

# **Board/Authority Authorized Course Framework Template**

Dream. Believe. Achieve.

School District/Independent School Authority Name: School District#22 - Vernon	School District/Independent School Authority Number (e.g. SD43, Authority #432):		
School district#22 - Vernori			
Developed by:	Date Developed:		
Provincial Resource Centre for the Visually Impaired (PRCVI) in	May 2021		
collaboration with BC Teachers of Students with Visual Impairments			
School Name:	Principal's Name:		
Inclusion Education – Vision Program	Christine Love		
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):		
teb 12/25	X. Marie		
Board/Authority Approval Date:	Board/Authority Chair Signature.		
Feb 19-2025	Lellan		
Course Name:	Grade Level of Course:		
Expanded Core Curriculum – Braille 11 (ECC-VI-BRL)	11		
No. 1. Common Constitution	New Joseph Charles		
Number of Course Credits:	Number of Hours of Instruction:		
4	120		

# **Board/Authority Prerequisite(s):**

None.

# Special Training, Facilities or Equipment Required:

This course requires a qualified teacher of students with visual impairments who is proficient in braille and access technologies. The students are taught using direct instruction on an individual basis (one-on-one) as there is usually only one student with a visual impairment in each school. Braille is scheduled as one of the electives and the Teacher of Students with Visual Impairments will create and assess the Braille Program while the Braille EA meets with the student during the appointed Block to work on Braille.

## **Course Synopsis:**

Students will be introduced to the foundations of Unified English Braille (UEB) and continue to develop proficiency in reading and producing braille with a variety of low- and high-tech devices. Students will also have opportunities to reflect on their learning by critically examining the uses of braille in their daily lives. They will explore various ways to use braille in other curriculum areas. Finally, students will begin to foster connections with peers who are braille users.

### Goals and Rationale:

This course has been developed so that students who are blind or visually impaired continue to develop competencies in braille reading and writing. It will provide students with skills that will allow them to continue to access and enjoy a variety of literacy materials in an efficient reading and writing medium.

There are several possible motivations for students to learn braille reading and writing skills in Grade 11. Students may use braille as their primary or secondary literacy medium for accessing learning materials in their coursework. They may also acquire braille reading and writing skills in advance of post-secondary education, entry into the workforce, or to access community-based activities and programs.

Across curricular areas, braille remains one of the most effective and pedagogically sound formats for non-visual access to learning content. This course continues the student's journey to becoming proficient in braille reading and writing within their secondary school career and beyond.

# **Indigenous Worldviews and Perspectives:**

The course touches upon deeper issues and understandings that align with several First Peoples Principles of Learning.

1) Learning is embedded in memory, history, and story.

By learning the braille code, the student is part of a proud tradition of individuals with visual impairments gaining independent access to the written word, which dates back over two centuries. Course content emphasizes a historical study of braille as well as an examination of the role of braille in contemporary life. This content enables the student to feel better connected to the story of braille, the impact braille has had on the world, and the impact it can have in their own lives.

2) Learning requires exploration of one's identity.

For a learner to acquire the braille code at the secondary school level, it is likely that the student has experienced a significant change to their sensory profile that now requires non-visual access to learning materials. Learning the braille code does not happen in isolation from the socioemotional implications that vision loss can have for young people. This course emphasizes a grounded approach to learning braille by examining how braille is represented in our society and provides learners with the information and perspective needed to speak to their families and peers with confidence about the importance of braille. The course also emphasizes the importance of experienced mentors who read braille – not only to provide technical support but to also provide learners with a positive model.

3) Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.

One of the key features of ECC-VI-BRL 11 is that the course is individually created by a qualified Teacher of Students with Visual Impairments. Knowledge and fluency in the use and instruction of the braille code requires intense study and regular practice. In this way, the content of the course is shared in the context of the relationship between the learner, the Braille EA and the qualified Teacher of Students with Visual Impairments.

# **BIG IDEAS**

Braille reading and writing are essential skills for students requiring non-visual access to learning materials.

**Curricular Competencies** 

Braille reading and writing take place in social, cultural and historical contexts and are connected to feelings and attitudes toward visual impairment and its impact on the individual.

Learners can use multiple sensory modalities (vision, hearing, touch) to gather information in the learning environment. Technology for braille reading and writing is vital to the learner's ability to access and analyze information at home, school, in the community, and in the workplace.

