THE BRAILLISTS FOUNDATION

AN INTRODUCTION TO BRAILLE ON ANDROID

Matthew Horspool: Welcome back to Braillecast Extra. Coming up this time, An Introduction to Braille on Android, a session recorded on Tuesday, 18th May 2021, and introduced by Dave Williams.

Dave Williams: Good evening and a very warm welcome back to the Braillists Foundation. I'm Dave Williams, chair of the Braillists Foundation and it's a pleasure to see so many familiar faces and a couple of new people as well. A very warm welcome in. As you know, our occasional Braillists Master Classes are an opportunity for those of you who already know something about Braille to take your Braille to the next level, perhaps learn some new skills. We keep an archive of these sessions. They are recorded and made available via our media page and also through the Braillecast podcast.

Don't forget, tonight's session is run in accordance with our moderation policy, found on the website at braillists.org. So we run a fairly tight ship, invite you to remain muted until we get to the Q&A section of proceedings.

In just a moment, I'll introduce our presenter this evening, who will be introducing us to all things Braille on Android, so we will start with that very shortly. In the meantime, on moderation duties as ever is Mr. Ben Mustill-Rose. Good evening to you, Ben.

Ben Mustill-Rose: Hello. Here as ever, every first and third Tuesday of the month, here to help in moderation. Really looking forward to this one. I'm sure I'm going to learn a lot. We'll go through how to raise hands nearer to the time. I'm sure there's going to be plenty of time for questions.

Dave Williams: Thanks very much, Ben. As we know, Android is the world's most popular mobile operating system and there are lots of questions about what is possible in terms of Braille on Android. Where have we come from? Where are we now? And where are we headed in the future in terms of support for Braille displays and Braille screen input on Android devices? Well, we're very fortunate this evening to be joined by someone who is, I think, a huge fan of Android, it's fair to say, somebody who's been working in the assistive technology arena for several decades. It's the proprietor of Computer Room Services and our good friend, Mr. Steve Nutt. Steve himself is a Braille user, as many of you will know. Steve's also got an extensive background in a wide range of assistive technology products, many of which are available through his Computer Room Services, comproom.co.uk. Steve's also omnipresent at Sight Village events as well up and down the country, so we look forward to those coming back so you can go and meet Steve and follow up, maybe, after tonight's session.

Without any further ado, to guide us through Braille on Android, Steve Nutt. Good evening, Steve.

Steve Nutt: Good evening, Dave. Good evening, everybody. How are you all doing? You got it absolutely right, Dave, it is comproom.co.uk, or you can go to computer-room-services.co.uk as well.

Now let's talk about the matter at hand which is Braille on Android.

I have to say two things about Braille on Android. One, it's nowhere as easy to set up as iPhone, so it's not as pleasant an experience to set up but once it's set up, it's great. The second thing is that I still don't think that Braille on Android is quite as good as iOS. But on the plus side, they don't break Braille as much as iOS. In other words, Braille has been pretty stable where it is at the moment on Android, since Android 10, but with Android 11 comes some new things about Braille which, until recently, only the iPhone had.

So with that out of the way, let's get all the prejudices out of the way and all that stuff, so let's talk a little bit about Android Braille.

One difference between Android and iOS Braille is that iOS Braille is nicely built in to VoiceOver. No, it's not BrailleOver, but it's built in to VoiceOver so that's easy because you can go into VoiceOver and select Braille, turn it on and away you go.

Android is not nearly so straightforward to set up but as I say, once it's done, it generally just works.

So, what do we have to do? First of all, TalkBack is now called Android Accessibility Suite and I wish they would build Braille back into it. I've requested it and they should do it now but they haven't yet. So, what you have to do first, is you have to download BrailleBack, which is all one word, from the Google Play Store. I'm not going to go into how to download BrailleBack because if you don't know Android, that would be quite boring, but basically you get it from the equivalent of the app store, which is the Play Store.

So, you download BrailleBack. You install BrailleBack. And, then you go into Settings, Accessibility and you turn on BrailleBack. Once you've turned it on, it gives you a little warning that says, "BrailleBack will change the behaviour of your machine, is this okay," and you just hit okay and that's absolutely fine.

At this point, nothing happens because you haven't yet connected your Braille display. So, now what you have to do is you have to go into the Android's Bluetooth, so you go into Settings, Connectivity and Bluetooth, and then you pair your Braille display as if you would pair a normal Bluetooth device. Now, that's different to iOS because with iOS, you go into VoiceOver and you turn on and you pair and do everything in VoiceOver with connecting a Braille display. So, you don't do that in Android. First of all, you download BrailleBack, you turn it on and then you hop into Bluetooth and you pair your Braille device in the normal way.

