

The Importance of Braille Literacy



NATIONAL FEDERATION
OF THE BLIND
TEXAS



Introductions



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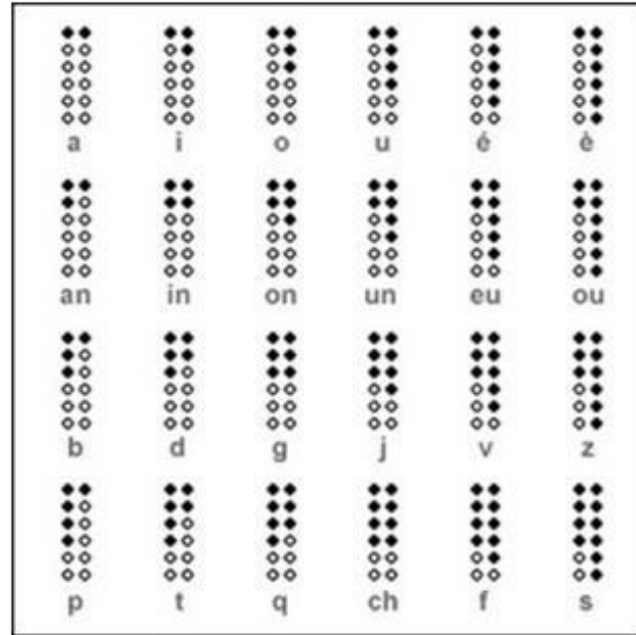
A Little History

1815

Night writing invented by Charles Barbier for the French
Army

Night Writing

12 Dots



Louis Braille

1821

saw night writing at the National Institute for Blind Children

1824

created what we know as braille

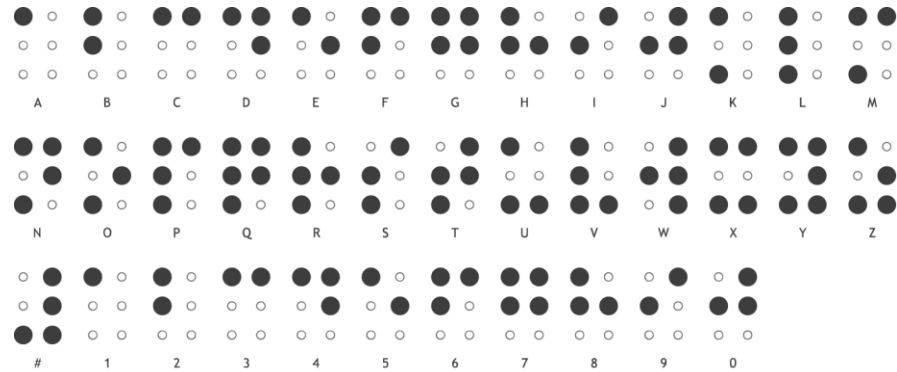
1860

Braille adopted by Missouri School for the Blind



Why Braille?

A Look at the Data



Reading Braille = Employment

“interviewed 74 congenitally blind adults of working age and found that among those who had used braille as their primary reading medium during childhood, 56% were employed, compared with only 23% of those who had grown up using print.”(Bell and Mino, 2013) (Ryles, 2000)

“subjects who learned to read using braille tended to be employed in higher numbers”(Ryles, 2000)

Reading Braille = Higher Salary

“Those who read Braille on a daily or weekly basis are employed at a significantly higher rate than those who do not, and Braille readers also earn on average \$11,000 more than non-Braille readers.” (Bell & Mino, 2013)

Reading Braille = Well Being and Self Esteem

“Braille is essential for literacy among the blind. In this study, we found that braille literacy is uniquely associated with well-being and self-esteem among legally blind adults, even after blindness onset and residual vision were held constant. Participants who learned braille early in childhood reported the highest well-being levels. However, those who learned braille later in life still reported higher well-being levels than those who never learned braille. In addition, participants who were braille literate were more likely to be employed than those who were not, regardless of their age when they learned braille.” (Silverman & Bell, 2018)



What is Braille?

Braille is...

- A code not a language
- labeled
- Predictable
 - a-j
 - K-t add a 3

The Braille Cell

1 ● ● 4
2 ● ● 5
3 ● ● 6

The Braille Alphabet

⠁	⠃	⠉	⠇	⠑	⠋	⠎	⠒	⠊	⠚
a	b	c	d	e	f	g	h	i	j
⠅	⠇	⠍	⠏	⠕	⠋	⠗	⠓	⠔	⠞
k	l	m	n	o	p	q	r	s	t
⠥	⠦	⠠	⠭	⠮	⠵				
u	v	w	x	y	z				

Creating Braille

What is a Slate and Stylus?

A stylus is a pointed tool that is used to press on the slate and make the indentations for the braille. A slate has several holes, and each hole is actually a cell with 6 indentations.
<https://www.pathstoliteracy.org/slate-and-stylus>

What is a Perkins Brailler?

The Perkins Brailler is a "braille typewriter" with a key corresponding to each of the six dots of the [braille](#) code, a space key, a backspace key, and a line space key. Like a manual [typewriter](#), it has two side knobs to advance paper through the machine and a carriage return lever above the keys.
https://en.wikipedia.org/wiki/Perkins_Brailler

What is a Braille Display?

