

Board Authorized Course Rubric

Course Name: Braille 17

Provincial Resource Centre For the Developed By: Visually Impaired + Kariann Pearce

School: Abbotsford Senior Secondary

Principal: Carla Campbell

1. Course Title:

In 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:

Mumber 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 cause, 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
 - image 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



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rovides 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
- An interview of the second student resources are listed (teacher and student resources)

Comments:

Recommended as submitted:

🕑 Yes

🛛 No

Changes required before recommendation:

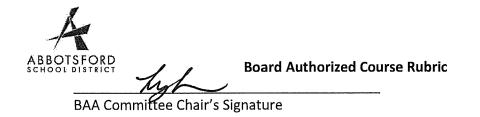
Rejected for the following reasons:

Recommended following required changes:

- 🛛 Yes
- 🛛 No

Date: November 22, 2024

Reviewer's Signature



Date approved by the Board of Education:



Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name:	School District/Independent School Authority Number (e.g. SD43, Authority #432):
Abbotsford School District	SD34
Developed by: Provincial Resource Centre for the Visually Impaired (PRCVI) in collaboration with BC Teachers of Students with Visual Impairments	Date Developed: June 2021 with updates June 2024
With updates by Kari-Ann Pearce, Teacher of Students with Visual Impairments	
School Name:	Principal's Name:
Abbotsford Senior Secondary	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:	Grade Level of Course:
Expanded Core Curriculum – Braille 12 (ECC-VI-BRL)	12
Number of Course Credits:	Number of Hours of Instruction:
4	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 teacher of students with visual impairments meets with the student during the appointed block.

Course Synopsis:

Students will be introduced to the foundations of Unified English Braille (UEB) and will refine their skills 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 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 medium.

There are several possible motivations for students to learn braille reading and writing skills in Grade 12. 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 refining their knowledge of 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 12 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 is an essential access medium for people requiring non- visual access to 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 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.		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 rules of UEB technical material and complex braille formats to their reading and writing. Use critical thinking, analysis, and prior experience to determine which braille 	 Unified English Braille (UEB) Code Knowledge Signs, symbols, and usage rules including advanced UEB math/technical symbols and rules. More complex formatting rules and guidelines.
 writing/production tool or device best meets their needs when completing a wide range of writing tasks. Anticipate which situations may present barriers to braille access and determine which advocacy techniques are available for articulating their accessible alternate format requirements at school, work, and in the community. 	 Braille Technology Use a variety of low tech, manual braille production tools. Advanced use of higher tech digital file access with refreshable braille display.
 Comprehend and Connect (Reading, Writing, Drawing) Complete a sequential process to learn more complex UEB code and rules. Use systematic tactile strategies to explore and interpret complex tactile graphics, diagrams, and drawings. Explore various methods and materials to create increasingly complex tactile drawings and diagrams. 	 Social and Historical Contexts of Braille Knowledge of historical and current advocates for braille literacy and how the code has developed over the last two centuries. Continued exploration of the implications of braille to early advances in education for learners with visual
Reflect and Project	impairments.Continued exploration of braille in our world.
• 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.	 Looking ahead and projecting new developments and trends.
Reflect on new technological developments in braille reading and writing in a socio-	Personal Connections

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 historical context. 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, employment, and leadership activities. 	 Braille and other formats as a "toolkit" for accessing information. Factors of braille reading and writing for future plans (e.g., post-secondary education, workplace). Methods and strategies for advocacy for accessible format needs at the school, work, community levels.
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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

- Determine locations and instances where braille could be used in everyday life and identify advocacy opportunities to increase access.
- Compare and contrast the various braille technologies available on the market.
- Use a variety of low- and high-tech devices for accessing, producing, and using braille.
- Evaluate different types of tactile diagrams that are best suited for representing information.
- Be able to analyze work and identify errors in both code usages and formatting rules.
- Assess the overall quality of their own personal reading and be able to analyze ways of accessing printed information in a medium that is compatible with their unique access requirements.

Comprehend and Connect (Reading, Writing, Drawing)

- Refine skills to increase speed and accuracy in braille reading and writing.
- Source, obtain, and read an increasing variety of braille materials.

- Become familiar with formatting rules in a variety of complex and technical braille materials.
- Continue to develop skills for efficiently skimming and scanning braille, both hard copy and digital formats.
- Create complex or technical braille documents that can be back translated to print accurately.
- Understand word processing concepts (e.g., headings levels) and apply them across different braille technologies.
- Continue to develop the ability to create, organize, and implement complex writing projects in braille.

