Braille Literacy Canada 2024 Symposium Transcript: Braille Music – Using technology, how do we learn it, how do we find resources? (Jordie Howell, Vision Australia, International Council on English Braille)

**Daphne Hitchcock**

Okay, that's great. Looks like it's the topic of the hour, so welcome Jordie and Jen Goulden. I'll hand things over to you.

**Jen Goulden**

All right. Well, thank you, Daphne. So it's my pleasure to introduce our next speaker, Jordie Howell. And I will just say that there were so many things that I could say about her, I had to kind of pick and choose. But if you want to read more about her, in the symposium information is a little bit more of a complete bio, I think. And maybe Jordie will tell us more things about her that I don't get a chance to include. But I'll keep this brief so that we can spend our time listening to Jordie talk about something she's very passionate about. So, Jordie Howell is the immediate past Chair of the Australian Braille Authority, as well as the immediate, we don't really have a name for this, but the immediate past—up until the GA in, the General Assembly in New Zealand—she was the Australian rep to the International Council on English Braille. And she continues to chair ICEB’s music committee. She's a transcriber for Vision Australia, and she helps to develop automation processes for transcription, particularly of music, from what I understand. She's a music teacher with the Statewide Vision Resource Centre in Victoria, where she loves working with the kids and with braille music and technology, all sorts of good things. And she's also a classical soprano, and she sings professionally as a soloist. And she is, and I can attest to this, she is a passionate advocate for braille music, and just an all around fantastic person. So with that I, oh, am I handing this over to Jordie? I think maybe I'm handing it over to you. And then in about half an hour-ish, I'll give you a one minute warning, and then we will, it'll come back to Riane who will take, she'll tech? Oh, my goodness, I'm sorry. You could tell it’s the end of the week. She will check for, we will take questions at that time. And then eventually hand it back to Daphne. So over to you, Jordie.

**Jordie Howell**

Excellent. Thanks, Jen. Good morning. Good afternoon. Good evening. Good night to you all. So it's 6am here, but I've had tea. I've had breakfast, the dogs have been looked after. So now I'm ready to talk about braille music, which is my favorite subject. I don't know how much you will know about braille music, so I'm going to assume that some of you don't know anything about it. And so we'll do a bit of a lesson. So those of you that do know something can have a bit of a snooze at that point. And then I'll, so yeah, I'll split the presentation into three, kind of segments. So yeah, the first will be about what braille music is, and how does it work, how different it is from print music. I'll then move to the resources that are available to learn braille music. So, they will include books, YouTube links, or videos, and some podcasts. And then I will demonstrate a few of the braille music tools that are available to translate electronic print music files, into braille. And this is the exciting stuff that's going on internationally at the moment. So I'd love to share those with you. There's three programs that I particularly want to demonstrate and a fourth that I'll kind of demonstrate in the course of the presentation when I'm talking about braille music.

Alright. So, it is amazing to think that Louis Braille, who was a teenager in the 1800s geeking around with dots, just as today, teenagers would probably geek around with coding and computers, you know, those kinds of kids. Louis created what we now call braille and braille music because he was a cellist and an organist and pretty clever musician. And his symbol of music is still the only international braille music code in existence. So we all have, you know, the English braille code, there are several maths codes in use, in Europe and whatever. But in terms of music, this is the code we all use. So if you borrow a braille music score in Canada, or Australia, or Norway or Vietnam, you'll be able to recognize the crotchets, quavers, or if you want, quarter notes and eighth notes, because they're going to be the same fundamental signs. The thing that differs though is formatting. And that's what I'll cover a bit later.

So, how does braille music work? What is it? Braille music is a representation of print music. So print music uses lines and spaces and you can see the pitch, for example, rise if the pitch is going to ascend up the page. But we don't have that option in braille, we have to take it in from a linear perspective. So what I'm going to do is share my screen now and use a program called Braille Music Editor or BME, this is a braille music editor latest version almost, to demonstrate what I mean because I've got a file here. So let's see if this screenshare works. Hopefully it does.

**<Screen Reader>**

Screen sharing meeting controls.

**Daphne Hitchcock**

Yes, yes.

**Jordie Howell**

Can we hear that?

**<Screen Reader>**

Post attendee reminder, Inbox, BME 2-C colon—

**Jordie Howell**

Alright. Jen, I don't know whether this speech is going to be too fast for some people that hopefully you'll cope. So the braille cell is kind of divided up when we talk about braille music. Louis Braille was a Frenchman. So they were using do re mi fa so la ti. So that they would use the solfege system, so that's kind of what he was basing things on. So the quavers, or the eighth notes, I'm going to be bilingual here.