Braille displays provide access to information on a computer screen by electronically raising and lowering different combinations of pins in braille cells.
<https://www.afb.org/node/16207/refreshable-braille-displays>

What is a Braille Embosser?

A braille embosser is an impact printer that renders text as tactile braille cells. Using braille translation software, a document can be embossed with relative ease. This makes braille production efficient and cost-effective.
https://en.wikipedia.org/wiki/Braille_embosser



Braille Resources

How to Learn Braille (for parents)

- Hadley.edu <https://hadley.edu/workshops/basic-braille-by-sight-reading-series>
- Braille Bits <https://idbimclibrary.blog/braille-programs/braille-bits-2/>
- Braille through Remote Learning <http://www.brl.org/>
- DOTS for Families <https://www.pathstoliteracy.org/blog/dots-families-braille-lessons>
- UEB Online <https://uebonline.org/>
- NLS Braille Transcriber course <https://www.nfb.org/programs-services/braille-certification>

Early Childhood

- Early Childhood Intervention services through your local school district
 - <https://hhs.texas.gov/services/disability/early-childhood-intervention-services>
- Braille Reading Pals Club
 - <https://www.nfb.org/programs-services/early-childhood-initiatives>
- Early Explorers
 - <https://www.nfb.org/programs-services/early-childhood-initiatives>

School Age

- NFB BELL Academy
 - <https://www.nfb.org/programs-services/nfb-bell-academy>
- National Center for Blind Youth in Science
 - <https://www.nfb.org/programs-services/national-center-blind-youth-science>
- TSBVI Short Term Program
 - <https://www.tsbvi.edu/short-term-programs>
- TSBVI Summer Programs
 - <https://www.tsbvi.edu/summer-programs-home>
- Training Center Summer Programs
 - <https://www.louisianacenter.org/buddyprogram>
 - <https://www.blindinc.org/programs/youth-programs/buddy-program/>
 - <https://cocenter.org/our-programs/summer-youth/>

High School

- NFBTX Mentoring Program <https://nfbtx.org/programs-student-mentoring.php>
- Training Center Summer Programs
 - <https://www.louisianacenter.org/step>
 - <https://www.blindinc.org/programs/youth-programs/>
 - <https://www.bism.org/rehabilitation#summerprograms>
 - <https://cocenter.org/our-programs/independence-training/challenge-recreation-activites/>

Beyond

- Training Center Adult Programs
 - <https://www.louisianacenter.org/adult-program>
 - <https://www.bism.org/rehabilitation#collegeprep>
 - <https://www.blindinc.org/programs/college-programs/>
 - <https://cocenter.org/our-programs/independence-training/>
 - <https://www.twc.texas.gov/jobseekers/criss-cole-rehabilitation-center>
- TSBVI EXIT Program
 - <https://www.tsbvi.edu/exit>

Braille Books

- Seedlings
 - <http://www.seedlings.org/>
- National Braille Press
 - <https://info.nbp.org>
- American Action Fund
 - <https://www.actionfund.org/programs>
- American Printing House for the Blind
 - <https://www.aph.org/tag/braille-books/>
- Free Slate Program
 - <https://www.nfb.org/programs-services/free-slate-and-stylus-program>
- Bookshare
 - <https://www.bookshare.org/cms/>
- Learning Ally
 - <https://learningally.org/>
- NLS BARD
 - <https://nlsbard.loc.gov/>
- Braille Institute
 - <https://brailleinstitute.org/special-collection>



Spanish Resources

Outreach to Spanish Speakers in Texas

The National Federation of the Blind of Texas has worked to welcome Spanish speakers in our programs. Cambiando Vidas was specifically designed to target the needs of Spanish speakers, and teaching the Spanish Braille code is a huge component of this life changing program. In the Silver Bells and the Braille Enrichment for Literacy and Learning academy, we have made efforts to provide interpretation services for Spanish speaking students. And we are determined to provide our resources in Spanish with the use of NFB-Newsline, where we are increasing our Spanish publications.

[Cambiando Vidas en la Frontera de Tejas](#)

For more information contact Daniel Martinez, Diversity and Inclusion Committee Chair

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Differences in the Spanish Code

- The uncontracted Spanish Braille code has additional Braille cells to represent seven commonly occurring accented letters, and punctuation is different as it follows the Spanish punctuation rules.

<https://www.pathstoliteracy.org/blog/spanish-braille-and-english-language-learners>

- Braille Bug: Check out the Spanish Braille code with this resource. It provides the dot positions for the characters used in Spanish Braille and other foreign languages.

http://braillebug.org/foreign_language_braille.asp



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Citations

Bell, Edward C., and Natalia M. Mino. *Blind and Visually Impaired Adult Rehabilitation and Employment Survey: Final Results*. The Journal of Blindness Innovation and Research, 2013.

Bell, Edward C., and Arielle Michal Silverman. *The Association between Braille Reading History and Well-Being for Blind Adults*. The Journal of Blindness Innovation and Research , 2018.

Ryles, Ruby. "Braille as a Predictor for Success." *Braille into the Next Millenium*, Library of Congress, 2000, pp. 462–492.