Once you've done those three things, then you're pretty much ready to go. So, if I get my little Braille display, and we hope the technology works, if I turn on my Braille display and I unlock my phone.

On my Braille display, it says "BT starting" [chime] and you hear that little jingle sound. That means your Braille display is connected. And that's all there is to it. It's actually giving me the home screen, as it were, so I scroll up and down and do all kinds of things like that.

Now, one thing that's common to all Braille displays on Android is that you press L chord, so that's L with space and it brings up the Braille help for your particular Braille display. So, if I bring up the Help now.

Synthetic voice: Brailleback keyboard help navigator button.

Steve Nutt: Now, this will be different for every Braille display because of the different keys. I'm using the VarioUltra 20 as we speak at the moment, so, I'm now going to scroll down.

Synthetic voice: Use navigation keys to move focus on the screen. Use the Braille pan right advance right use navigation keys to move focus on the screen. Use the Braille keys to enter text in any box. Below is the full list of key commands supported by your device. Out of list, pan right, advance right, in list, pan left, advance left, navigate to the next item, joystick right, navigate to the previous item, joystick left, navigate to the next line, joystick down, navigate to the previous line, joystick up, scroll forwards, dot 6 plus joystick down, scroll backwards, dot 6 plus joystick up.

Steve Nutt: And so on. And, so, if I press on here, it will be space with b which is back, which is pretty much the same as the iPhone. Now, I made a mistake there but I'm going to go back and do that again.

Now, when you first come in, this is something I also forgot, because this is what I told you about the set-up of Braille, you have to go in to Settings and Language and Input and you have to enable Hardware Braille Keyboard.

It's only a tick box but again, it's another thing you have to do. Once you've enabled it once, you only have to do it once, if you press a normal key, not a chorded key, but a normal key, it will come up with a little tick box.

Synthetic voice: Choose input method, dot 6, radio button, Braille hardware keyboard in list.

Steve Nutt: So, notice it says, "Choose input method," and it's automatically selected by default "Braille Hardware Keyboard." So we've got "Braille Hardware Keyboard."

Synthetic voice: Ticked, radio button Gboard.

Steve Nutt: Gboard which is your regular keyboard.

Synthetic voice: Dot 6, radio button, TalkBack Braille keyboard.

Steve Nutt: And TalkBack Braille keyboard which I'll get into a bit later.

So, what we're going to do is we're going to tick the Braille Hardware Keyboard.

Synthetic voice: Dot 6, radio button, Braille hardware keyboard.

Steve Nutt: And go in there.

Synthetic voice: Pixel launcher.

Steve Nutt: So, once I've done that, I can now type in anything in Braille and it will work on the keyboard. If for any reason I forget, or I don't want to use Braille anymore and I want to go back to my original keyboard on my phone, there is a button on the bottom-right hand side of the screen which I find with muscle memory but you can swipe to it as well. When you've got the Braille keyboard open, there's a button at the bottom of the screen on the phone and you can scroll down to it, with the Braille display as well, and it's called "Choose Keyboard Input Method." If you press that, that wizard will come up again and you can choose your original Google keyboard, Gboard.

That is a very, very basic and quick way of setting up Braille [chime] and that's what happens when you disconnect. So, I just basically locked the Braille display so you could hear the sound it makes when it disconnects from Braille.

So, that is essentially setting up a hardware Braille keyboard or any hardware keyboard.

Having talked a bit about the hardware keyboard, Braille is quite nice. It doesn't work on some apps so well. I notice it doesn't work well on the official Twitter app because when you go up and down what you consider to be a list, it goes to the top of the screen and then starts reading the navigation buttons, the up button and the search buttons and things like that. So, it goes right to the top of the screen. It comes out of the list. I've reported this to Google so we'll see what happens.

Most programs, like my email program, which is AquaMail, work well and Facebook seems to work well, so you can just literally scroll up and down with your scroll keys or in my case, I can do it with the joysticks or I can just pan left and right and it will carry on.

So, that's hardware Braille and once you've done that, other than a few different commands, a lot are self-explanatory so space with R is Recents on all Braille devices. So space with R, we've opened the overview which is the iOS equivalent of the App Switcher. Space with N will open Notifications. Space with H will open Home or take you to the Home screen. Space with B will take you back. And so on. And there are keys for scrolling up a page and down a page and the usual stuff.

Now, we get into Braille screen input and this is better experienced if you've got Android 11 and the reason for that is that Android 11 introduced multi-finger gestures. iOS has had them for years and years and Android and Google have realised it and they've copied it pretty much so the two finger double tap, for example, is the magic tap just the same now on Android as it is on iOS.

So, what you can do now is you can go into Settings and TalkBack, because this is a TalkBack function, and you can go into Braille Screen Input and in there, you can turn on a Braille keyboard, effectively, and if you turn on the Braille keyboard, it works the same as the hardware keyboard in the sense that, instead of having a button at the bottom, because it changes all the gestures, it's a three-finger flick up to change from your Braille keyboard to your regular keyboard. So, once you've changed to your Braille input keyboard, there are two methods of Braille input.

One is that you can do what they call Tabletop mode and the other one is what they call Screen Away mode. It's automatic and it detects which one you want to use. If you put the phone down on a table, it detects that the back of it is on a flat surface and it says, "Tabletop Mode." What you do is you put three fingers, so your three Braille fingers, either side of the screen, put them on the screen for a couple of seconds and then it calibrates and then you can just start typing.

By the way, when you go in there, there's a very good tutorial and it will ask you to do things like type the letter A and type the letter B and various things like that so you're not on your own. There is a good tutorial and it will just repeat it until you get it right. It's a bit like the TalkBack tutorials.

So, with Tabletop mode, you have the charging port to the left and you have the camera to the right and you basically just put your fingers in the middle of the screen, either side as it were, in landscape mode, and you just start typing in Braille.

Screen Away is where you have it the other way around, so the charging port is on the right and the camera is on the left and what you do is you hold it with the back of the phone facing your chest and the screen facing away from you and you support it with your thumb and your little fingers and then you use your middle fingers to type in Braille and again it is calibrated.

So, that's the two ways that you can do Braille input. Flicking left or single flick left is the equivalent of backspace and flicking right is the equivalent of space. Two-finger flick right is Enter. So it does two- and three-finger gestures as well. There are a few flicks and slide gestures but they're not the same as the regular TalkBack gestures and if you go into Braille gestures in TalkBack settings, you can see what all of those are.

That essentially is the way you do Braille and so you type your Braille. So as a single-finger flick right is space, after each word you think flick right, after each word, you flick right and then when you've entered your Braille, you do two-finger flick up and it submits the Braille and basically translates it to Grade 2 or whatever you've typed.

It does not support anything pre-UEB. It will support Grade 1 and Grade 2 but it is primarily UEB.

That, I guess, is about it, really. You can slide a finger over the screen just to feel, touch to read it but the gestures completely change and then when you've finished, it's three-finger flick down and then you're finished writing your Braille and it hides the keyboard, in the normal way, as if you'd hit the Back button.

Once you've done that, you then get the regular edit box and you can read everything that you've typed and if you've made a mistake, you can three-finger flick up again and the Braille keyboard comes back and you can carry on editing or you can bring back the regular keyboard and edit with the regular keyboard. So, you can interactively switch between the Braille and the regular keyboard.

The Braille doesn't always behave as you expect. It's not always as good as TalkBack. If you're working through a list, in some items, it doesn't always work. I also don't think Kindle is very good on Braille at all, on Android. So, I'm being brutally honest, even though I personally prefer Android to iOS for many other things, I'd say Braille is probably not one of them. But it does work and it does with a good few Braille displays.

I think that's probably most of what I can say about it and I seem to have got that in 20 minutes. I thought I was going to take ages. There really isn't much more to say about Braille on Android but I'll try to answer as many questions as I can.

Dave Williams: Okay, thanks very much, Steve. We're going to hand over to Ben who is going to give everybody a little bit of direction on how the Q&A section is going to work and then we'll start working through those.

I do have a question, Steve, so we'll come to that in a moment but let's go to Ben first.

Ben Mustill-Rose: Thank you for that, Steve, and I've learned a lot already.

So, this is time for questions and if you have a question, you can raise your hand and we'll come to you momentarily. There are a few different ways you can raise your hand, depending on what device you're using. So, if you're on Windows, you can press Alt+Y. If you're on a Mac computer, you can press Option+Y. If you're on a telephone, you can press star+nine. Or if you're on an iDevice or Android device using the Zoom app, you can press the More button in the bottom right of your screen which is visually represented by three small dots, and then press the Raise Hand button from there.

We try to give people a little bit of prior warning before we unmute them. We're going to come to David Weston first and that just gives David a bit of time to make sure he's ready.

Dave Williams: While you're standing by David Weston, Steve, I'm just going to chip in with my first question out of the gate, in terms of Android support, you talked about various versions of Android there, Android 11 which sounds like that's the one you recommend, but is there any difference in Braille support depending on which Android device you go for, because we know that one of the benefits of Android is that you have got a large selection of different shapes and sizes and features at different price points and that's clearly an advantage that you might not have on other platforms, there's a wide variety, but does that affect the Braille support?

Steve Nutt: Fortunately I can say that it is absolutely consistent. The BrailleBack gestures are all the same, nothing interferes with the BrailleBack gestures. I've never seen a phone on which it doesn't work and I've tried various phones. Fortunately I am a frequent contributor to a podcast called The Phones Show Chat with Steve Litchfield. I don't know if you've heard of it. Steve is in a circle of people and he gets phones to review from PRs of companies like Sony and so on and we sometimes get to borrow those phones and test them for accessibility. In terms of BrailleBack, there really is no difference. The only reason I said I recommend Android 11 is because the screen input works on the earlier versions of Android 11 but not as consistently because they had to make some alterations to the underlying framework. It would be like saying, make sure you've got iOS 14 rather than 13. Braille is better on 14 than 13. Fortunately though, I can say the experience will be the same for Braille on whatever phone you get. Of course, the other variable is the Braille display that you get. Some Braille displays might work better than others. I don't have experience of a whole load of Braille displays. We certainly do have experience of the VarioUltras and the Esys range and they work well and basically the BAUM VarioUltra Braille displays are much the same as Humanware Braille displays so I'm guessing that Humanware Braille displays would also work well on them.

Dave Williams: Excellent. Right, let's go to Ben who's going to bring in David,

Ben Mustill-Rose: We're going to go to David Weston first and then Tracy.

David : I have just taken my first steps into Android and I now have a Fire tablet 8 Plus and when I connected my Orbit Reader, that's the original Orbit Reader, it connected very fast, very easily but I find some of the keystrokes don't work. Should I have put on the BrailleBack?

Steve Nutt: No. The reason is that Amazon have BrailleBack built into the device. You couldn't easily put BrailleBack onto your Amazon Fire tablet unless you side-loaded it. You can't actually download it from the Amazon Store, as you can from the Play Store. As I understand it, and I might be wrong, and if I am wrong, I do apologise, Braille on the Fire tablet is a little bit more limited than BrailleBack. They don't have Braille screen input because they're a little bit behind because they're on the equivalent of Android 9 or 10, is it, Ben? Something like that.

Ben Mustill-Rose: I think it's something like that.

Steve Nutt: Yes, they're a little bit behind with Android so you're not going to get the same experience on a Fire tablet. A Fire tablet is not proper Android, put it that way.

David: I can read Kindle books using my Braille display very easily.

Steve Nutt: Yes, that's true and that's one thing Amazon have done very well because they've actually forked BrailleBack and they've made their own version of it. I think Google are working on getting things like Kindle to work on Android and it does work pretty well but not always.

David: I've just got one other question. I've been looking on the Web for an Android phone. Which one would you recommend, Steve? As a beginner.

Steve Nutt: As it happens, although you can get cheaper phones, I would recommend something like the Pixel 4a. The Pixel 4a, or the 4a 5G, are two nice phones. I think the 4a is only £349 now and you're getting the pure Google experience. It's like buying from the people who control Android.

This is nothing to do with Braille, but the problem with Android, and Ben and Dave are right about this, is that there are all different styles and sizes and they're fantastic and they're cheaper, but if you buy manufacturers other than Google, they put their own skin on it. They put their own launchers on it, they put their own apps on it, as well as the Google apps, and the experience is not always so good. That's the problem with Android. With flexibility comes complexity. There's so much customisation that you can do to it, that sometimes it's not as straightforward to get the stellar experience.

So, I always recommend a Pixel when people ask me what Android phones to buy.

Until recently Samsung had a version of TalkBack called Voice Assistant and it was always two versions behind in Android and the only reason they didn't ditch it was because TalkBack didn't have multi-finger gestures and now it does, Samsung are using, guess what, TalkBack.