**<Screen Reader>**

Fourth octave, C quaver.

**Jordie Howell-**

So you can hear that say fourth octave C quaver because I've got it in the Australian system.

**<Screen Reader>**

C quaver. [Note plays.]

**Jordie Howell**

So you can hear it play the C quaver and speak quaver. So that uses, it's a letter D for do, so you can call it do quaver, if you like. It uses dots coming from the top four dots of the braille cell. Words, I’m losing them, okay. And then we progress through the letters. So, the note do, or C, is the letter D. And then if I move forward, D, quaver or D, eighth note is an E

**<Screen Reader>**

Bar line. D quaver. [Note plays.]

**Jordie Howell**

D quaver, or D eighth note, is an E.

**<Screen Reader>**

Bar line. E quaver. [Note plays.]

**Jordie Howell**

E quaver, or eight note, so that's an F. So you can imagine, kids might find that a little bit confusing, if they're thinking a note, a letter ahead of a note. But we hope that they feel an F under their fingers, and automatically think, [Jordie hums the note], if they have good pitch to do that, it's kind of the aim really.

**<Screen Reader>**

Bar, F quaver.

**Jordie Howell**

F quaver, or eight note, that's a G, so I won't carry on with that. So that's quavers. And the pitch is changed by using the four dots of the braille cell. Moving down to quarter notes, or crotchets though, so if we're changing rhythm

**<Screen Reader>**

New line. Crotchets colon contains dot six. New line.

**Jordie Howell**

As you heard JAWS say, the crotchets contain dot six.

**<Screen Reader>**

Fourth octave, C crotchet, barline.

**Jordie Howell**

So if I press right arrow here in this Braille Music Editor file I've created.

**<Screen Reader>**

C crotchet.

**Jordie Howell**

So C crotchet, or C quarter note, contains dot six. So it's C quaver or D, the letter D, with dot six added. So, if you're a braille user, it's kind of like a T-H contraction. But again, we try and certainly with kids, I try and teach them that that T-H sign means [Jordie hums note], C, if they have good pitch. You've been working with a lot of blind kids, a lot of them do. Some of them don't and we don't want to, you know, discriminate. So we have other methods of teaching.

**<Screen Reader>**

Bar line. D crotchet.

**Jordie Howell**

And D crotchet, or quarter note, uses…is a W-H sign. So it's the letter E with dot six added. Moving to half notes on minims now.

**<Screen Reader>**

Minims colon, contain dot three. New line.

**Jordie Howell**

instead of the dot six, we alter the bottom dot, which is dot three.

**<Screen Reader>**

Fourth octave, C half, bar line. C half. [Note plays.]

**Jordie Howell**

So you can hear that same thing. So you have D, which is our sort of base, or root, of the system, that we add dot three, which sort of makes an N in braille.

**<Screen Reader>**

Bar line, D half.

**Jordie Howell**

D half, or minim, so you have an E in braille, and you just add a dot three to that to make it a half

I bar line, E half. [Note plays.]

**Jordie Howell**

E half, or it kind of looks like a P in braille, it is a P. [Screen reader interrupts.] Sorry about this.

**<Screen Reader>**

Speech on demand.

**Jordie Howell**

Oh, maybe I can do that. See if that works. So that's how minims work. Moving down to, I've written semiquavers here, contain dot three and six. In braille music, the semibreve and the semiquaver have the same sign because there's only 64 combinations, including the blank space, that we can use. So we have to be a bit creative, or Louis was creative. So C hole or C semibreve, is a D with dots three and six. So if you can work that out, it makes the letter Y. And D semibreve makes a letter Z. So that's the system. You can, every nuance in print music, can be put into braille music. So, for example, if I wanted to make [plays note] this E, an E flat, I can put a G-H before it [plays note] and make it an E flat. And if I wanted to [plays two notes] this A and A flat, can do the same thing, and create, and change that.

So hopefully, people who can see you can see what's going on on the screen there. And those that can't can hear that. So that's the cool thing about braille music, we can have the same access. I can stop screen sharing now.

**<Screen Reader>**

Full speech. Title is screen share meeting controls. Alt S.

**Jordie Howell**

So, yeah, all nuances can be represented in braille music. Although it's an international code, formatting does differ. For example, in Australia, we have different ways of writing bar numbers and things compared to say the US system. I chair, as Jen said, the International Council on English Braille music committee, and it's on our list to collate the formatting differences that exist between countries, so that if you obtain a piece of music from a different country, with a little background work, you'll be able to hopefully decipher it. Mostly though, vocal music is formatted with a line of words starting at the margin, and below that, unlike print, which has words below music, in most cases, vocal music is above the music line. And the music line is indented to the third braille cell. So that way, it's easy to run your hand up and down the left hand side of the page and locate that music line quite quickly, because it's indented. Piano music usually, like in the US, UK, Australia is formatted in what we call bar over bar format. So you have the right hand above the left hand, and the beginning of each bar aligns. So if you need to see what's happening in bar eight, in the right hand, you can just run your finger down to the line below it and feel what's happening in bar eight in the left hand. In Europe, they use this system called section by section where you might have 10 bars of the left hand written out in one sort of slab, followed by 10 bars on the right hand. So it's a lot more memory work and less easy to see, I think. That's probably personal preference. Less easy to see what's going on in individual bars. So you can also have music for single line instruments where bar numbers might appear at the beginning of each line. And then you can read what happens along that line, so it's easy to find a bar number just find the beginning of the line. Some countries might have the bars and numbers located just above the line of music, it might say something like L1 before or L2 before or something for line one before. So you just got to learn a bit about what the formatting differences are.

So where on Earth how do we obtain braille music? So it can be done through your blindness agencies with braille music transcription departments. And I noticed that there's a transcriber from Canada right here today. So that's awesome. You can find what's called a music, XML file online, which we'll talk about later and convert it yourself. You might not get as pretty a result, but you'll get a result, which is the main thing. So they're kind of the two main ways you'll find braille music. So I'll tackle blindness agencies first. So at the recent, ICEB General Assembly, we heard from Martine Abel Williamson, who talked about the Accessible Books Consortium. This service contains digital downloads and some access, agencies sorry, offer their clients the facility of downloading titles directly from that service. In Australia, we have to push for our agencies to do that because it's a bit quicker than going through your agency to get them to access the Accessible Books Consortium on your behalf. So it's a partnership led by the World Intellectual Property Organization, WIPO. And their goal is to increase the number of books worldwide in accessible formats. And obviously it contains braille, audio, large print, and also braille music. So that is a hugely exciting project. So you can ask your blindness agency also to, if you don't have a braille display to emboss your score and have it in your hands. You can also, if you have a braille display, often you have online catalogues where you can just directly download the BRF. And if there's a score from another library, you might be able to have, you know, access interlibrary loans. So that sort of covers agencies.

The DAISY Music Braille Project, created some software tools to interact with music XML. And these tools are for both blindness agencies and end users, and their goal is to ensure that more music braille scores are available more easily to more musicians worldwide. And this project is a cross-sector collaboration to identify, prioritize, and deliver improvements to secure the future of music braille production and use. So we, they have improved file conversion tools, file format standards, and opportunities for international file sharing. That's a bit I'm excited about. So the first phase was back in 2017, where the Norwegian Library for Talking Books, NLB, Braille and Talking Books, sorry, asked for interested parties to join a collaboration to find a solution as they recognize that we need to achieve more with braille music than we are doing it individually, because there's a lack of transcribers internationally really. And now we have around 150 participants worldwide involved in some way in that project. And so you can have a look, if you look up DAISY Music Braille Project, you'll be able to read more about that. But basically, they've created tools so that if you have a conductor that you need a score from, they can research engraving guidelines, and they know how to create that XML file for you. We're working with publishers so that the files are born accessible and having some success with some music publishers. And we're also working on teaching and learning materials. So any materials out there where we're trying to increase or, sort of, correct any errors or increase the availability of learning and teaching manuals to promote braille music and born accessible work.

So I thought I would do demonstrate a few of those tools a little bit later. But firstly, I thought I should talk before I get into the fun demo stuff. That's probably the stuff I should be interrupted with when we finish. But I'll talk about some books that are available. And podcasts and YouTube links. And this is what I have and what will be emailed out to you at some point just in a little Word document, so you can have a bit of a Google. So the first one I've referenced is An Introduction to Braille Music for the Blind Student. This is a course in music and braille music reading. So, you know, if you want to brush up your music theory, as well as just learn a technical code, that one's probably a good choice. And that's by Richard Taesch and published by Dancing Dots for the Goodfeel program.

So there's also one called Seven Little Steps to Read Music Braille. There is a braille version available for students, but I tried to email them, but I had to be a student in order to access that, from that place, so I couldn't get it. There's also a webpage that we put together as the ICEB Music Committee, and I've given you a link to that. And some of the books include A Survivor's Guide to Braille Music by Helen Merrin, and that's available through Vision Australia, and contains an audio CD as well. So I'm hoping that you'll be able to access that through ABC, the Accessible Books Consortium. Music Braille Code, 2015. I would say that this is the most sort of definitive resource at the moment. This was developed under the sponsorship of the Braille Authority of North America, BANA, and a lot of countries use this as a reference alongside the New International Manual of Braille Music. New being published in 1996. So that's our, sort of, next task is to try and at least get a supplement to update that code if we can get enough international collaboration. RNIB and UKAAF have publications available as well. RNIB’s publications are split into material for sighted learners and for blind learners. So you'll be able to see the rest of those books on that website there.

So, YouTube and podcast links. There is a webinar around the DAISY Music Braille Project that you can have a look at where Dr. Sarah Morley Wilkins has been the project lead, will describe what's going on. And there's also, in terms of learning braille music, Kate Risdon from the UK introduces the braille music method for reading and writing music, and that was produced by Classic FM in the UK. So it's quite a cool YouTube link if you want a bit more information than what I gave you today. Braille Music: Let’s Tackle the Basics. This is a BrailleCast podcast. And I know Matthew Horspool’s on this call as well. That is another excellent podcast where you can hear more about braille music. The UKAAF Braille Music Podcast is a journey through braille music, I highly recommend that one as well.

All right, now for a bit of fun so that I get to play with some technology now. And hopefully this works alright. I'd like to demonstrate three tools that I use personally. The DAISY Music Braille Project worked on access to converting XML, which is an extension markup language where it's print music and elements captured in a text format so we can exchange music internationally online. And so these programs use that format. So you can just download an XML file provided it's been formatted correctly and then imported into these programs so that you can have instant access. So the three programs I'll demonstrate are MuseScore, which is having some braille, you know, live input and output. And SMB, the Vietnamese Sao Mai braille translation software, where you can literally open a file and insert braille music, print braille music score into it, press Control-T, and you have braille music under your fingers. And there is also MakeBraille, which agencies can access. I won't demonstrate this so much but conceptually MakeBraille was sort of the first tool that the DAISY Music Braille Project tackled, where you can use a program called cappella-scan, for the sighted user that is, to scan a print music file, and also you can edit that file so that then it can be produced into braille. The user then accesses a website and selects your country formatting specifications. So I would choose Australian formatting, for example. And select the parts I want to braille, because you can make sure, if you don't want a whole score, because if you're, for example, requesting music from an agency, and you're wanting the Brahms Requiem, but you're only singing the soprano part, it's a bit of a waste to have the whole thing brailled when it's not efficient to use it in rehearsals. And likewise with translation tools, you can just have one part brailled, because you can just uncheck the other parts. And then what happens with MakeBraille is that it will email you the part, the file, in BRF format, all lovely, beautifully converted. There's still a bit of work to do with these translation packages. But we're getting there, you will get a decent score, provided you know what to do.

So I'll share my screen again here.

**<Screen Reader>**

Title is… Participants can now…

**Jordie Howell**

We’ll start with MuseScore.

**<Screen Reader>**

Your default speaker has cha… Windows-D. Folder.

**Jordie Howell**

Can we hear that speech okay?

**Daphne Hitchcock**

Yes.

**<Screen Reader>**

Default microphones has changed.

**Jordie Howell**

Thank you.

**<Screen Reader>**

M. MuseScore Stuido 4 checked. Enter. MuseScore 4. Your default speaker has changed.

**Jordie Howell**

So MuseScore 4…

**<Screen Reader>**

…to change the selection… MuseScore Studio… MuseScore… Your default microphone …

**Jordie Howell**

Sush, JAWS. So that's the latest version. I've prepared a few files here. So one is called Bach, it's a piano thing called Bach’s Mortify Us By Thy Grace.

**<Screen Reader>**

Control O, MuseScore…

**Jordie Howell**

So I’ll open that right now.

**<Screen Reader>**

Bach Mortify Us By Thy Grace dot XML. One of four.

**Jordie Howell**

I’m gonna hit enter.

Enter. Bird dash… Bach Mortify Us By Th… Enter. MuseScore Studio. MuseScore Studio. Muse…

**Jordie Howell**

And if I hit space that will play quite a rapid rate.

**<Screen Reader>**

Space.

**Jordie Howell**

Or not. Okay.

**<Screen Reader>**

Escape. Space.

**Riane Lapaire**

I’m sorry, Joridie, to interrupt.

**Jordie Howell**

Yeah.

**Riane Lapaire**

You have a pop up for a new version of MuseScore covering the actual notation.

**Jordie Howell**

<Laughs> Thank you. Okay.

**<Screen Reader>**

Balance radio… Escape. MuseScore Studio. MuseScore Studio. Insert F1 help.

**Jordie Howell**

Has that disappeared?

**Riane Lapaire**

No, you have another dialog box.

**<Screen Reader>**

Escape. MuseScore Studio. Escape. MuseScore Studio. MuseScore Studio. Insert F1 help. Escape.

**Jordie Howell**

How about that?

**Riane Lapaire**

No.

**<Screen Reader>**

MuseScore Studio. Alt F4. MuseScore Studio. MuseScore Studio. Insert F1 help.

**Riane Lapaire**

it looks like it's on the…

**<Screen Reader>**

Alt F4.

**Riane Lapaire**

There we go. It's gone.

**Jordie Howell**

Oh, excellent. Thank you.

**<Screen Reader>**

Bach Mortify Us By Thy Grace dot…

**Jordie Howell**

Let’s try this.

**<Screen Reader>**

Space. Escape. Space.

**Jordie Howell**

It’s always the why, isn't it, went perfectly the day before

**<Screen Reader>**

Beth put in wait… Beth put… MuseScore Studio. MuseScore Studio. Insert F1 help. Bach Mortify Us By Thy Grace dot X-M-L unavailable. MuseScore Studio. MuseScore Studio. End. Escape. Escape. Alt F4. MuseScore Studio. MuseScore Studio. Insert F1 help. Bach Mortify Us By Thy Grace. Don’t save button, to activate press space. Folder view list view. M, MuseScore, three checked. Home. M, MuseScore Studio 4. Enter. MusScore 4. Lost focus, press Alt Tab. Title is MuseScore. Control O. MuseScore Studio. MuseScore Studio. M, other, one of three. Adele Has Left the N dash H, one of three. Escape, leaving, item view list box, Bach, Bird, Bach Mort, enter. MuseScroe Studio. MuseScore Studio. MuseScore Studio. Insert F1 help. Score Bach Mortify Us… Segment. Segment, measure one, beat one point five, chord, measure one, beat one point five, note D five sixteenth, voice one. Measure one, beat one.

**Jordie Howell**

Alright, so you can hear quite a lot of information that it's giving us when I arrow through each note.

**\*\*\*\*30:17 <Screen Reader>**

segment measure one B 1.75 core measure one b 1.75, D flat five 16.1 measure, one 1.75 segment measure one b two, I can press

**Jordie Howell**

space and it will just play the whole thing, space.

**Jordie Howell**

Space, I can tab over to the Braille window store.

**<Screen Reader>**

Pilots radio ad pilots, active Eclipse pilot when the workspace call in default button to activate toolbar direction is main toolbar, the rotations, playback tool toolbar, notation toolbar panel main toolbar direction glyphs palette,

**Jordie Howell**

I won't waste time doing that sorry, my MuseScore is performing it differently. But there is a live Braille window that you can access where you can actually read Braille under your fingers, which is extremely exciting. You can also input Braille music so if you use six key entry with dots 123456 You can you know, then then you can share music with your site and colleagues or friends. So I'll leave me a score for now

**<Screen Reader>**

I'll therefore back modifiers. And let's try something different all therefore middle schoolers to the store holder for maths and live and learn search boxes. So by Ray Lambert

**Jordie Howell**

saw my Braille. So so my Braille, this is not my real exciting I can open let's try and vocal piece this time. And I can insert a print music score into this file and insert it into this print file and translate it immediately into Braille and get some sort of output and it's very customizable. So if you want the words underneath the music for some reason, you can do that. If you want by numbers in different positions, you can tell the program how to do that. So if I create a new file called

**<Screen Reader>**

Document one,

**Jordie Howell**

insert a nine

**<Screen Reader>**

out of 12 Oh that we live in a music store dialogue, Explore page menu, escape leave it back more than ever. So I have page one music that goes up and the slide was not exactly

**Jordie Howell**

a nice lesson choral work that goes on Pan is vivus and I'm just going to translate that into Braille with Ctrl T Ctrl. T

**<Screen Reader>**

0%. What a document is ready to

**Jordie Howell**

go to the top of the file because it automatically places you at the end page one

**<Screen Reader>**

and then logic starts one five.

**Jordie Howell**

It's telling me in doc numbers at the moment and all this is customizable, so Ergo Sum panels plan is vivus of I've got a title for and I can read William Byrd see 1542 1620 Saatchi Horrell public domain,

**<Screen Reader>**

library 22.6 dot one. This is the alto 3456. This

**Jordie Howell**

is in four fold. And I've got bars here I have music

**<Screen Reader>**

immediately 3456 Dots 145, dots three under my fingers, dots, five, six dots, three dots. This at

**Jordie Howell**

the moment is putting music above the words but I haven't played too much with 3456. My Settings bar numbers are at the beginning of the line, as in US formatting. Dots five, six. And you can work your way through that score. And I could embossed that out if I wanted. The last thing I wanted to demonstrate Oh,

**<Screen Reader>**

therefore good firms document good feel with those, which

**Jordie Howell**

is the paid version of Bill McCann's dancing dots suite of products. I use this probably still most often, personally, because it's the program I'm most familiar with. So it's a three step process where you import a music, XML file into lime. And you can you can hear that score and then you can edit it there if you want to, to a limited extent and as a blind person, sometimes you don't know if it's correct or not. And then you can translate that into Braille.

**<Screen Reader>**

Look at line 9.16 checked.

**Jordie Howell**

So we'll open line

**<Screen Reader>**

Milcom with the line 9.16.

**Jordie Howell**

And I'm going to import

**<Screen Reader>**

menu, something else music XML doc doc doc script called important.

**Jordie Howell**

I mean all sorts of things going on today on it. My

**<Screen Reader>**

name is Norbert folder, Berg imslp, Morley, Bach mortifies, I'd

**Jordie Howell**

love to stick to piano music because I think it's probably the format that's most well known, I would say

**<Screen Reader>**

multiple Document Interface client window live.

**Jordie Howell**

So we've got here options for XML import, and you can change things like addition. Just additional page settings, how many print stage you want on a Braille page, voice and stem directions and stuff. I just want to

**<Screen Reader>**

call it from calling

**Jordie Howell**

I can write are on my way through the piece

**<Screen Reader>**

be 1.2535 semiquaver, Florida next Holman from COVID, Baltimore to be 1.5 D, five, b,

**Jordie Howell**

the nice thing was like I'm allowed to, and I think the school does this is it? Well, it's it's a vocal piece that will tell you the word and then the notes. At the same time, I can hit Ctrl, H to hear this piece. percent of Mark, and I'm going to slow this because it's 04. You can choose how slow you want it to play it, call the drum

**Jordie Howell**

that way, if you're learning a piece, you can say, oh, okay, yep, I'm glad to hear that board.

**<Screen Reader>**

And then I can just convert this I can just hit manual file make File menu, I can save save as imports, open template, open Duck, duck, duck and good SEO script called from back mortified. Graphic save, live Golan from colon unknown script from backward from Blackmores bar for beat lung default. Title is live from Baltimore to Pianoteq to be flat three, manual file manual new data living manuals from Baltimore, from Baltimore, this is gonna be an intermediate dialogue. It's Abra. Right. So

**Jordie Howell**

before it converts to Braille, it will tell you all the errors that it's found in that score

**<Screen Reader>**

was boxed and moved error call it notes notitle bound using File Name, Ms. Li.

**Jordie Howell**

So it says no title found using file name, that's fine. Or

**<Screen Reader>**

to call it the middle part of the page calling one nearby arboricola get correct amount of time ms legal. So

**Jordie Howell**

the scan or the file is not finding the right amount of beats to make up a bar in that in that bar. So it's telling me that so that when I look at the score, I'm not surprised. Eric

**<Screen Reader>**

call it the handlebars, okay, it's calling one near bar six colon conflicting, redundant expressions called an MS three colons and 39. So that's

**Jordie Howell**

kind of an idea. There's some redundant expressions. I don't know what that is, but I can just convert it so that I can see it in a format that I can use.

**<Screen Reader>**

Which title clips are real, despite critical errors checkbox not checked. So

**Jordie Howell**

you say Braille Despite critical errors, yep. Let's do that. So don't worry about them.

**<Screen Reader>**

process, process space, go to your colon, and then

**Jordie Howell**

another error then.

**<Screen Reader>**

Okay, but no real destination related or button.

**Jordie Howell**

So you've got different places you can embossed this straightaway. If you trust it, I wouldn't. But you can pop it into a Braille editor, which I think is the most sensible thing to do.

**<Screen Reader>**

From Baltimore to talk to you up here I have Brian straightaway by grace, land, keyboard, cable, underlying the semi colon seven.

**Jordie Howell**

This is in so we've got to crush it equals 122 flats, common time, great. On right hand, piano, fifth octave D semiquaver. slurred to see slow DISA E. It's all there staccato signs. Everything including you must recall g number, okay, number, right hand for the first bar goes up again, robbery goes over to line number and then carries on I've got pedal signs, I've got octave signs, dynamics, everything is there. So that is extremely exciting. Personally, I would work through this with a transcriber or something like that or a reader just to make sure that every element is included. For real. What I will stop the screen share.

