

Unified English Braille (UEB) Implementation Plan for California

April 20, 2015

What is UEB and why is it important at this time?

UEB is a revised code, set of rules, for teaching and reading braille for students who are blind. The new code is set to be the default code beginning January 4, 2016 (the birthday of Louis Braille, the man who invented the braille code). UEB is not regulated by law, however all transcribing agencies may begin providing braille in the new code across the United States.

The changes that will be made include the dropping of some punctuation, a few of the contractions, and several rules of formatting. The goal of the change is to have all current codes reflected in one code, with the caveat that Nemeth math code will be retained for math and science. All of these changes are provided in an overview document entitled *The ABCs of UEB* found on the Braille Authority of North America (BANA) Web site at <http://www.brailleauthority.org/ueb.html>.

Many books currently exist in English Braille, American Edition (EBAE), the former code. These titles will not be re-transcribed into UEB, but new titles going forward will be transcribed in UEB beginning July of 2015. Each new braille volume will indicate UEB on the spine in both print and braille. Trainings are being developed and there are several programs that provide assistance in learning the new code.

New curriculum will be provided for students in UEB beginning in January 2016. In order for students to be taught the new code, their teachers need to be trained in the new code. Providing training for teachers of students who are visually impaired (TVIs) and school transcribers should be in place prior to braille being produced for students.

Background

Unified English Braille (UEB)

Braille Authority of North America (BANA), representing transcribers, educators, and consumer organizations, working with students who are blind or visually impaired passed a resolution on November 2, 2012, approving UEB.

It is moved that the Braille Authority of North America (BANA) adopts Unified English Braille to replace the current English Braille American Edition in the United States while maintaining the *Nemeth Code for Mathematics and Science Notation, 1972 Revision*; the *Music Braille Code 1997*; and the *IPA Braille Code, 2008*. The official braille codes for the United States will be *Unified English Braille, Nemeth Code for Mathematics and Science Notation, 1972 Revision* and published updates; *Music Braille Code, 1997*; and *The IPA Braille Code, 2008*;

And, that the *Guidelines and Standards for Tactile Graphics 2010* and *Braille Formats: Principles of Print-to-Braille Transcription 2011* continue to be used in the United States as well as other relevant guidelines developed for specialized and uniquely-formatted materials;

And, that BANA will immediately embark on implementation by developing a preliminary transition timetable and by forming a group of related committees composed of stakeholders from the consumer, educational, transcription, and production communities. These committees will be charged with helping to plan in their respective areas for the development of training materials and for other relevant aspects of the transition. These plans will take into consideration all aspects of creating, teaching, learning, and using braille in a wide variety of settings.

<http://www.brailleauthority.org/ueb/UEBpassed.html>

The Braille Authority of North America (BANA), at its November 8–10, 2013 meeting in Louisville, Kentucky, affirmed January 4, 2016, as the date by which the United States will implement the general use of Unified English Braille (UEB).

<http://www.brailleauthority.org/pressreleases/pr-2013-11-26.html>

Justification

In order to prepare for successful transition to UEB, support for this change must be provided. There currently is not a requirement for all teachers and transcribers working with students who are blind to learn the new braille code. Because books, assessments, and materials will be transcribed into UEB, it is important that teachers and transcribers be competent in UEB. Providing resources and training will enable these professionals to learn UEB.

Consequences

If UEB is not implemented in California for braille reading students according to the January 2016 timeline the following may occur:

- State assessment test scores may be lower as students who are braille readers may not have learned UEB sufficiently
- Teachers may not be able to assist students if they are not trained in UEB
- There may be a shortage of certified UEB transcribers who are eligible to be contractors for the state who can provide braille for students. As a result, Instructional materials, and statewide assessments may only be provided in the prior EBAE code

- Students using IDevices to access materials which default to UEB will be confused if they are unfamiliar with UEB
- Transcribers at the district level will not be able to transcribe instructional materials in UEB if not trained in the changes, and certified in the UEB braille code

What Administrators Need to Know

- Administrators will need to assure parents that teachers of students with visual impairments are trained in UEB so that students will be taught the new code.
- School transcribers will need training in UEB so that materials provided will be accessible to students with proper formatting and code use.
- The state materials center (CSMT) will be responsible transcribing all new materials using the new code beginning in July 2015.
- Statewide assessment contractors will be transcribing tests in UEB. At the end of this plan the reader will find many resources that will assist teachers, transcribers, and school administrators in learning UEB. Many of the resources are free or inexpensive.
- It is anticipated that the California School for the Blind will partner with professional and consumer organizations to provide staff development opportunities for TVIs and transcribers during the 2015-2016 school year.

Considerations

California Teaching Credential requirement changes

VI Standard 4: Braille Competency and Braille Literacy Instruction

Each candidate demonstrates proficiency in reading and writing alphabetic and fully contracted braille using a variety of devices such as the braillewriter, slate and stylus, computer-generated translation, and electronic note takers. Each candidate demonstrates proficiency in basic Nemeth Code for Mathematics and an understanding of advanced Nemeth code. The program provides substantive, research-based instruction that effectively prepares each candidate to teach braille literacy and to be prepared to deliver a comprehensive program of systematic instruction aligned to the state adopted English Language Arts Content Standards and the California Braille Standards for Reading and Mathematics. The program provides basic knowledge of the various additional braille codes currently in use such as computer braille code, foreign language codes, and music. www.ctc.ca.gov/educator-prep/special.../VI-Standards.doc

California Education Code Related to Braille

Definitions: § 56350 Unless the context otherwise requires, the definitions set forth in this section shall govern the construction of this article. (a) A "functionally blind pupil" means a pupil who relies basically on senses other than vision as major channels for learning. (b) A "pupil with low vision" means a pupil who uses vision as a channel for learning, but who may also benefit from instruction in braille. (c) A "visually impaired pupil" means a pupil who is functionally blind or a pupil with low vision. For purposes of this article, a "visually impaired pupil" does not include a pupil who is eligible for special education and related services based on a specific learning disability identified pursuant to Section 56338. (d) "Braille" means the system of reading and writing through touch commonly known as Standard Unified English Braille, American Edition.

Braille Instruction § 56351 Local educational agencies shall provide opportunities for braille instruction for pupils who, due to a prognosis of visual deterioration, may be expected to have a need for braille as a reading medium.

Instructional Assistant § 56351.5 (a) (1) A local educational agency may reinforce braille instruction using a braille instructional aide who meets the criteria set forth in paragraph (2) under the supervision of a teacher who holds an appropriate credential, as determined by the Commission on Teacher Credentialing, to teach pupils who are functionally blind or visually impaired. This instruction shall be in accordance with the individualized education program of the pupil.

Braille Standards § 56351.9 (a) By June 1, 2006, the state board shall adopt braille reading and mathematics standards for pupils who, due to a visual impairment, are functionally blind or may be expected to have a need to learn the braille code as their primary literacy mode for learning.

Functional Vision Assessment § 56352 (a) A functional vision assessment conducted pursuant to Section 56320 shall be used as one criterion in determining the appropriate reading medium or media for the pupil. (b) An assessment of braille skills shall be required for functionally blind pupils who have the ability to read in accordance with guidelines established pursuant to Section 56136. A local educational agency may provide pupils with low vision with the opportunity to receive assessments to determine the appropriate reading medium or media, including braille instruction, for the pupils.

Notifications from the Office of Special Education

A letter dated July 19, 2013 was sent to all directors of special education in the country advising that braille be offered to all students who qualify as legally blind. Although this letter does not address UEB specifically, it is imperative that students receive instruction in UEB braille as a stipulation of IDEA. The letter can be found at <http://www2.ed.gov/policy/speced/guid/idea/letters/2013-2/dearcolleague06192013brailleiep2q2013.pdf>.

Transcription

All transcribers in schools as well as contractors providing braille will transition to UEB in January of 2016 per the recommendation of BANA. Existing books will not be re-transcribed into UEB, but going forward new books will be transcribed in UEB. Where applicable, all tactile graphics and illustrations also will be transcribed into UEB.