Reflect and Project

- Self-reflect on the learning process and the role of braille and braille technology in terms of its advantages and disadvantages.
- Continue to incorporate braille into their school, home, community, and work activities.
- Continue to assess the influences of braille reading on their own literacy development as it relates to current and future access to information.
- Build upon research and knowledge of new developments in braille technology and assess the goodness of fit between this technology and current and future needs, including strategies and means to acquire new technology.
- Use braille technology to communicate with a mentor who uses braille and provide mentorship to younger braille learners.
- Use braille technology to communicate with peers who also read braille as a means of providing peer support.
- Continue to examine, promote, and advocate for enhancing braille awareness and sharing of braille writing in the school and larger community, including connections with national and international advocacy organizations.

Content – Elaborations

Unified English Braille (UEB) Code Knowledge

- Technical signs, symbols, and usage rules.
 - Introduction of the alphabet, contractions, and code rules through a systematic program to promote literacy in braille.
- More complex formatting rules and guidelines.
 - Proficiency in braille formats for learning materials at the secondary and post-secondary level (e.g., poetry, drama).
 - Developing skill in other required braille codes (e.g., computer braille or braille music code).
 - Continued skill development in creating tactile images, diagrams, and graphs according to technical material guidelines.

Braille Technology

- Use a variety of low tech, manual braille production.
 - Proficiency in the use of the manual Perkins braillewriter.
 - Basic skills with a slate and stylus and handheld braille labellers.
- Advanced use of higher tech digital file access with refreshable braille display.
 - Use of refreshable braille in a variety of contexts (e.g., standalone notetaking device, braille display paired with computer or mobile device).
 - o Basic knowledge of other braille technologies (e.g., braille embosser, braille translation programs).

Social and Historical Contexts of Braille

• Knowledge of historical current advocates for braille literacy and how the code has developed over the last two centuries.

Content – Elaborations

- Reading and discussing documents that examine the establishment of braille as the tactile reading medium worldwide (e.g., the "War of the Dots").
- Discussion and exploration of the development of braille codes around the world as well as specialized codes used internationally (e.g., music braille code).
- Awareness of braille-related organizations (e.g., Braille Literacy Canada) and the programs they offer as well as the opportunities for participation in the future of braille and accessibility.
- The implications of braille to early advances in education for learners with visual impairments.
 - Reading and discussion of biographies that demonstrate the impact of braille in the lives of braille readers.
 - Continued exploration and discussion of to the limitations on the availability of braille and inclusive access for individuals with visual impairments as content for discussions on social justice and accessibility.
- Braille in our world.
 - Exploring texts and online content to learn about how braille is produced in other regions, countries. International perspectives provide opportunity for examination of global, national, regional, and local issues facing individuals with visual impairments. Students should be encouraged to formulate potential solutions to these issues.
- Looking ahead to new developments and trends.
 - Develop and apply 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 and other formats as a "toolkit" for accessing information.
 - Refine knowledge, skills, and experience to determine the combinations of accessible formats that maximize comprehension and efficiency.
- Factors of braille reading and writing for future plans (e.g., post-secondary education, workplace).
 - Proficiently and independently use strategies to access to 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, work, community levels.
 - Articulate arguments that support the provision of accessible alternate format materials. Student may practice strategies for addressing advocacy challenges, such as writing a mock letter to a university professor or community organization.

Recommended Instructional Components:

Unit 1: Exploration

Students will explore the history of braille and its development and current advocates for braille literacy. They will continue to develop proficiency in use of 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 rticulate the history of braille and its importance in daily life (e.g., accessibility in public spaces, routine tasks, and daily organization)
- Students will identify and research a braille advocacy group

How can the student show this?

• Student/instructor/mentor dialogue

• Presentation of research

Unit 2: Tactile Discrimination/Interpretation

Students will refine their skills in discriminating textures, lines, and characters used in complex tactile graphs, charts, and diagrams. They will analyze information that is presented in a tactile format as well as create their own tactile graphics.

ASSESSMENT:

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

• Students can read more complex tactile diagrams 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 refine braille writing and production skills using low- and high-tech devices. Students will be able to use the braillewriter to accurately 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 use a high-tech device accurately to produce braille documents

How can the student show this?

- Braille products evaluation
- Summative assessment

Unit 4: Braille Reading

In this unit, students will continue to master their knowledge of the braille code. 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 read UEB sentences, stories and academic materials including math with fluency
- Students can 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.

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ASSESSMENT:

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

- Students can accurately write lists, sentences, stories and math equations 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, peer 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 within their school, community and future workplace setting to others.

How can the student show this?

- Participate in an exchange of braille communication with a peer or adult mentor.
- Write a real or mock letter to a university professor or community organization articulating need for braille.

Recommended Assessment Components:

Ensure alignment with the Principles of Quality Assessment

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.

Additional Information: