

Texas Examinations of Educator Standards™ (TEXES™) Program

Preparation Manual

Braille (183)



Table of Contents

About The Test	4
The Domains	4
The Standards	5
Domains and Competencies.....	6
Domain I — Braille and Nemeth Code	6
Important Information About the Braille (183) Test.....	7
Approaches to Answering Multiple-Choice Questions.....	8
Practice Questions.....	9
Reading Contracted Braille	9
Reading Nemeth Code	11
Transcription Questions	12
Producing Contracted Braille with a Braillewriter	12
Sample Transcription Question	13
Score Scale	13
Producing Nemeth Code with a Braillewriter	14
Sample Question.....	15
Score Scale	16
Referring to Nemeth Code Rules to Produce Nemeth Code with a Braillewriter	17
Sample Question.....	18
Score Scale	18
Nemeth Code Rules.....	19
Producing Contracted Braille with a Slate and Stylus	24

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Sample Question.....	25
Score Scale	25
Answer Key	26
Study Plan Sheet	27
Preparation Resources	28

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

About The Test

Test Name	Braille
Test Code	183
Time	5 hours
Number of Questions	25 multiple-choice questions 4 constructed-response tasks
Format	Paper-based Test (PBT)

The TExES Braille (183) test is designed to assess whether an examinee has the requisite knowledge and skills that an entry-level educator in this field in Texas public schools must possess. The 25 multiple-choice questions and 4 constructed-response tasks are based on the Braille test framework. The test may contain questions that do not count toward the score. Your final scaled score will be based only on scored questions.

The Domains

The Braille test consists of one domain.

Domain	Domain Title	Approx. Percentage of Test	Standards Assessed
I.	Braille and Nemeth Code	100%	Braille VII, VIII

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

The Standards

Braille Standard VII

The teacher of students with visual impairments, including those with additional disabilities, knows how to read contracted and uncontracted literary braille and Nemeth Code.

Braille Standard VIII

The teacher of students with visual impairments, including those with additional disabilities, knows how to produce contracted and uncontracted literary braille and Nemeth Code.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Domains and Competencies

The content covered by this test is organized into broad areas of content called **domains**. Each domain covers one or more of the educator standards for this field. Within each domain, the content is further defined by a set of **competencies**. Each competency is composed of two major parts:

- The **competency statement**, which broadly defines what an entry-level educator in this field in Texas public schools should know and be able to do.
- The **descriptive statements**, which describe in greater detail the knowledge and skills eligible for testing.

Domain I – Braille and Nemeth Code

Competency 001: *The teacher of students with visual impairments, including those with additional disabilities, knows how to read contracted and uncontracted literary braille and Nemeth Code.*

The beginning teacher:

- A. Demonstrates competence in reading contracted and uncontracted literary braille.
- B. Demonstrates competence in reading basic Nemeth Code (e.g., +, -, ×, ÷, =, <, >, %, \$, decimals, punctuation indicators, horizontal and vertical formats of presentation).
- C. Demonstrates competence in using resources for reading advanced Nemeth Code.

Competency 002: *The teacher of students with visual impairments, including those with additional disabilities, knows how to produce contracted and uncontracted literary braille and Nemeth Code using a manual braillewriter and a slate and stylus.*

The beginning teacher:

- A. Demonstrates competence in producing contracted and uncontracted literary braille.
- B. Demonstrates competence in producing basic Nemeth Code (e.g., +, -, ×, ÷, =, <, >, %, \$, decimals, punctuation indicators, horizontal and vertical formats of presentation).
- C. Demonstrates competence in referring to Nemeth Code rules to produce advanced Nemeth Code.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Important Information About the Braille (183) Test

For the TExES Braille test, you *must* bring the following:

- a manual (non-electric) braillewriter that accommodates standard 11 1/2-by-11-inch braille paper
- a traditional (not direct) slate and stylus that accommodates 8 1/2-by-11-inch braille paper

Please note the following important information:

- Before test day, make sure your braillewriter is functioning properly; problems caused by malfunctioning braillewriters (e.g., ghost/shadow dots) might negatively affect the scoring of your transcriptions.
- If you do not bring an appropriate braillewriter and slate and stylus with you to the test center, you will not be permitted to test.
- Because erasures detectable by touch might negatively affect the scoring of your transcriptions, it is recommended that you bring and use a braille eraser.
- Braille paper will be provided at the test center; you may not bring your own braille paper.
- All equipment is subject to inspection before being allowed into the testing room.
- For each of the four transcription assignments, you must use the device specified in the test instructions.
- You must provide a scorable transcription for each of the four assignments; your test will not be scored if any of your four transcriptions is unscorable. Unscorable transcriptions include those produced on the wrong device and unreadable transcriptions (e.g., too lightly embossed, overlapping lines of text, prevalent ghost/shadow dots, etc.).

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Approaches to Answering Multiple-Choice Questions

The purpose of this section is to describe multiple-choice question formats that you will typically see on the Braille test and to suggest possible ways to approach thinking about and answering them. These approaches are intended to supplement and complement familiar test-taking strategies with which you may already be comfortable and that work for you. Fundamentally, the most important component in assuring your success on the test is knowing the content described in the test framework. This content has been carefully selected to align with the knowledge required to begin a career as a teacher of the visually impaired.

The multiple-choice questions on this test are designed to assess your knowledge of the content described in the test framework. In most cases, you are expected to demonstrate more than just your ability to recall factual information. You may be asked to think critically about the information, to analyze it, consider it carefully, compare it with other knowledge you have or make a judgment about it.

When you are ready to respond to a multiple-choice question, you must choose one of four answer options. Leave no questions unanswered. Questions for which you mark no answer or more than one answer are counted as incorrect. Your score will be determined by the number of questions for which you select the correct answer.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Practice Questions

This section presents some sample test questions for you to review as part of your preparation for the test. To demonstrate how each competency may be assessed, each sample question is accompanied by the competency that it measures. While studying, you may wish to read the competency before and after you consider each sample question. Please note that the competency statements will not appear on the actual test.

An answer key follows the sample questions. For each sample test question, the answer key lists the question number and the correct answer. Please note that the answer key also lists the competency assessed by each question and that the sample questions are not necessarily presented in competency order.

The sample questions are included to illustrate the formats and types of questions you will see on the test; however, your performance on the sample questions should not be viewed as a predictor of your performance on the actual test.

Reading Contracted Braille

Each question in this section consists of a statement in printed text followed by four answer options in simulated braille. You must choose which of the four options (labeled A, B, C or D) is the correct contracted braille transcription of the printed statement.

The statements in the questions are representative of the types of material that a VI teacher may be called upon to transcribe into braille for a student with a visual impairment. The statements may come from a variety of educational materials, such as science books, English worksheets, health texts, information about field trips, instructions for class activities and the like.

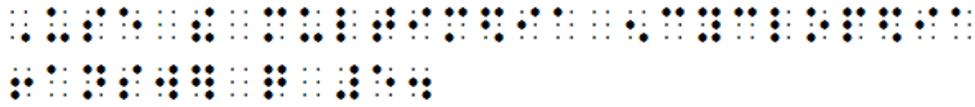
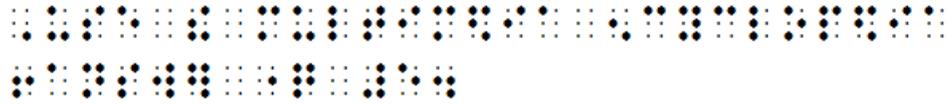
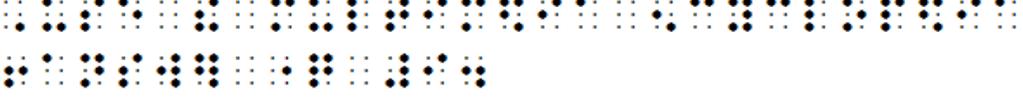
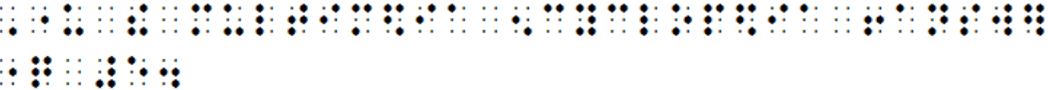
The questions on the following page are examples of this type of question.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

For each of the two questions that follow, read the sentence given; then select the correct contracted Braille transcription of the sentence.