Instructional Materials

Textbooks and workbooks will be transcribed in UEB beginning July 1, 2015

- Initially students will have to know how to read EBAE, and the new UEB code, as some newly adopted textbooks will be available in the new code, and older books may be in EBAE.
- When books are distributed from the Clearinghouse for Specialized Media and Translation (CSMT), books will be identified as either EBAE or UEB.
- Teachers will assist students to identify which titles are in EBAE and which are in the new UEB code by markings on the spine of each volume.
- Transcribers will need to learn how to use translation software, Duxbury or Braille2000, to convert files from EBAE to UEB by January 2016. [Or should any specific software be identified at all?]

State-wide Assessments

- All state-wide testing will be in UEB when a new contract is in place.
- Smarter Balanced tests will be in UEB when a new contract is in place.
- Contracts to provide braille for students taking the Smarter Balanced assessments need to include UEB code in the future.

- Students will be using technology to access the test in refreshable braille and need to be familiar with the device prior to testing
 - Several devices already have UEB as a setting (e.g., IDevices, Apex notetaker, BrailleNote, and BrailleSense)
- Students need to have access to specified embossers for on-demand production of testing materials
- Training needs to be provided to professionals who support students during testing to ensure that the embosser and other assistive technology is functional for testing

RESOURCES: Learning the UEB Code

Training

San Francisco State University and California State University Los Angeles are the only two teacher credential programs in the state of California, and both universities have begun to offer braille courses in UEB.

- **FREE online** UEB Ready? Series of youtube.com videos
- **FREE online** WCBVI Videos: Introduction to Unified English Braille for Teachers on youtube.com
- **FREE online in 2015** Hadley’s new “Transitioning to UEB” course that will be free for professionals in 2015 <http://www.hadley.edu/UEBTransition.asp>
 - Adult Continuing Education (ACE) or High School (HS) (for people who are visually impaired). Upon receipt of the application and eye report (required if you live in the U.S.), students will receive the Entrance Assignment. Students **MUST** successfully complete the Entrance Assignment prior to enrollment in the UEB course.
 - Hadley School for Professional Studies (HSPS) for professionals and para-professionals (who assist people who are visually impaired)
 - Family Education (FE) Program (for family members of visually impaired individuals)
- **FREE online** UEB MANUAL New Zealand Edition
- **FREE online** UEB Australian Training Manual (2013) <http://brailleaustralia.org/unified-english-braille/unified-english-braille-australian-training-manual-2013/>
- **FREE online** UEB Online: Royal Institute for Deaf and Blind Children’s Renwick Centre <http://uebonline.org/>

Transcriber UEB Certification

- **FREE** Braille Certification Courses (National Federation of the Blind) <https://nfb.org/braille-certification> (under contract from the National Library Service for the Blind) <https://nfb.org/braille-transcribing>
 - NOTE: for current transcribers and proofreaders holding Library of Congress Certification in Literary Braille, an examination leading to a Letter of Proficiency in Unified English Braille is available
- **FREE online** Transcriber's UEB Course <http://www.cnib.ca/en/living/braille/Pages/Transcribers-UEB-Course.aspx>

Educator UEB Certification

- National Blindness Certification Board <http://www.nbpcb.org/ncueb/>
- Teacher Credentialing Programs in California at San Francisco State and California State University, Los Angeles
- Other teacher credentialing programs in the United States

UEB Code Manuals

- **UEB Rulebook**, Second Edition, 2013 <http://www.iceb.org/ueb>
- **UEB BRAILLE SYMBOLS AND INDICATORS** http://www.brailleauthority.org/ueb/symbols_list.pdf
- **UEB Guidelines for Technical Material** http://www.brailleauthority.org/ueb/Guidelines_for_Technical_Material_2_008-10.pdf

Other UEB Implementation Plans

- **State of Minnesota Unified English Braille (UEB) Implementation Plan** at <http://education.state.mn.us/MDE/EdExc/SpecEdClass/DisabCateg/VisualImpair/056538>
- **State of Wisconsin UEB Plan** at <http://www.wcbvi.k12.wi.us/outreach/ueb-introduction>
- **State of Michigan UEB Implementation Plan** can be found under Low Incidence at <http://maase.pbworks.com/w/file/attach/83860270/OSE-MAPS%20August%20SI%20update.pdf>