Content

Connections to the braillereading community contextualize and enrich braille usage for the individual learner

# **Learning Standards**

#### Students are expected to do the following: Students are expected to know the following: Problem Solving and Critical Thinking Unified English Braille (UEB) Code Knowledge • Students will engage in problem solving when applying rules of UEB and braille • Common signs, symbols, and basic usage rules formats to their reading and writing. • Basic formatting rules and guidelines. Students will use critical thinking and analysis to determine which braille Braille Technology writing/production tool or device best meets their needs when completing a • Use of low tech, manual braille production. range of writing tasks. • Awareness of higher tech digital file access and refreshable Students will determine which advocacy techniques are available for articulating braille display. their accessible alternate format requirements at school and in the community. Social and Historical Contexts of Braille Comprehend and Connect (Reading, Writing, Drawing) • Basic knowledge of the story of Louis Braille. • Students will continue to work through a sequential process to learn the UEB code • Emerging exploration and understanding of braille in our and rules. world. • Students will use systematic tactile strategies to explore and interpret tactile **Personal Connections** graphics, diagrams, and drawings. • Students will explore various methods and materials to create tactile drawings and Begin to understand how braille fits into a "toolkit" for accessing information. diagrams. Begin to advocate for accessible format needs at school Reflect and Project Students will reflect on the role of braille in their own learning process and will critically examine how braille reading and writing will factor into their projected

	(future) plans.	
•	<ul> <li>Students will continue to expand their usage of UEB beyond academic tasks by connecting with mentors and peers who read braille, and by exploring options for using braille in leisure activities.</li> </ul>	

# **Big Ideas - Elaborations**

- 1) Braille reading and writing are essential skills for students requiring non-visual access to learning materials.
  - a. Despite the proliferation of text-to-speech options available for accessing texts in digital format, braille remains the most pedagogically sound means of providing access to learning materials for students who require non-visual access to learn along with their typically sighted peers.
- 2) Braille reading and writing take place in social, cultural and historical contexts and are connected to feelings and attitudes toward visual impairment and its impact on the individual.
  - a. When braille is acquired as a new literacy medium at the secondary level, it is often in response to a change in the student's level of functional vision. As a result, there are a number of socio-emotional considerations that enter into braille instruction at the secondary level. Teachers of students with visual impairments must address socio-emotional considerations in tandem with braille code acquisition.
- 3) Learners can use multiple sensory modalities (vision, hearing, touch) to gather information in the learning environment.
  - a. Braille reading and writing requires the learner to use the sense of touch to gather rich information and to use other senses in coordination to access learning opportunities and curricular content. In learning to read and write in braille, tactile input takes on special significance for non-visual access as compared with the role of tactile input for visual access to learning content.
- 4) Technology for braille reading and writing is vital to the learner's ability to access and analyze information at home, school, in the community, and in the workplace.
  - a. Technology to support braille reading and writing is essential for efficient and effective access across a variety of settings. Developments in braille technology have greatly increased the breadth and depth of access to literacy materials for learners with visual impairments. In today's world, braille usage and technology are increasingly inextricable.
- 5) Connections to the braille-reading community contextualize and enrich braille usage for the individual learner.
  - a. Many students will be the only student in his or her school or community who reads and writes in braille. Therefore, it is critical that braille-reading students be connected to their peers who read braille as well as more experienced mentors. Community connections provide motivation, support, and connect the learner to a broader reality where braille is an inextricable part of everyday living.

# **Curricular Competencies – Elaborations**

Problem Solving and Critical Thinking

- Begin to determine locations and instances where braille could be used in everyday life and suggest other uses to improve accessibility.
- Use a variety of low-tech devices for reading and writing braille.
- Experiment with different types of simple tactile diagrams that represent information.
- Begin to analyze own work to identify and correct errors.
- Assess own reading and writing skills; determine areas for improvement or skill development.
- Begin to explore strategies for accessing printed information in a medium compatible with accessibility needs.

Comprehend and Connect (Reading, Writing, Drawing)

- Begin to build increasing speed and accuracy in braille reading and writing.
- Begin to explore and read a variety of braille materials.

- Become familiar with basic formatting rules in a variety of braille materials.
- Begin to develop skills for efficiently skimming and scanning braille materials.
- Begin to apply word processing concepts (e.g., styles, link text, headings).
- Begin to develop strategies to effectively create, organize, and implement writing projects using braille.

### Reflect and Project

- Begin to self-reflect on the learning process and the role of braille and braille technology.
- Begin to incorporate braille into their school, home, and community activities.
- Begin to assess the influences of braille reading on their own literacy development and access to learning.
- Begin to research braille technology and assess the goodness of fit between this technology and current and future needs.
- Use braille to communicate with a peer or mentor who uses braille (i.e., as pen pals).
- Begin to examine, promote, and advocate for enhancing braille awareness and sharing of braille writing in the school.

# Content – Elaborations

# Unified English Braille (UEB) Code Knowledge

- Signs/notation and usage rules.
  - o Introduction of braille tracking and same/different, the alphabet and numbers through a systematic program of braille introduction
  - o Introduction of braille contractions, punctuation, and indicators as well as code rules through a systematic program of braille instruction.
- Formatting rules and guidelines.
  - o Development of skills in braille formats for basic learning materials at the secondary level (e.g., textbooks).
  - o Basic awareness of different braille codes and systems (e.g., braille ASCII, foreign language codes, music code)
  - $\circ\quad$  Guided exploration in techniques used for creating simple tactile images, diagrams, and graphs.

# Braille Technology

- Low tech use, manual braille production.
  - o Developing proficiency in the use of the manual Perkins braillewriter.
  - o Awareness of the slate and stylus and handheld braille labellers.
  - o Basic knowledge and use of braille learning tools (e.g., braille rulers, models with braille labels).

