a variety of resources and teaching strategies.

1. Intro to braille contractions, sentences and lessons. A combination of teacher made and commercially produced lessons
 - Celebrating braille a Canadian Approach: Volumes 2-5 have the lessons.

<https://cnibsmartlife.ca/products/celebrating-braille-vol-3-ueb-a-canadian-approach-sp-nr>

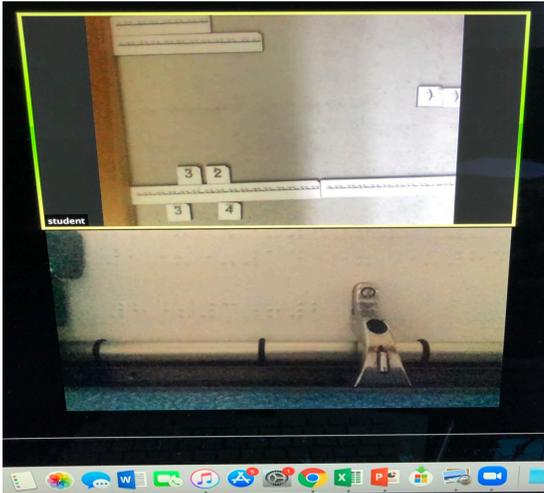
- Ashcroft braille reading: <http://www.scalarspublishing.com/ordering/>
 - Using ESL stories; high interest, short passages
2. Student and instructor connected using Zoom. The student used a braille notetaker to braille out sentences that were dictated to her by the instructor. Instructor then reviewed with the student the braille contractions that were used. In addition, student received emailed copies of practice sentences. These sentences were then brailled and the instructor asked the student which of the contractions were used.
 3. Providing opportunities for new learners to connect with others.
 - Braille games day
 - Zoomers meetings with Braille Literacy Canada
 4. Discussions about braille in the community and home
 - Labelling, organizing
 - Supporting student to make braille relevant and useful for day to day living
 5. Discussion about the larger world of braille
 - History of braille
 - Braille in different countries
 - Braille organizations, businesses that produce braille products etc

Braille Literacy Canada
www.brailleliteracycanada.ca
[1-877-861-4576](tel:1-877-861-4576)
info@blc-lbc.ca

Braille reading shelf over brailler

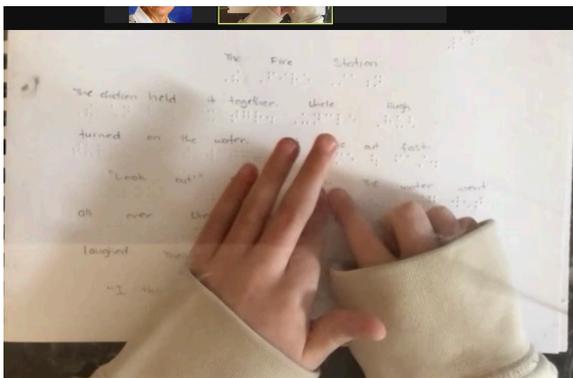


Examples of student work as seen by TVI on computer monitor.



The student had 2 work stations set up and was moving between working on the math window and brailleing the equation on their brailer.

Student is reading a short story to the teacher.



REMOTE LEARNING BRAILLE VIEWING STAND

Commercial units: photo shows the idea of the stands. The Staples unit would work well for the math window activities or braille reading, but not for placement of a braille underneath (unless legs were added).

1. Acrylic computer stands at Staples: <https://www.staples.ca/products/2879636-en-azar-computer-monitor-riser-clear-21-x-775-x-45-515360>



2. Acrylic bed tray at CB2 Overall Dimensions <https://www.cb2.ca/acrylic-bed-tray/s545239>

Width: 21"
Depth: 12"
Height: 9"



Home-made Units.

Wooden and plastic stand (10 D x 9.5 H x 20.5 W inches) Needs to accommodate brailier underneath the shelf. Braille Writer measurements: 13.75 in long x 9.25 in width x 5.75 in height.