- **State of Indiana UEB Implementation Plan** and Timeline at <https://sites.google.com/site/isbvik12/ierc/unified-english-braille-code-ueb>
- Policies regarding UEB Transition at the American Printing House for the Blind (APH) <http://www.aph.org/pr/20140724Policies-Regarding-UEB-Transition-at-APH.html>

Additional Information

- **UEB Frequently Asked Questions** <http://www.brailleauthority.org/ueb/ueb-faq.html>
- **The ABCs of UEB** <http://www.brailleauthority.org/ueb/abcs/abcs-ueb.html>
- **UEB Tips and Resources** <http://www.brailleauthority.org/ueb/tips-resources.html>
- **Duxbury UEB Braille Chart** http://www.duxburysystems.com/images/ueb_black.pdf
- **Changes from Current Literary to UEB** http://www.brailleauthority.org/ueb/overview_changes_ebae_ueb.html
- **Check lists and Cheat Sheets** <http://www.svrc.vic.edu.au/CS.shtml>
- **Planning the Transition to UEB: Actions and Opportunities** at http://www.brailleauthority.org/ueb/actions_and_opportunities.html
- **The Value of Braille** <http://www.cde.ca.gov/ci/cr/cf/documents/valueofreadingbraille.pdf>

Implementation Plan Timeline

Winter 2015

- Identify stakeholders in California who are vital to the implementation of UEB, to become the steering committee.
- Work directly with the state Department of Education. Provide CDE with background information and an implementation plan including a timeline of activities for UEB
- Stakeholders groups meet to determine strategies for training of teachers and transcribers, transcribing/materials acquisition, and student instruction, as well as strategies for families to transition to UEB
- Train university instructors for TVI credentialing in UEB
Submit plan to the state Department of Education for approval and dissemination
- Work with the state Department of Education to assist in notify notification, and direct local education agencies and service providers to comply with required actions identified in the UEB Implementation Plan.
- Incorporate strategies identified by steering committee
- All training opportunities such as online courses, webinars, self-study materials are collated and disseminated to teachers, transcribers, paraprofessionals and consumers, will be posted on various education websites
- In addition to training for students in the school system, a statewide effort to implement UEB will include organizations and consumers who are visually impaired who read braille
- Students enrolled in the teacher preparation program will receive coursework in UEB

Summer 2015

- Orders for textbooks in subjects using literary braille (i.e., social studies and language arts), not previously transcribed, will be produced in UEB for the 2015-16 school year beginning July 1, 2015.
- Orders for textbooks in technical subjects (i.e., science and mathematics), not previously transcribed, will be produced in accords with the *Provisional Guidance for Transcription Using the Nemeth Code* within UEB Contexts (on the BANA Web site at <http://www.brailleauthority.org/ueb.html>) for the 2015-16 school year.
- Textbooks previously transcribed will be available in their original codes.

Fall 2015

- Begin implementation strategies as outlined in *California Unified English Braille Implementation Plan, dated xx/xx/xx.*

- Teachers are trained at regional workshops in northern and southern California. Training should focus both on UEB rules and braille instructional strategies for transitioning students.
- Transcribers are trained at regional workshops in northern and southern California.
- TVIs begin teaching UEB to students to address the instructional needs of both new braille users as well as those who are transitioning from English Braille, American Edition [EBAE])
- School transcribers begin to provide braille materials to students in UEB.

January 4, 2016

- Implementation year for UEB begins according to the BANA affirmation in November 2013.

Spring 2016

- TVIs continue teaching UEB to students with the understanding that some existing braille material will be in EBAE.
- Continued offerings of regional workshops centered on both UEB and instructional strategies for implementation will be available.

Fall 2016

- All new material ordered for the 2016–2017 school year will be produced in UEB. All students who read braille will expect to receive material produced in accordance with the *Provisional Guidance for Transcription Using the Nemeth Code* within UEB Contexts.