So, at least Samsung is now the same as Google but I always recommend the Google phone because it would a bit like buying a fake Apple phone if you bought anything other than Google. That's how I feel about it.

Ben Mustill-Rose: Thanks for that, David, and a great question as well because, as you say, one of the strengths of Android is the variety, but equally so much choice, it's hard to know what to go for.

We're going to come to Tracy next and then Kawal.

Tracy: I'm from Toronto, Canada, and this is my first time. I'm really happy that someone sent me this information and I joined today and I hope to join almost every week now. I'm totally blind and I use Braille and I totally agree with what Steve said about Braille on the Android. I want to make a couple of comments. The tabletop version is fairly new because I remember emailing them last year about it and I didn't realise, it was a few months, but all of a sudden, I got an email back from them saying, "You can now do tabletop," and I was really impressed that they read my email and responded to me, and that was just done at the beginning of this year, I think, or the end of the last year.

When I use the format of Screen Away, I like to hold it the wrong way so that my ring finger on my left hand is dot 1, and the reason is I tried to do it the other way and I just kept making mistakes because to me it's like reading Braille on your stomach.

Steve Nutt: Tracy, I just want to make a comment generally on Google. They are fantastic at coming back to you. Apple are not so good always. So, if you report a bug with software, I've actually had direct conversation with TalkBack engineers and you can't say that about Apple, to be honest, and that's one of the other reasons that I've been a fan of Google for years, because if you get advance, you get down and dirty with Apple, usually you'll get something back, "We'll look into it," or a canned reply. With Google, I've always had a real person reply to me and a real person doing the testing and a real person right to the end of the conversation.

Tracy: Yes. The other comment I can make too is I agree with getting the Google because you get the updates quicker. I've had other brands that are good but I think that Samsung might be better for visually impaired. They seem to like the Samsung a little better and I'm not sure why.

Steve Nutt: It might be to do with some of the magnification but that is now level with Google as far as I know because they've taken out Voice Assistant which had that extra magnification in and I think Google is doing that now with TalkBack.

Tracy: I recommend, especially for totally blind people, that they should maybe look at going with the Google phone, the Pixel, and I'm glad that they brought out the cheaper one.

Steve Nutt: I can't wait for the Pixel 6. You know what, I'm talking to you lot tonight and I'm missing the Google event which is tonight.

Tracy: Oh, dear.

Ben Mustill-Rose: Some people are so dedicated to Android that they watch the Google event but some people are even more dedicated to the point where they miss the Google event to come and teach it to everyone else.

Steve Nutt: To do Braille. Yes.

Ben Mustill-Rose: Great to have you here, Steve. We're going to come to Kawal now and then Teresa.

Kawal: I'm actually teaching Braille to a group of children who are using BrailleNote Touch and I wanted to know whether or not the BrailleNote Touch is using the same software as Google.

Steve Nutt: No. Short answer. And the reason is the BrailleNote Touch is still on Android 8 and so therefore they've actually virtually rewritten it, so they're written their own application. If you install BrailleBack for the BrailleNote Touch, it probably wouldn't be as good because it's not designed for Android 8.

Kawal: Okay, and the second thing is I'm supporting somebody who's got the BrailleNote Touch and I say that he should write stuff in Grade 1 and he says that when he writes in Grade 1, it goes into Grade 2. So, I said to him that he could go into the Settings and change that so that if he wants to write something, it stays in the actual same way that he wrote it, but he said that he couldn't do it. I'm sure there must be a way. Do you know if there is?

Steve Nutt: Space with G?

Kawal: Okay, that's great, thank you.

Steve Nutt: I like easy answers like that one. So, space with G will toggle the translation, so if you want to type in Grade 1, just do space with G and it should toggle it to Grade 1 if I remember right. I don't have a BrailleNote Touch but I think that is what I remember of BrailleNotes.

Kawal: Okay, that's great. Thank you.

Ben Mustill-Rose: We're going to come to Teresa next and then Carla.

Teresa: I'm Teresa from Venezuela. I have two questions. The first one is I already have a Focus 44 Braille display and my phone is a Motorola E4 with Android 7. I believe it's a Stone Age phone. I have the Focus already paired to the phone but now from quite a while ago, it doesn't want to connect. I've gone to the Settings in the Focus where you change the connection. I put the Bluetooth for the Motorola but it doesn't seem to connect, so I don't know if I have to open the BrailleBack first?