COMPETENCY 001

1. Use the multimedia encyclopedia to answer question 5.

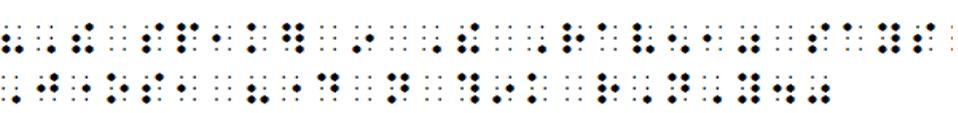
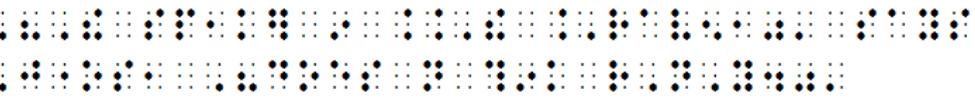
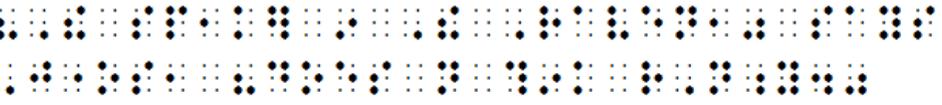
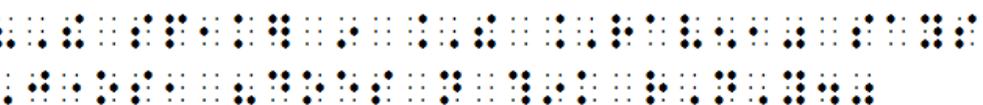
- A. 
- B. 
- C. 
- D. 

Answer Key

COMPETENCY 001

2. Read the sentence below and then select the correct contracted braille transcription of the sentence.

"The speaker in *The Raven*," says Jones, "does not think rationally."

- A. 
- B. 
- C. 
- D. 

Answer Key

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Reading Nemeth Code

Questions in this section consist of a mathematical problem or expression that is shown in printed text and then followed by four answer options in simulated braille. You must choose which of the four choices (labeled A, B, C or D) is the correct Nemeth Code transcription of the printed math.

The math problems or expressions that appear in the questions are representative of the types of material that a VI teacher may be called upon to transcribe for a student with a visual impairment. Typical examples include simple addition and subtraction problems, algebraic expressions, problems involving money or percentages, expressions with unknowns and word problems.

The question that follows is an example of this type of question.

For the question that follows, read the problem or statement given; then select the correct Nemeth Code transcription.

COMPETENCY 001

3. Read the problem below and then select the correct Nemeth Code transcription.

$$4\frac{1}{2} + \frac{2}{4} = 5$$

- A. 
- B. 
- C. 
- D. 

Answer Key

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Transcription Questions

The purpose of this section is to describe the types of transcription questions that you will see on the Braille test, and show test directions, a sample question and the score scale that will be used to score your responses.

Producing Contracted Braille with a Braillewriter

For this section of the test, you will be presented with a short (80–100 word) passage to transcribe into contracted braille using a manual (nonelectric) braillewriter.

The passage will be representative of the type of instructional material that a teacher of the visually impaired may be called upon to transcribe into braille for a student who has a visual impairment. The passage might contain an analysis of a poem, a description of a scientific process, an assignment related to an English or history unit, directions for a class project or similar instructional materials.

Test Directions

This assignment involves transcribing a passage into contracted braille. Your transcription must be made using a manual (nonelectric) braillewriter that can accommodate the 11½-by-11-inch paper provided by your test administrator. Do not hyphenate words unless they are hyphenated in the text. Your transcription should be done in contracted braille. Your transcription should require only one sheet of braille paper.

The following errors will be counted as incorrect in your transcription.

