Course Name: Braille 10

School: Abbotsford Senior Secondary

Developed By: Provincial Resource Centre For the Visually Impaired (PRCVI) + KariAnn Pearce

Principal: Carla Campbell

1. Course Title:
- ☑ Not the same as any other Ministry-developed courses
- ☑ Includes grade level 10, 11, 12 in the course name.

Comments:

2. Grade level:
- ☑ Reflects the appropriate level of instruction
- ☑ If part of a series of courses designed to address different aspects of a subject, it is reported as 11A, 11B, or 11C (ex. History 11A, History 11B, History 11C)

Comments:

3. Number of credits:
- ☑ Number of credits is indicated (1,2,3,4)
- ☑ Credit value accurately reflects the length and scope of the course
  * Arts Ed 11 or ADST 11 course written to meet the Arts Ed/ADST graduation requirements may be 2 or 4 credits.

Comments:

4. Course Synopsis:
- ☑ Course synopsis accurately describes what a student will have gained as a result of completing the course

Comments:

5. Goals and Rationale:
- ☑ Everything in the goals section connects to the Big Ideas, Curricular Competencies, Content
- ☑ Identifies 4 to 8 goals
- ☑ Rationale is a brief statement that explains the area of learning and the importance of the learning to students and to society
- ☑ Rationale may also include connections to cross-curricular competencies and to other curricular areas

Comments:

6. Aboriginal Worldviews and Perspectives:

☑ A clear connection and integration of First Peoples Principles of Learning and Aboriginal content is present in the course

Comments: Indigenous content cannot be authentically connected to this course, but the First Peoples Principles of Learning are integrated throughout

7. Organizational Structure:

☑ Content, competencies, and big ideas are assessable, observable, and understood by students and parents

☑ Content (*know*): includes essential topics and knowledge taught in the course

    ☑ does not significantly overlap new MInistry curriculum content

☑ Curricular Competencies (*do*): clearly connect to the skills, strategies, and processes that students will develop

    ☑ may have some or all of the curricular competencies of a Ministry-developed course

☑ Big Ideas (*understand*): clearly outline the generalizations of important principles, and key concepts in the course

    ☑ may share some or all of the Big Ideas of a Ministry-developed course(s)

Comments:

8. Recommended Instructional Component: makes clear the intent of the learning standards

☑ there is a direct connection between the content, curricular competencies, the big ideas and methods of instruction (examples from the course are provided for each strategy listed)

    ☑ Appropriate balance of various learning standards

    ☑ Variety of approaches, including both innovative and "tried and true"

    ☑ Activities that draw from and build on prior learning

    ☑ Various learning styles

    ☑ Activities that are transferable to other contexts

Comments:

9. Recommended Assessment Component:

    ☑ involves a wide variety of methods or tools (examples are provided)

    ☑ measures competency acquisition

    ☑ evaluates students' progress toward meeting learning standards (know, understand, and do)

    ☑ is fair, transparent, meaningful and responsive

    ☑ is ongoing, timely, specific and embedded in day to day instruction

☑ provides varied and multiple opportunities for learners to demonstrate learning

☑ communicates clearly to the learner where the student is, what they are working towards, and the ways that learning can be supported

Comments:

10. Learning Resources:

☑ Age appropriate

☑ Support learning standards

☑ Takes into account the needs of the learners

☑ Major learning resources are listed (teacher and student resources)

Comments:

Recommended as submitted:

☑ Yes

❑ No

Changes required before recommendation:

Rejected for the following reasons:

Recommended following required changes:

❑ Yes

❑ No

Date: _November 22, 2024_

Ashlyn Zirl
Reviewer's Signature

ABBOTSFORD
SCHOOL DISTRICT

Board Authorized Course Rubric

BAA Committee Chair's Signature

Date approved by the Board of Education:

Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name: Abbotsford School District	School District/Independent School Authority Number (e.g. SD43, Authority #432): SD34
Developed by: Provincial Resource Centre for the Visually Impaired (PRCVI) in collaboration with BC Teachers of Students with Visual Impairments With updates by Kari-Ann Pearce, Teacher of Students with Visual Impairments	Date Developed: February 2021 with updates June 2024
School Name: Abbotsford Senior Secondary	Principal's Name: Carla Campbell
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course Name: Expanded Core Curriculum – Braille 10 (ECC-VI-BRL)	Grade Level of Course: 10
Number of Course Credits: 4	Number of Hours of Instruction: 100

Board/Authority Prerequisite(s):

None.

Special Training, Facilities or Equipment Required:

This course requires a qualified teacher of students with visual impairments (TSVI) 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 TSVI meets with the student during the appointed block.

Course Synopsis:

Students will be introduced to the foundations of Unified English Braille (UEB) and begin 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 curriculum themes, develop projects, and research topics of personal interest. Finally, students will begin to foster connections with peers and mentors who are proficient braille readers.

Goals and Rationale:

This course has been developed so that students who are blind or visually impaired can begin 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 medium.