Steven Nutt: Well, it's a long time since I've used Android 7 so bear with me. What I think you probably need to do is first of all go into Settings and Accessibility, make sure BrailleBack is still on. If it's not on, turn it on. If it is on, toggle it off and then on again. If that doesn't work, then go into Settings and Connectivity and go into Bluetooth and forget it and re-pair it because it might have corrupted the actual Bluetooth connection. If that doesn't work, then you can go into Settings and you can go into System and Reset Networks. Now, what that'll do though unfortunately is it will lose all your WiFi but it will also lose all your Bluetooth connections and then you should be able to reconnect it.

Teresa: Okay, so it looks like I have my BrailleBack off so it seems like I have to turn it on first and then connect.

Steve Nutt: Yes. You should really leave BrailleBack on all the time, you don't ever need to turn it off. If you leave it on, it will detect as soon as your Braille display is turned on. When I did it today with VarioUltra just now, I didn't turn on BrailleBack, I just simply turned on the Braille display and it connected.

Teresa: Okay, and if I want to go back to the computer, then I simply go to the Settings in my Braille display and set it back to the USB, right?

Steve Nutt: You can do that but just turn it off, as well. Turn the Braille display off. You can do anything you want to disconnect the Braille display, so you can go back to USB or you can just power down the Braille display and the phone will chime and disconnect.

Teresa: Oh, I see. The other question is I tried the Braille writing on the phone for the first time a few days ago and it's a mess really. I'm not sure how to put my fingers in the sense that the tutorial, for example, says dot 1 and I get to dot 2 or a column, so I suppose the fingers should be in a Perkins style movement, right?

Steve Nutt: Yes, so for example if you're using Tabletop mode, put the phone on the table with the charging port to your right, so it's landscape, and put your middle fingers, so not your thumb and your little finger, but your middle fingers, in a Braille formation anywhere on the screen, near the top and near the bottom, and then hold it there for a couple of seconds and it will make a beep noise to tell you it's calibrated and then once you do that, you just start typing in Braille. Don't think about where you're putting your fingers, just imagine you're typing on a Perkins.

Teresa: Right. When I write on the Perkins, I usually use my first three fingers.

Steve Nutt: That's correct. So, not your thumb.

Teresa: Yes, my index and the next.

Steve Nutt: Yes, your index finger and your middle finger and your ring finger.

Teresa: Okay. So you use the same fingers in order to calibrate as you said.

Steve Nutt: Yes, so, if you imagine the left-hand side of the phone is dots 1, 2 and 3 and the right hand side is dots 4, 5, 6, that's what you do.

Ben Mustill-Rose: Thanks for that, Teresa. I hope that's given you some helpful points. Let us know how you get on. In the meantime, we're going to come to Carla next and then Steve Pulley.

Carla: It's more of a comment actually. I just wanted to update people on the Amazon Fire tablets, they now do support Braille screen input, both tabletop and screen away mode, believe it or not. Braille has come on quite a long way, so that's all good. The way to set it up, you can go into Settings and Voice View and Braille and you can just go and connect a Braille display straight from there, if it's something like an Orbit Writer.

Steve Nutt: That's more like iOS, isn't it? It's integrated. Good.

Carla: With some of the non-supported Braille displays, you're going to have a bit of a fight on your hands but you can get them connected.

Ben Mustill-Rose: Thanks for that, Carla. We're going to come to Steve Pulley and then to Tracy.

Steve Pulley: I haven't got an Android phone or a tablet at the moment and I'm wondering about getting one and I don't even know whether you really can get Android tables, apart from the Fire. I have got a BrailleNote Touch. Is the situation, whether tablet or phone, fairly much the same?

Steve Nutt: Yes, pretty much, although there aren't many Android tablets around. You've got the Samsung Tabs, which are pretty good tablets and they all work with speech and Braille. There are lots of Chinese, cheap Android tablets but I wouldn't recommend going that that way.

Steve Pulley: My only reason for wondering about tablets is because I'm more likely to be using the thing through a wireless router as opposed to through phone protocol.

Steve Nutt: You mean you'll be on a network rather than using a SIM card?

Steve Pulley: Yes, that's the one.

Steve Nutt: But you don't have to have a tablet to do that, do you? Just buy a phone and don't put a SIM card in it.

Steve Pulley: My phone I've got at the moment is from 2007. My second question, is there any kind of list of supported displays for Android?

Steve Nutt: Yes, I believe there is and what I'll try to do is I'll try to forward a link to Ben to a list of the supported Braille displays.