**Jen Goulden**

screen shortly I'm just gonna give you a two minute warning at this point. We wanted to add a little bit of extra time so we could see all these fun tools that work so excellent.

**Jordie Howell**

Thank you. All right. So I'm pretty much finished now. Just to say that I think we're in a very exciting time for Braille music. I think there's a lot to be said for this technology. I've been emailed a discount or something to sing it at midnight, you know, before a service and my conductors gone. Oh, I was singing this in the morning and I've gone oh my goodness. And then I have to Translated and then in the taxi the next morning on the way to the service, I'll be kind of frantically editing my document on my Braille sense, six, two, so that you've got material in front of you. But I mean, for our students having stuff transcribed, manually is still really important because particularly with things like graphical notation, some chance, non western music notation. You know, there are still a way to go. And there's still need for that manual intervention and the transcriber notes and things like that. But yeah, I'm really interested in hearing, hearing your questions. And I apologize for the little technical things that went on. But I hope some of that was useful.

**Jen Goulden**

I was fantastic. Thank you, Jordy. And I'd like our systems know when we are being watched, so they like to do anything to us. They totally do. So yes, thank you. That was wonderful. I'm going to hand things over to Rianne now so that she can take questions and do some of the other things that need to be done.

**Riane Lapaire**

Excellent. Thank you so much, Jen. And Jordi. That was fantastic. I wrote tons of notes and thoroughly enjoyed it. Our first question is from IANA.

**Ioana Gandrabur**

Hi, that was really fascinating. I was curious, do you have any? You didn't really mention the brain music editor? Is it? Is it one of the tools in the kit that you're using? Because I know you use it first. But you just? And also, do you have a preference which one has the most flexibility in, in understanding more things? Like I don't know, grace notes, and I'm a guitarist. So most things don't do well with right hand versus left hand fingering? I don't know. Do you have a preference in terms of which tool knows most? Yes, Braille conversion.

**Jordie Howell**

Yeah, thank you for that question. So in terms of Braille music editor, I did forget to explain exactly what that is. So Braille music editor is a way of breaking in six key entry into a Braille music into a file. And then importing, exporting that sorry to music, XML, so going the other way. So that file I showed you at the beginning of the presentation was where you had, when I had the scales and stuff, I just brailled into that file, I had to tell the program at some stage, I need to write text here above this line and put, you know, scales or put whatever it was quite as. And so that way for students and at university or at school, you can do your Harmony exercises, all right, whole orchestral schools with that, and then share them with bandleaders or friends and stuff. So there they are, it's a program based

**Ioana Gandrabur**

out of Italy. I know personally, okay. No worries. But

**Jordie Howell**

to your second question, I would suggest that SMB, at the moment has it they're still working on this program, and it would be the program to go to provided the XML file is engraved correctly, right, so that each note or each annotation, so a grace note or dynamic or it's in use our ticket guitar, sine is associated with a note and it's done correctly, rather than just kind of stretched across the screen, or I'm not sure exactly the terminology. But if it's engraved correctly, you'll get a nice output with SMB, and you'll be able to customize that output in the settings. And it's free. That's the thing. That's amazing.

**Ioana Gandrabur**

Yeah. Anyway, I'd love to stay in touch because I have a lot of guitar music that I have written myself, but oh, cool with some variants, and I'd like to make it a vote anyway.

**Jordie Howell**

I'll get in touch anyway. And yeah, it really

**Ioana Gandrabur**

sounds fun. Yeah. Cool. Yeah. Thank you so much.

**Jordie Howell**

Later.

**Riane Lapaire**

Any more questions? We'll maybe while we're waiting for some raised hands, we can do a door prize. Drumroll please. John Oberg. Are you still here John? Yes, I believe you are. Congratulations. You have won our door prize for Canadian assistive technology gift card. So we'll be in touch with with you and with them. And congratulations and I see another hand. Adele are able to unmute

**Riane Lapaire**

All right while we're waiting cheap spout in

**<Screen Reader>**

audio now

**Jen Goulden**

Hello there. Hello. Hello. Hello, James. Hi there.

**Jordie Howell**

Oh, can you hear we can hear you?

**Adele**

Well, look, it's fascinating the series first things. First, it is fascinating the series of other webinars as part of the BLC. Brown

**Jen Goulden**

Thank you, we're glad you could be here.

