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# Braille Music Our Way: Introducing a new and unique approach to music literacy through Braille.

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## Introduction

Braille creates opportunities in all areas of life. It builds transferrable skills and strong, resilient communities. Music transcends language, cultural, and societal barriers and plays an integral part in the lives and wellbeing of blind and sighted musicians. Together, Braille and music are a potent combination that can change the lives of participants and communities alike. Long-term, the skills and connections created through Braille music have flow-on effects for all of society. However, opportunities for blind adults to access and/or participate in music making experiences are limited at best and inaccessible at worst in New Zealand. To address this imbalance, the Tactile and Technology Literacy Centre in collaboration with Dr Wendy Richards formed a project team with a vision that members of the blind community have access to music literacy through Braille.

The project is named the Aotearoa Braille Music Initiative (ABMI) and is guided by three key principles:

1. Access-led: The initiative is developed and led by people with lived experience and people who are closely connected with the Braille music community.
2. Community: The initiative fosters community engagement and develops a broad range of skills for the practical use and production of Braille music.
3. Flexible: The initiative meets individual learning needs and includes appropriate resources.

As part of this broad project, a Braille music teaching and learning programme is currently in development. This programme is informed by our collective experiences and a deep understanding of how we, as Braille readers, approach music and learning. Understanding that Braille music is a tactile representation of sound and not a coded form of print music has provided the space to move away from traditional approaches to music learning. The programme, called “Braille Music for Us!” (BMU), outlines an effective music learning process and provides resources for us to learn Braille music our way.

## Braille Music for Us!

The experience of music, whether making it or listening to it, is multi-sensory. It engages cognitive functions, aural, tactile, kinaesthetic, and visual senses. For a learner who is blind, the reduction of visual engagement places more importance on audiation and learning experiences which engage aural and kinaesthetic pathways. Audiation, a term coined by Edwin Gordon (1927-2015), describes a person’s ability to “think” in music. It is the cognitive ability to translate sound and give it musical meaning. Developing audiation in combination with Braille sits at the heart of the BMU programme.

Braille Music for Us presents a framework for learning that engages people in practical music making experiences, fosters audiation, and nurtures Braille music skills. It outlines a process for learning music and suggests activities that develop skills and understandings sequentially. The BMU framework for learning is very different from a traditional programme such as an instrumental series or theory text that has a set course. An instrumental programme must cover elements of music theory alongside the physical skills required to meet the technical demands of the instrument. A traditional theory book presents the rules of music coding, regardless of whether the reader has any musical understanding or skill. Braille Music for Us focuses on understanding, performing, reading, and writing the fundamental elements of music, rhythm and tonality. These fundamental elements can then be understood within larger contexts through the integration of Braille notation. The advantage of using a framework instead of an approach with prescribed lesson content, is that it can be applied across different settings, it allows for individual music interests to be accommodated, and provides flexibility for tutors to develop a teaching and learning approach that reflects their own personal style.

## Pedagogy

Braille Music for Us is built upon three key pedagogy principles:

1. Flexibility and responsiveness.
	1. The programme provides the capacity to respond to and meet individual learner need, even when in a group setting.
	2. The programme incorporates both context and code-based approaches.
2. Active engagement in the construction of knowledge.
	1. Learners are engaged in practical activities right from the start and are therefore active participants in the development of their own music understandings.
3. Acknowledgement and accommodation of the unique learning culture of Braille music learners.
	1. Braille nuances and features of Braille music learning culture are acknowledged and embedded into the pedagogy and resources.
	2. Accessibility is forefront. Resources are available in Braille, print, and audio formats, and developed with a user-friendly approach.

## How does the programme work?

BMU follows the same natural process as language acquisition. This process begins as a baby when we listen to sounds around us, begin to understand their meaning, and respond verbally. At first, our sounds come out as babble until we develop the ability to coordinate our breath with our body to speak real words. The words may not make sense at first, but as our comprehension develops, we begin to string words together appropriately to form sensible sentences. Later, we learn how to read and write the words that we already understand and from there, we begin to expand our knowledge by learning new words.

In music, we describe this process as establishing a series of vocabularies; a listening vocabulary, a thinking vocabulary (audiating), and a performing vocabulary (singing, playing). Once these vocabularies have been established, notation is introduced as a tactile representation of the sounds we are audiating. A BMU tutor works with learners to develop music literacy following this process, providing lots of opportunities to practice new learnings in a relaxed environment.

A key concept that underpins BMU practice is an understanding that everyone brings different perspectives, cultural, and life experiences to the programme and that music development does not follow chronological development. It is acknowledged that some learners, regardless of age, may still be in the “babble” stage of music learning for a number of reasons and that this is part of the learning process. Conversely, for people who already have established musical understandings, the process can incorporate code-based practices alongside active music engagement. Lessons can be undertaken in person or online, individually or as a group, although group learning is preferred due to the potential it brings for group music making.