Ben Mustill-Rose: And we'll make sure that is on the website alongside all the other notes for this show, in our handout.

Steve Pulley: Thanks for that. My final question, can you set up the Braille to be able to read characters from different languages and write characters from different languages? I'm thinking typically of mixing English with Hebrew.

Steve Nutt: Yes, I believe you can, although I've never tried it.

Steve Pulley: Thanks for that.

Ben Mustill-Rose: We're going to come to Tracy and then Alan Dyte.

Tracy: I have a question and a comment. Do you have to have your phone on before you turn your Braille display on? Sometimes I've found I had to do it by turning the Braille display on first and then the phone.

Steve Nutt: I don't switch my phone off ever. Do you mean unlocked?

Tracy: I mean unlocked, sorry.

Steve Nutt: Right, no, you don't. Certainly with the VarioUltra, it's got commands to wake up the phone. It depends really, I suppose, on the Braille display

Tracy: The other comment was I also have an Orbit Writer and use that and it works really well on Android.

Steve Nutt: Good, I'm glad, because I don't think anyone in the UK has got it, unless they've imported it.

Ben Mustill-Rose: I believe it might be for sale at the RNIB at the moment but that's a very recent thing. Thanks for that, Tracy. We're going to come to Alan Dyte and then Nick Adamson.

Alan: Mr. Nutt, I have a Kindle Fire. I'm totally blind and I have trouble in writing using the Kindle Fire keyboard so being a brave sort of person like I am, I bought myself a Logitech keyboard to connect to Kindle Fire so that I could write on that keyboard and it doesn't connect and I don't know why. Can you give me any reason why it doesn't work or put me in a way to help?

Steve Nutt: That's a difficult one. Presumably you're putting the Logitech keyboard into pairing mode and you're switching to the right profile because they can connect to about three devices at once, can't they?

Alan: Yes, and I am making the right selection and the Logitech sign is coming up, where the device is showing on the phone but it actually isn't connecting itself.

Steve Nutt: So you can see the Bluetooth entry on the phone, yes?

Alan: Yes.

Steve Nutt: And you hit connect on the phone and nothing happens. Did you get any errors?

Alan: I didn't get any errors.

Steve Nutt: Did it just say disconnected?

Alan: You move to connect and tap it and it should accept it, like VO spacebar. You do that and it should connect it, but it doesn't. Does the phone fill up so you can only have so many things on there? I've had things on there in the past and I've disconnected from them but left them on there. Could that be a problem?

Steve Nutt: It could be. I'd say the same to you as to Teresa, I think. You go into Settings and forget all Bluetooth devices and then start from the beginning. I do that at least once a year with my phones.

Alan: Could I have a supplemental question please? I've got many devices within two rooms downstairs. If I did that on the Kindle Fire in the back room, would it turn off the other Bluetooth devices in the front room?

Steve Nutt: No. It will only affect that device that you do it on.

Alan: Thank you. I'm happy.

Steve Nutt: Just a quick commercial break. If anyone does want technical support like that, unfortunately not free, but give me a ring. We work on the basis that if I can't fix it, you don't pay.

Ben Mustill-Rose: Sounds like a good deal to me. We're going to come to Nick Adamson.

Nick: Quick question about Braille input. At one point you said, when you're doing desktop mode, your power button is to the left and your camera is to the right and then I think later on, you said it was the other way round. Can you just clarify which one it is because I'm sure I've got that wrong before?

Steve Nutt: To be fair, I've forgotten but it does tell you on the phone. When it says table top mode, it does tell you, so you can't get it wrong, because it will say, tabletop mode, turn it landscape so that the USB port is on the, I think, it's right on tabletop mode and on the left on the other mode.

Ben Mustill-Rose: We have a couple of new hands up, so we're going to come to Wendy and then Caroline.

Wendy: This is not actually a Braille thing. Since I've done the newest update, to turn the voice feedback on and off, I used to press the higher and lower button.

Steve Nutt: Hold down the volume up and down button.

Wendy: That's what I meant. But I don't seem to be able to do that now, since the upgrade. Any advice?

Steve Nutt: Yes. TalkBack Settings, Accessibility, Shortcut.

Wendy: I'll have a look.

Steve Nutt: I think what's happened is you got caught in the trap that Samsung have gone over from Voice Assistant to TalkBack. The accessibility shortcut might be turned off. If you go in there, it's turned off in some things, there's a tick box to turn it on and then it'll tell you that the volume up and down buttons will turn on TalkBack, is this okay and you just hit okay.