## Social and Historical Contexts of Braille

- Basic knowledge if the story of Louis Braille and how the code has developed over the last two centuries.
  - Reading and discussing biographies of Louis Braille and examining the precursors to the braille code (eg.night writing)
  - $\circ\quad$  Discussion and awareness of the development of braille codes around the world
  - o The rationale for the adoption of UEB in Canada and around the world and awareness of braille authorities (e.g., Braille Literacy Canada, the International Council on English Braille).

## **Content – Elaborations**

- Awareness of the implications of braille to early advances in education for learners with visual impairments.
  - o Discussing historical biographies that demonstrate the impact of braille in the lives of braille readers.
  - An introduction to the limitations on the availability of braille and inclusive access for learners with visual impairments as content for discussions on accessibility.
- Emerging Understanding of braille in our world.
  - o Explore texts and online content (e.g., blogs, videos) to learn about how braille is produced around the world.
  - o Examine global, national, regional, and local issues facing individuals with visual impairments in accessing braille.
  - Begin to formulate potential solutions to these issues.
- Looking ahead to new developments and trends.
  - Begin to discuss and develop strategies for keeping up-to-date with developments in new braille technology and major code changes.
  - Accessibility discussions (e.g., steps to address discrimination facing braille readers in school).

#### Personal Connections

- Begin to understand how braille fits into a "toolkit" for accessing information.
  - Begin to develop knowledge, skills, and experience to determine the combinations of accessible formats that maximize comprehension and efficiency.
- Begin to understand how braille reading and writing will factor into plans for the future (e.g., postsecondary education, workplace).
  - o Begin to develop strategies to independently access print materials (e.g., OCR software, accessible library services)
- Begin to understand strategies for advocating independently for accessible format needs at the school.
  - Guided practice in articulating arguments that support the provision of accessible alternate format materials (e.g., presentations to teachers or other school staff).

# **Recommended Instructional Components:**

## Unit 1: Exploration

In this unit, students will explore the history of braille and its development. They will begin to learn the braille code and consider ways in which braille could be used throughout their daily life.

## Unit 2: Tactile Discrimination/Interpretation

In this unit, students will begin to learn how to discriminate the different textures, lines, and characters used in tactile graphs, charts, and diagrams. They will begin to analyze information that is presented in a tactile format as well as create their own simple tactile graphics. Students will learn how to interpret tactile information in a format that they understand and relate to others.

### Unit 3: Production

In this unit, students will begin to develop braille writing and production skills using low-tech devices. Students will be able to use the Perkins braillewriter to begin to produce material using the braille code.

# Unit 4: Braille Reading

In this unit, students will begin to build their knowledge of the braille code. Students will also focus on increasing their speed and accuracy in braille reading.

# Unit 5: Braille Writing

In this unit, students will produce braille with a high degree of accuracy. They will use braille to produce a variety of materials for leisure and school activities.

## Unit 6: Social/Emotional Components of Braille Reading/Writing

In this final unit, students will connect with other braille users, peer or adult mentors, and reflect on their own experiences learning and using braille.

# **Recommended Assessment Components:**

**Ensure alignment with the Principles of Quality Assessment** 

Type of Assessment	Category	Details	Weighting (%)
Formative	Practical applications	Teacher designed program	40%
	Teacher rating scale	End of Units 1-6	40%
Summative	Final assessment	Reading	10%
		Writing	10%
		Total	100%

• Eighty per cent (80%) of the grade will be based on evaluations conducted throughout the course. This portion of the grade will reflect the students' most consistent level of achievement throughout the course, although special consideration will be given to the more recent evidence of achievement. Twenty per cent (20%) of the grade will be based on a final evaluation of knowledge of UEB and other braille codes.

### Performance Methods

- Braille code knowledge
- Projects
- Portfolio/binders/computer files

- Braille products evaluation
- · Presentation of completed works
- Maintaining assignments on note book

## Personal Communication

- Student/instructor/Braille EA dialogue
- Logbook reflection
- Self-evaluation
- Teacher evaluation

### Other

- · Monthly assessment
- Teacher/Braille EA anecdotal records
- Teacher/Braille EA log
- Checklists
- Rubrics
- · Rating scales

# **Learning Resources:**

Farrenkopf, C. (2015). Assessment of Braille Literacy Skills: UEB and EBAE. (3rd Ed.). Houston, TX: Region 4 Education Service Center.

Holbrook, M. C. & D'Andrea, F. M. (2014). Ashcroft's Programmed Instruction: Unified English Braille. Germantown, TN: SCALARS Publishing.

International Council on English Braille (2014). Guidelines for Technical Material. Retrieved from http://www.iceb.org/guidelines for technical material 2014.pdf

International Council on English Braille (2013). Rules of Unified English Braille. (2nd Ed.). Retrieved from <a href="http://www.iceb.org/Rules%20of%20Unified%20English%20Braille%202013.pdf">http://www.iceb.org/Rules%20of%20Unified%20English%20Braille%202013.pdf</a>

Wormsley, D. P. (2016). I-M-ABLE: Individualized Meaning-Centered Approach to Braille Literacy Education. Louisville, KY: American Foundation for the Blind.