Date: Thu, Aug 6, 2015 at 5:32 PM

Subject: {COSB} NFB Resolution: Braille Code To: "COSB@tsbvi.edu" <COSB@tsbvi.edu">

A recently adopted resolution by the NFB is presented below, for your information.

Resolution 2015-29
Regarding Unified English Braille and the Nemeth Code for Mathematics and Science Notation

WHEREAS, the Braille Authority of North America (BANA) has voted that as of 2016 the official codes to be used in the United States are Unified English Braille (UEB), the Nemeth Code for Mathematics and Science Notation, the music Braille code, and the International Phonetic Alphabet code; and

WHEREAS, to reach the implementation goal, BANA announced as follows: "BANA is providing guidance on how to incorporate the Nemeth Code into UEB context with the intent that the Nemeth Code will continue to be integral to Braille in the United States"; and

WHEREAS, each state must create a customized plan for implementation of UEB; and

WHEREAS, some states, acting under an impression that part of the implementation process involves setting, at the state level, the standard for how mathematics Braille will be produced and taught in that state, have indicated an intent to move to the use of only UEB symbols for the teaching and production of Braille math in their state; and

WHEREAS, Braille production does not occur in isolation within each state, but rather is done to a great extent by a nationally connected network of Braille transcribers and producers; and

WHEREAS, the strong support for the use of Nemeth Code for mathematics is based in Nemeth Code being a known quantity, used successfully for decades, and found to be efficient and agile for reading and working mathematics problems because of its use of lower numbers distinct from letters, its one-cell representations of many mathematical symbols, its compact spacing, and other features that make it especially suited to mathematics; and

WHEREAS, theories that abandoning the Nemeth Code in favor of the use of UEB symbols for technical contexts will improve Braille readers'

access to and performance in math are unproven; and

WHEREAS, there exists in the US a well-established network of certified Nemeth code transcribers, but there is no training or credential to ensure the qualification of transcribers producing technical materials using UEB symbols only; and

WHEREAS, the differences between the presentation of mathematics in Nemeth Code and math using UEB symbols are so fundamental that a blind child moving to a state with a different math standard could find his or her math books and tests inaccessible even though they are in Braille; and

WHEREAS, it is sometimes difficult to find the resources to produce a math book or test in Braille, much less the resources to produce the very same math textbook or test in two different ways; and

WHEREAS, during the transition to Unified English Braille, some duplication of effort will be unavoidable to minimize disruption to the education of Braille readers, but to add a further variant to the standards for math would make the transition exponentially more chaotic, costly, and confusing for all concerned: Now, therefore,

BE IT RESOLVED by the National Federation of the Blind in Convention assembled this ninth day of July, 2015, in the city of Orlando, Florida, that this organization call upon state departments of education to eliminate needless confusion and unnecessary cost by using the Nemeth Code for Mathematics and Science Notation, with BANA's guidance for Nemeth in UEB contexts, as the standard for math Braille; and

BE IT FURTHER RESOLVED that this organization urge the Braille Authority of North America quickly to clarify that, although timelines and processes for UEB implementation are set at the state level, Braille code standards are not set by individual states; and to indicate unequivocally that the Nemeth Code, with the guidance for Nemeth in UEB contexts, is the standard for mathematics Braille in the United States.