There are several possible motivations for students to begin to learn braille reading and writing skills in Grade 10. 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 begins a student's journey to becoming proficient in braille reading and writing within their secondary school career and beyond.

Indigenous Worldviews and Perspectives:

This 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 starting to learn braille, the student becomes part of a proud tradition of individuals with visual impairments gaining independent access to the written word, which dates back over two centuries. The 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 skills in reading and writing braille 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. The course 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 10 is that the course is taught 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 practice. In this way, the content of the course is shared only in the context of the relationship between the learner and the qualified teacher of students with visual impairments.

BIG IDEAS

Braille reading and writing is an essential skill for students requiring non-visual access to learning materials.	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 provides flexibility in accessing braille reading and writing at home, school, and in the community.	Connections to the braille-reading community contextualize and enrich braille usage for the individual learner.

Learning Standards

Curricular Competencies	Content
Students are expected to do the following:	*Students are expected to know the following:*
Problem Solving and Critical Thinking - Engage in problem solving when applying basic rules of UEB and basic braille formats to their reading and writing. - Use critical thinking and analysis to start determining which braille writing/production tool or device best meets their needs when completing a given writing task. - Determine which advocacy techniques are available for articulating their accessible alternate format requirements at school. Comprehend and Connect (Reading, Writing, Drawing) - Begin to work through a sequential process to learn the UEB code and rules. - Use systematic tactile strategies to explore and interpret simple tactile graphics, diagrams, and drawings. - Begin to explore various methods and materials to create tactile drawings and diagrams. Reflect and Project - Begin to reflect on the role of braille in their own learning process and will begin to critically examine how braille reading and writing will factor into their projected (future) plans. - Begin to reflect on new technological developments in braille reading and writing in	Unified English Braille (UEB) Code Knowledge - Most common signs, symbols, and basic usage rules, including beginning UEB math/technical symbols and rules. - Basic formatting rules and guidelines. Braille Technology - Basic use of low tech, manual braille production. - Basic use of higher tech digital file access with refreshable braille display. Social and Historical Contexts of Braille - Basic knowledge of the story of Louis Braille and how the code has developed over the last two centuries. - The implications of braille to early advances in education for learners with visual impairments. - Looking ahead to new developments and trends. Personal Connections - Braille as part of a "toolkit" for accessing information. - Implications for braille reading and writing within future plans (e.g., post-secondary education, workplace).

a socio-historical context. • Explore ways to expand the usage of UEB beyond academic tasks by connecting with mentors and peers who read braille, and by exploring options for using braille in labelling, organization, and leisure reading activities. • Understand how braille reading and writing will factor into future plans (e.g., post-secondary education, workplace).	• Methods and strategies of advocacy for accessible format needs at the school level.

Big Ideas – Elaborations

1) **Braille reading and writing is an essential skill for students requiring non-visual access to learning materials**.
   a. Individuals with visual impairments require a repertoire of skills to enable full access to reading and writing tasks, and braille is an important skill to develop for individuals who cannot easily access print.
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 several 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.
- Develop an awareness of the various braille technologies available and the basic differences between them.
- Begin use of low- and high-tech devices for reading and writing braille.
- Experiment with creating different types of simple tactile diagrams to represent information.
- Begin to analyze own work to identify and correct errors.
- Assess own reading and writing skills and determine areas for improvement or skill development.
- Begin to explore strategies for accessing printed information in a medium compatible with accessibility requirements.

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.
- Create simple braille documents that can be back-translated to print accurately.
- Understand basic word processing concepts (e.g., heading levels).
- Begin to develop the ability to create, organize, and implement writing projects using braille.

Reflect and Project

- Begin self-reflection on the learning process and the role of braille in literacy development.
- Begin to incorporate braille into their school and home activities.
- Begin to assess the influences of braille reading on their own literacy development.
- 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 mentor who uses braille.
- Use braille to communicate with peers who also read braille (i.e., as pen pals).
- Begin to examine, promote, and advocate for enhancing braille awareness and sharing of braille writing in school.

Content – Elaborations

Unified English Braille (UEB) Code Knowledge
- Most common signs, symbols, and basic usage rules.
    - Introduction of the alphabet, contractions, and code rules through a systematic program of braille instruction.
- Basic formatting rules and guidelines.
    - Development of skills in braille formats for basic learning materials at the secondary level (e.g., novels).
    - Basic awareness of different braille codes and systems (e.g., braille ASCII, foreign language codes, music code).
    - Guided exploration in techniques used for creating simple tactile images, diagrams, and graphs.

Braille Technology
- Basic use of low tech, manual braille production.
    - Developing proficiency in the use of the manual Perkins braillewriter.
    - Awareness of the slate and stylus and handheld braille labellers.
    - Basic knowledge and use of braille learning tools (e.g., braille rulers, models with braille labels).
- Awareness of higher tech digital file access with refreshable braille display.
    - Awareness of refreshable braille and the various ways in which it can be used (e.g., standalone notetaking device, braille display paired with computer or mobile device).
    - Awareness of other braille technologies (e.g., braille embosser, braille translation programs) and knowledge of scenarios in which they are used.