## Framework for Learning

The BMU framework for learning develops music skills by exploring fundamental rhythm and tonal patterns using a series of music-based strategies. It follows the framework established by Edwin Gordon in his Music Learning Theory, though with different labels. Some adaptations are introduced in practice to meet the specific needs of learners who access music literacy through Braille. Of particular note are adaptations to tonal pattern activities when notation is introduced.

There are six sequential learning strategies in the framework designed to build upon each other and lead the learner toward musical comprehension, including the ability to read music with understanding (as opposed to decoding). The rhythm and tonal content learned through the six strategies is organised into levels, starting with the easiest to comprehend (level 1) and moving through to the most complex. Content from each level (e.g. level 1 rhythm patterns) is assimilated by working through a range of activities, beginning with those in strategy one and eventually moving through all six strategies. Different levels of content can be combined with each learning strategy to ensure the learning needs of everyone in a group can be met.

The first three learning strategies focus on aural features of the language of music. In strategy one, the basic units of musical meaning are introduced (rhythm and tonal patterns) and listening and performing vocabularies are established. Strategy two introduces a labelling system for discrimination, identification, and categorisation of patterns, and learners begin to make inferences by audiating the underlying tonality or metre of a series of patterns in strategy three. Strategies four, five, and six develop notational audiation (reading and writing music with understanding) and deepen music theory knowledge.

It is from strategy four onwards that Braille really comes to the fore. At this point, at least some fundamental music patterns have been assimilated aurally, kinaesthetically, and cognitively. Braille music then becomes an external expression of this inner cognition. Rather than abstract symbols with no meaning, the Braille notation connects and reflects the musical knowledge already present. Learning Braille music this way avoids the dilemma of attempting to learn an instrument, the rules of music theory, and how to read music symbols all at the same time.

## What makes BMU special?

Braille Music for Us is unique in several ways, some of which are not new to the world of music education but may be new to Braille. Firstly, BMU follows the natural progression of language acquisition. In this case, music. As a result, Braille is introduced as an integrated element of musicianship, not as a separate piece of the puzzle. The shift away from traditionally prescribed print-based methodologies of music learning positions Braille as a standardised notation system that directly represents sound, rather than as a coded form of print music. It reflects the position of a native Braille user who reads Braille and feels sound through their fingertips.

Furthermore, Braille nuances are embedded into the learning process following Braille logic instead of print music or music theory logic. For example, sharp and flat signs are traditionally introduced as accidentals. However, BMU introduces them as key signatures first. This serves to reinforce tonal understandings and avoid any confusion for new readers with dot six symbols being placed together (e.g. sharp sign and crotchet note). The sharp and flat signs are revisited as accidentals when quavers are introduced to alleviate this issue. Building a comprehensive music learning programme from a Braille user perspective has allowed BMU to embed music theory concepts following a Braille-friendly, Braille-logic approach.

Braille Music for Us also actively applies Braille-friendly teaching and learning techniques like the whole-part-whole strategy. This is a three-step process which is particularly helpful when introducing new repertoire. The first step provides an introduction or overview of the whole piece through multi-sensory activities including listening, moving, singing, and/or chanting. The second step incorporates a more detailed analysis of the piece using activities outlined in the learning strategies, i.e. the rhythmic, tonal, and/or harmonic patterns within the piece are actively explored. The third and final step returns to the whole piece but this time with a deeper understanding of how the musical elements fit together.

The initial step is particularly important for a Braille reader because it presents an aural overview; an aural opportunity to assimilate musical features. This is equivalent to the way a sighted reader might absorb musical information with a visual scan or a glance at the score. For us, it provides an aural glance. An additional strength of this technique is that by examining smaller details of the music in the second step, a beginning reader is exposed to smaller, meaningful fragments of Braille without being overwhelmed by a full score.

## Conclusion

Music teaching and learning can be approached in many ways, each with their own distinctive style and merit. Braille music is not immune to this phenomenon. However, at some point in Western history, music teaching and learning practices were standardised and, in many cases, followed a traditional conservatory (university) model whether appropriate or not. Braille music education generally followed suit and was very often taught by a sighted teacher who decoded the dots and then taught code, or by a Braille user who had themselves been taught by a sighted teacher, who taught code. Braille Music for Us is attempting to turn those traditions on their head. The BMU framework is broad and the approach comprehensive and flexible, with the active application of Braille integral to the process. Rather than musical knowledge being placed onto Braille code, Braille nuances and understandings are embedded into the learning process in ways that are logical from a Braille-first perspective. The fundamental patterns that underlie all music are integrated with Braille in a holistic rather than compartmentalised way. Most importantly, Braille Music for Us reveals that we can teach Braille music differently … we can teach it our way!