1. contractions omitted or misused;
2. characters misformed (including added or omitted dots);
3. characters omitted or misused or extra ones inserted (including hyphenation of words not hyphenated in the text);
4. words omitted or repeated;
5. punctuation marks or composition signs omitted or misused, or extra ones inserted;
6. spacing errors (including improper spacing between words or lines);
7. formatting errors (including improper line breaks and margins); and
8. erasures detectable by touch.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

If you need additional braille paper, notify your test administrator. When you have completed your final version of the transcription, check the appropriate box at the bottom of the page containing your final version. **Your score for this section will be based solely on the version of your transcription that you designate as the final version.**

Sample Transcription Question

COMPETENCY 002

4. Transcribe the following passage into contracted braille. You should not hyphenate words unless they are hyphenated in the text.

This week we have been discussing facts and opinions. To write all the facts for a news story, a reporter answers the 5 W's questions: WHO, WHEN, WHERE, WHAT, WHY? Today, you will work in small groups on the following activity. Each group will receive copies of a news article from *The Northfield Tribune*. After reading the news story, work with the other members of your group to find sentences that answer the 5 W's questions for this story. Has the reporter provided a clear description of the facts?

Score Scale

The score scale shown below is the one that will be used to score your contracted braille transcription. Your response will be scored based on the number of transcription errors you make.

Score Point	Score Point Description
4	2 or fewer errors
3	3–5 errors
2	6–8 errors
1	9 or more errors
U	Illegible
B	Blank

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Producing Nemeth Code with a Braillewriter

For this section of the test, you will be presented with a math worksheet to transcribe into Nemeth Code using a manual (nonelectric) braillewriter.

The worksheet will contain problems that are representative of the type of material that a VI teacher may be called upon to transcribe into Nemeth Code for a student who has a visual impairment. Examples include multiplication problems with fractions or decimals, algebraic expressions, word problems involving money or time, operations with mixed numbers and similar material. Above the worksheet you will find a few signs that may be useful to you in your transcription. Note that you are asked only to transcribe the worksheet, not to solve any of the problems.

Test Directions

This assignment involves transcribing a set of mathematical problems and statements into Nemeth Code. Your transcription must be made using a manual (nonelectric) braillewriter that can accommodate the 11½-by-11-inch paper provided by your test administrator. Include all punctuation marks. Skip one line between problems. Your transcription should be done using Nemeth Code. Your transcription should require only one sheet of braille paper.

The following errors will be counted as incorrect in your transcription.

1. contractions omitted or misused;
2. characters, numerals, or symbols misformed (including added or omitted dots);
3. characters, numerals, or symbols omitted or misused or extra ones inserted (including hyphenation of words not hyphenated in the text);
4. characters, numerals, or symbols in the number of the problem omitted or misused or extra ones inserted;
5. words omitted or repeated;
6. Nemeth Code indicators, punctuation marks, composition signs, or the general omission symbol omitted or misused, or extra ones inserted;
7. spacing errors (including improper spacing between words, lines, or problems);
8. formatting errors (including improper line breaks or margins); and
9. erasures detectable by touch.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

If you need additional braille paper, notify your test administrator. When you have completed your final version of the transcription, check the appropriate box at the bottom of the page containing your final version. **Your score for this section will be based solely on the version of your transcription that you designate as the final version.**

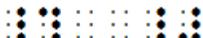
Sample Question

COMPETENCY 002

5. Transcribe the following mathematical problems and statements using Nemeth Code. Include the number of the problem/statement (1–6). Use a 28-cell line and make maximum use of each line. You should not hyphenate words unless they are hyphenated in the text. Include all punctuation marks. Skip one line between problems. DO NOT SOLVE ANY OF THE PROBLEMS.

Some or all of the following signs may be useful to you in your transcription.

Greater Than Sign 

Mixed Number Indicators 

Less Than Sign 

Punctuation Indicator 

1. Tracy cut $6\frac{3}{4}$ meters of carpeting from a roll containing $20\frac{1}{2}$ meters of carpeting. How much was left on the roll?
2. $\$67.45 + \$128.89 =$
3. $18,105 \div 5 =$
4. 50% of 4 =
5. Is $9 > 5$?
6. A train left town at 4 p.m. and arrived at its destination at 7 a.m. How many hours did the trip take?

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Score Scale

The score scale shown below is the one that will be used to score your Nemeth Code transcription. Your response will be scored based on the number of transcription errors you make.

