

## What is Braille? April 2022

*(music)*

Emily: Hey Megan, what are you doing? How are you reading that book when there are no words in the page?

Megan: Well, there are words on the page; I'm reading braille. Actually, we recently celebrated World Braille Day on January 4th, which is Louis Braille's birthday. Did you know that Louis Braille invented the Braille code in 1824?

Emily: Whoa, that's a long time ago!

Megan: And many students at MSAB like me use braille every day.

Emily: I use print to read at school, but I have questions about braille. Like, what's it like to learn it and how does braille work? And what age people are when they learned it? How old were you when you learned braille?

Megan: I was four years old when I started learning braille. We asked current and retired MSAB braille teachers as well as students about their experience with braille. Here is what we learned.

*(music)*

Ms. Godwin: I was super excited about learning braille, and I remember the first time I felt that I was actually "reading to read" instead of "reading to learn braille," if you know what I mean by that? Like I wasn't focusing on learning braille, I was focusing on reading a book and it was just...I was so ecstatic and I just remember that feeling of...feeling proud of myself that I mastered braille so well that I didn't have to think about the code and the literary code anymore and could just focus on the book I was reading. So I loved it.

Ms. Shallbetter:

At first I didn't want to learn at all. I was 17 and I just lost my vision and at the time I didn't have anything left and I was more scared than anything else and I kind of rejected it. But when I got to Vision Loss Resource Center (back then it was called Minneapolis Society for the Blind), I learned braille very fast and realized I wanted to read very badly.

Arianna: When I first started, I was not happy about it. But eventually I started learning it and it was really difficult. And but I just powered through it and I learned it in pretty much, yep, a year. I learned it in a year.

Mr. Weber: I've had lots of experience with the Braille. I've been blind since birth and been reading Braille since I was three.

Levi: I think I was 14 in 8th grade.

Gideon: My name is Gideon, and and I'm 6.

Megan: I started learning Braille when I was about...4.

*(music)*

Emily: Megan, you keep talking about a braille cell, but what is that? I thought it was just a cell in the body that was named "Braille".

(Drum set "sting" in response to the humor)

Megan: Well, that's a very interesting thought and it would make sense that you would think that. But we asked several students and staff to give us responses to this question. Here is what they said:

*(music)*

Mr. Weber: So think of the braille cell as a two column thing. So pretend you have a table or an Excel sheet with two columns and three rows. Of these two columns and three rows, you can make all the braille letters and a whole bunch of contractions.

Ms. Godwin: The braille cell is made up of six dots in two parallel rows and with various combinations and numbers of the dots you can read and write all the braille symbols, which is just amazing to me.

*(music)*

Emily: Next, I wanted to learn about the difference between Grade 1 and Grade 2 braille, also known as "uncontracted" and "contracted" braille. Let's listen.

Ms. Godwin: Grade 1 is a letter-by-letter and number-by-number and punctuation-by-punctuation of symbols, just like you would find in print; it's transcribed letter by letter. And Grade 2 or "contracted braille", it's like a shorthand where you have

different combinations that can use a group of words or an entire word, so it takes up less space and some people would even claim that when you learn contracted braille, you can read faster. I also believe that uncontracted and contracted braille needs to be...they need to be taught simultaneously (at the same time).

*(music)*

Emily: Nemeth is a brilliant code created by Dr. Abraham Nemeth. Used for math and scientific equations. It was formally accepted as the standard by the Braille Authority of North America in 1952. We use Nemeth here at school to read and write math equations - for example, in algebra and geometry. Megan tells us that all the numbers in Nemeth are one cell lower than literary notation.

*(music)*

We were also wondering about braille around the world. Here is what we learned:

Some languages share similar alphabets and symbols. Others, like Mandarin, are based on phonetics. The World Braille Usage Book is a reference that includes codes for 133 languages, including indigenous and endangered languages. Languages that are read right to left or vertically in print or special characters are read left to right in braille. Also, although English unified braille uses contractions, many languages, such as Spanish, do not.

*(music)*

Louay: My name is Louay. I'm an exchange student and I'm from Tunisia. So I speak four languages fluently. I speak Tunisian, Arabic, French, and English, and I also speak a little bit of Spanish and German. In braille, I can read Arabic, French and English and some Spanish. However, since Tunisian is not a written language so we just speak it so there isn't like a writing or there isn't a braille writing of Tunisian. So basically, since our talking about my experience. There is a lot of difference between languages, so for instance in Arabic we have contractions which are very very different from the English contractions. Even the math code that we use is different. And also in Arabic there are like a lot of letters and the letter may change, like for instance the way of writing the letter may change if you write it. For example with the first of the beginning of the word or the ending of the word (with the word I mean!) so that that makes it kinda hard a little bit to learn, but it's very... It's very interesting. Other than that, in French we have a thing, it's called the accent, which is which may change the way of writing the letter. So for instance, let's take an example of e, which is basically E in English. It

may change if you add the accent to the letter. Other than that, it's...all the more interesting. Basically, in Tunisia we use a lot of French coding in math.

Emily: Braille music is a code developed by Louis Braille. It is different from his literary braille code and is different than Nemeth. The top part of the cell (dots one, two, four and five) represent the musical pitch. And the bottom part of the cell (dots three and six) represent the note value or rhythm.

We think it is important to learn braille music so we can be more independent and literate musicians, read first hand what the composer intended, and to make our own artistic decisions.

*(music)*

Megan: Hey, Emily! Did you learn a lot about braille today?

Emily: Yeah, I sure did. Thanks to everyone involved for telling me and our listeners more about braille.

*(music fades)*