Social and Historical Contexts of Braille
- Basic knowledge of 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 (e.g., night writing).
    - Discussion and awareness of the development of braille codes around the world as well as specialized codes used internationally (e.g., music braille code).
    - The rationale for the adoption of UEB in Canada and around the world and awareness of codes that preceded Unified English Braille.
- Awareness of the implications of braille to early advances in education for learners with visual impairments.
    - Reading and discussion of historical biographies that demonstrate the impact of braille in the lives of historical figures.

Content – Elaborations

- An introduction to the limitations on the availability of braille and inclusive education for learners with visual impairments as content for discussions on social justice and accessibility.
- An emerging understanding of braille in our world.
  - Explore texts and online content (e.g., blogs, videos) to learn about how braille is produced around the world.
  - 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.
  - Research the latest prototypes and speculative developments in braille technology and evaluate the prospective advantages and disadvantages to each.
  - Social justice and accessibility discussions (e.g., steps to address discrimination facing braille readers in Canada and/or abroad).

Personal Connections
- Braille as part of a "toolkit" for accessing information.
  - Begin to develop knowledge, skills, and experience to determine the combinations of accessible formats that maximize comprehension and efficiency.
- Implications for braille reading and writing within future plans (e.g., post-secondary education, workplace).
  - Begin to develop awareness of strategies to independently access print materials (e.g., OCR software, accessible library services) and independently produce print materials (e.g., essays back-translated from a braille notetaker).
- Methods and strategies for advocacy for accessible format needs at the school and community levels.
  - Guided practice in articulating arguments that support the provision of accessible alternate format materials. Student may create a short presentation on braille and what it means for them which can be shared with teachers, administrators, etc.

Recommended Instructional Components:

Unit 1: Exploration

Students will begin to 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.
ASSESSMENT:
What would it look like if the student meets this learning outcome?

- Students can articulate some of the history of braille and its importance in daily life (e.g., accessibility in public spaces, routine tasks, and daily organization)
How can the student show this?

- Student/instructor/mentor dialogue

- Self-evaluation through journal or discussions

Unit 2: Tactile Discrimination/Interpretation

Students will learn how to discriminate the different textures, lines, and characters used in simple 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.
ASSESSMENT:
What would it look like if the student meets this learning outcome?

- Students can read a simple tactile diagram with accuracy and create one that shows information accurately

How can the student show this?

- Braille products evaluation (create a diagram of personal interest to share)
- Summative assessment

Unit 3: Production

Students will begin to develop braille writing and production skills using low- and, potentially, high-tech devices. Students will be able to use the braillewriter to begin to produce material using the braille code.

ASSESSMENT:

What would it look like if the student meets this learning outcome?

- Students can independently use a Perkins braillewriter from beginning to end to produce braille documents
- Students can articulate initial understanding of how high-tech devices (e.g., refreshable braille displays, computers) are used for braille production

How can the student show this?

- Braille products evaluation
- Summative assessment

Unit 4: Braille Reading

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

ASSESSMENT:

What would it look like if the student meets this learning outcome?

- Students can accurately read UEB sentences and short stories with fluency
- Students can accurately find formatting structures (e.g., titles, headings, page numbers)

How can the student show this?

- Summative assessment of reading skills

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, including the use of technology for production.

ASSESSMENT:

What would it look like if the student meets this learning outcome?

- Students can accurately write lists, short sentences, and short stories using UEB

How can the student show this?

- Braille products evaluation
- Summative assessment of writing skills

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

In this final unit, students will connect with other braille users, peers, and adult mentors, and reflect on their own experiences learning and using braille.
ASSESSMENT:
What would it look like if the student meets this learning outcome?

- Students can articulate the need for braille and begin to self-advocate within their school setting for braille materials

How can the student show this?

- Presentation of personal experiences and what braille means to them to be shared with teachers

Recommended Assessment Components:

Students will be given 3 opportunities for formative assessments before a final assessment of learning. Students will receive two opportunities for assessments of learning.

Performance Methods

- Braille code knowledge
- Projects
- Portfolio/binders/computer files
- Braille products evaluation
- Presentation of completed works
- Maintaining assignments on note taker

Personal Communication

- Student/instructor/mentor dialogue
- Logbook reflection
- Self-evaluation
- Teacher evaluation

Other

- Weekly assessment
- Teacher anecdotal records
- Teacher 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
http://www.iceb.org/Rules%20of%20Unified%20English%20Braille%202013.pdf

Sewell, D. EVALS: Evaluating Visually Impaired Students Using Alternate Learning Standards Emphasizing the Expanded Core Curriculum.
(2007). Austin, TX: Texas School for the Blind.

Swenson, A. M. (2016). Beginning with Braille: Firsthand Experience with a Balanced Approach to Literacy. (2nd Ed.). New York, NY: AFB Press.

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