Wendy: Thank you.

Ben Mustill-Rose: We're going to come to Caroline next.

Caroline: I had a phone call during part of this so I might have missed this, but I just wanted to mention, Tracy had mentioned that she turns the phone upside down so that she can reverse her fingers but there's actually a setting that will let you flip those dots.

Steve Nutt: That's right, yes, there is and I'd forgotten about that.

Caroline: Yes, so that you don't have to worry about flipping your phone. If you're doing that, does it really matter what direction you're holding your phone?

Steve Nutt: I don't know. It must matter to some degree because otherwise it wouldn't know what dot 1, 2 and 3 was and what dot 4, 5 and 6 is.

Caroline: True.

Ben Mustill-Rose: Thanks for that, Caroline. We've got around about five minutes left so maybe time for one or two more questions.

In the meantime, we are the Braillists Foundation. If you're new to us, we run Master Classes every first and third Tuesday of every month, along with lots of other events. Visit our website at www.braillists.org and if you want a once a week email, keeping you up to date with all the things that are going on at Braillists HQ, subscribe to our newsletter which is also on braillists.org. Like us on Facebook and follow us on Twitter. We are Braillists Foundation on Facebook and @braillists on Twitter. We post a lot of content on Twitter these days. If you have any feedback about this Master Class or any suggestions for future content, we'd love to hear from you. You can email help@braillists.org.

We have a couple of questions now. We're going to come to Carrie first and then if we have time, Tracy then Caroline.

Carrie: You were saying earlier on, Steve, that when you want to use Braille with the Kindle Fire tablets, did you say that it doesn't work very well when you write it in?

Dave Williams: Just to clarify, it's the Braille screen input, I think, Steve was referring to, that you think that that's not on Fire yet.

Steve Nutt: Yes, it has been updated though, apparently, because Carla made that comment.

Carrie: That's great. Thank you very much.

Dave Williams: A great option for reading Kindle books though, really low cost option.

Carrie: Yes, that's what I want to do. My mother has a Kindle and she's sighted but she can't hold a book due to arthritis and she tells me about all the books she reads.

Dave Williams: We are going to do a bit of a deeper dive, I think, Ben, into the Kindle Fire and how you can use that to access Kindle. So we are going to do a session on the Kindle Fire tablet specifically so stay tuned for that one.

Ben Mustill-Rose: Yes. We're going to try to really quickly squeeze Terry-Ann in and then Dave to wrap things up.

Terry-Ann: At the risk of adding fuel to the fire, no pun intended or maybe it is, regarding the Amazon Fire tablet, I was just looking at the Plus 10th Generation and I did a demo regarding using the input keyboard and how to access that and now with this most recent update, I'm not seeing it here in a blank document which you're supposed to be able to do. So, I'm not quite sure what's happening but I will dive into this a little more and maybe I can let you know what I find.

Dave Williams: We will be doing some homework as well in preparation for our session on the Kindle Fire tablets so hopefully we can get some clarity on that. Steve, any final thoughts?

Steve Nutt: Just, basically, thank you for all your questions. They've been really good questions. I hope I've answered them to reasonable satisfaction. If anyone wants any Android or iPhone training or support or even Windows training or support on various screen readers, do feel free to contact me, doesn't have to be in the UK, we can do it all over the world by Zoom or by phone and you can get me at steve@comproom.co.uk and the website is www.comproom.co.uk.

Thank you for giving me the opportunity, Dave and Ben and everyone else at Braillists Foundation.

Dave Williams: Steve Nutt from Computer Room Services, Braille on Android. Thank you very much for taking all those questions and for sharing your experience with us this evening. We very much appreciate that.

Thank you also, Ben, for your help with the moderation. That's been brilliant. And all of you, of course, there's no point in these sessions without you, so thank you very much.

In two weeks' time, we are going to be doing something a little bit lower tech and we're going to be looking at the various ways in which we might use Braille in the kitchen and we will have a guest presenter for that session on 1st June.

Next week, next Tuesday, it'll be the Braille Bar, so it'll be an open Braille Bar for any Braille-related questions, maybe about Android, maybe about iOS, maybe about something entirely separate but we will look forward to an open Braille Q&A in the Braille Bar next Tuesday from 7:30pm UK time.

From all of us at the Braillists Foundation, have a very safe week, take care, stay in touch and we'll see you soon. Bye for now.