**Adele**

I'm Adele. And I've been introduced to music Braille Of course, before I'd been introduced to music Braille before discovering dancing dots could feel which somehow allows me to be open to the world of sight it means sight it, I mean, preparing some preparing scores for the citing people with adaptive technology like Goodfield. Yep. No. And in fact, one of you one of some one of whom you is a classical singer. And searching for and, and I'm wondering if you all would be available for if you would be a fillable to help me on Zoom for my, for my Ruthenian for my Ruthenian coalition, for which I need good feel, and a singer audience with bel canto an event to be to an event to, to an event to how to say an event to verify if I'm on the right track with analyzing classic corporate short for the piano, I know, with or without school and apply the Chopin philosophy?

**Riane Lapaire**

I'm sorry, I don't do you have a specific question for our presenter, we do have a lot of questions yet.

**Adele**

Oh, sorry.

**Riane Lapaire**

That's okay.

**Adele**

Good, excuse me, I made a mistake.

**Jordie Howell**

I think perhaps if you have a look at this email lists where you can find people who were, you know, interested and have sort of time to have a, you know, maybe take on students or, or help you analyze things. So I would recommend, there's a number of email lists, and I should have included those in my resource list. So there's things like the Music Educators Network for the visually impaired, and then V. There's the good feel music, email lists, you might say, I'm good, that's good. So perhaps you

**Adele**

can reach or sometimes have news and hope to counselor if dancing.

**Jordie Howell**

Nice. There's also the accessible news score email list, there's a brown music chat email list. There's a lot out there. So maybe that's probably a good place to put your question to some of those email lists, I would say.

**Riane Lapaire**

Wonderful. Thank you.

Thank you. Thank you.

**Riane Lapaire**

We'll move on to James Bowden.

**James Bowden**

Hello, everyone. I'm also in Australia. So it's very early for me as well. So apologies. God, it's great to hear you. Thank you so much. I just wanted to say that Muse score, one of the things that God did not say is MuseScore is a main stream fully functioned. music editing software, can be used by sighted and blind people alike. It's fully accessible, works best currently with NVDA. The other thing I was going to say is there is also a resource published by ukef. UK association for accessible formats, which lists all these programs and gives a very brief but general how to use them, kind of bullet pointed lists the thing, so that might also be helpful. And God also mentioned XML files, there are literally 10s of 1000s, if not hundreds of 1000s of scores that you can download, as well as create yourself with new score. Thank you. Thank

**Jordie Howell**

you, James, for clarifying about new score. Appreciate it. Thank

**Riane Lapaire**

you. And we have a question in the chat from Kim. In BM e is the note being played as you type.

**Jordie Howell**

Yes, it can be Yes. Which is very cool because if the kid forgets an octave sign, they will be prompted. You can turn those on or off as well. very customizable in that way and it you can tell it whether to speak the doc numbers or the note itself.

**Riane Lapaire**

That's wonderful. Thank you. KENNETH Silverman.

**Ken Silverman**

Hi, journey. This is Ken Silverman in Maryland, USA. It's a pleasure I wanted to ask you, the software programs are talking about, do they allow you to create different instruments and overlay them over each other to create, like, a whole orchestral piece? Absolutely, yeah,

**Jordie Howell**

I just demonstrated them at a fairly, you know, just import a file and translate. I didn't do any editing. But yes, you can add as many instruments as you like, good feel has. So does, your school has templates. So for example, if you had an orchestral score with different instruments, you can you can definitely do that. Okay,

**Ken Silverman**

because I and because I'm looking to sort of get back into music after many many years of you know, and I need to and there was a book you mentioned about music theory like what teach you about like learning what is a major key what is a minor key? What is it for bar was that one

**Jordie Howell**

that was Yeah, Richard teachers book that will be included in the reference list that I'll Okay,

**Ken Silverman**

great. Yeah, no. Dancing gods. But But yes, yes. It's

**Jordie Howell**

not it's, it's available. If you have a look on dancing dots will be available there. You can you can order it through the I think it's in about four Braille volumes. You might not need them all either. Yeah.

**Ken Silverman**

I gotta do better than the elementary school orchestra. We were bad. Anyway. Thank you.

**Jordie Howell**

No worries. Pleasure. Wonderful. And

**Riane Lapaire**

we have time for one quick question from the chat. Um, the BME Braille, Braille versus new score Braille input capabilities. Can you just compare and contrast them?

**Jordie Howell**

So new school Braille input is is very elementary at the moment. So not it doesn't contain the or doesn't have the ability to recognize all all nuances or signs yet, but watch this space. So yeah, Braille music sorry, BME to Braille music editor 2021. I think it's the latest version, but there might be a new one would be would be superior at this stage.

**Riane Lapaire**

Thank you, and I'd like to hand it back to Daphne. Thank you so much, shorty, and thank you, everyone. This was so great. f&e back to you. Yeah.