Score Point	Score Point Description
4	3 or fewer errors
3	4-7 errors
2	8-11 errors
1	12 or more errors
U	Illegible
B	Blank

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Referring to Nemeth Code Rules to Produce Nemeth Code with a Braillewriter

For this section of the test, you will be given a section of Nemeth Code rules to refer to in order to transcribe four mathematical or numerical expressions into Nemeth Code.

The Nemeth Code rules provided are representative of the type of information that a VI teacher may need to refer to in order to transcribe a mathematical expression or numerical information for a student with a visual impairment. Examples include notations of measurement, room numbers, dates, page numbers and similar material.

Test Directions

This assignment involves referring to a set of Nemeth Code rules in order to transcribe four mathematical expressions into Nemeth Code. You should refer to the Nemeth Code rules on pages 19–23 to determine the correct transcription for each mathematical expression. Your transcription must be made using a manual (nonelectric) braillewriter that can accommodate the 11½-by-11-inch paper provided by your test administrator. You should transcribe each selection exactly as written. Skip one line between selections. All four selections should be transcribed onto the same piece of paper.

The following errors will be counted as incorrect in your transcription.

1. contractions omitted or misused;
2. characters, numerals, or symbols misformed (including added or omitted dots);
3. characters, numerals, or symbols omitted or misused or extra ones inserted;
4. Nemeth Code indicators, punctuation marks, or composition signs omitted or misused or extra ones inserted;
5. spacing errors (including improper spacing within or between expressions);
6. formatting errors (including improper line breaks or margins);
7. erasures detectable by touch; and
8. misapplications of the rules provided.

If you need additional braille paper, notify your test administrator. When you have completed your final version of the transcription, check the appropriate box at the bottom of the page containing your final version. **Your score for this section will be based solely on the version of your transcription that you designate as the final version.**

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Sample Question

COMPETENCY 002

6. Use a braillewriter to transcribe the following mathematical expressions into Nemeth Code. Refer to the attached section of Nemeth Code rules to determine the correct transcription. Transcribe the expressions exactly as written. Skip one line between expressions. Transcribe all expressions onto the same piece of paper.

'39

pg. 53.

"75"

Do exercises 12-17.

Score Scale

The score scale shown below is the one that will be used to score your Nemeth Code transcription based on the Nemeth Code rules. Your response will be scored based on the number of transcription errors you make.

Score Point	Score Point Description
4	2 or fewer errors
3	3-5 errors
2	6-8 errors
1	9 or more errors
U	Illegible
B	Blank

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Nemeth Code Rules

§37. **Use of the Punctuation Indicator:** Subject to the provisions of §38, the punctuation indicator must be used *before* a punctuation mark and *after* any symbol of the type listed below. In all these circumstances, the mode of punctuation is considered to be mathematical.

i. After any braille indicator.

(1) $\frac{1}{2}, \frac{3}{4}$ 

(2) $\overline{\text{velocity}}$.
(bar over "velocity") 

ii. After any numeric symbol written as in the Nemeth Code.

(1) 0. 

(2) "49" 

iii. After a Roman numeral.

(1) I, II, III. 

iv. After a dash or ellipsis, when these occur in a mathematical context. When the nature of the context is in doubt, the punctuation indicator must be used.

(1) $24 = 6 + \text{---}$. 

(2) 1, 3, ... 

v. After any reference symbol.

(1) note*. 

vi. After the general omission symbol.

(1) $5 \times 3 = ?$. 

vii. After a "single letter."

(1) a, b, c. 

viii. After a sequence of more than one letter in which each letter has a separate identity, provided that such a sequence is not an abbreviation.

(1) $\triangle ABC$. 

ix. After ordinal, plural, or possessive endings which are joined to numerals, letters, or other mathematical expressions.

(1) 1st, 2nd, 3rd, 4th. 

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Producing Contracted Braille with a Slate and Stylus

For this section of the test, you will be asked to use a slate and stylus to transcribe a set of three brief selections into contracted braille.

The selections are representative of the types of information that a slate and stylus is commonly used to record. Each set of selections includes a name, address and phone number; a shopping list; and a brief note to a student.

Test Directions

This assignment involves transcribing three selections into contracted braille. Your transcription must be made using a traditional (not direct) 27- or 28-cell slate and stylus that can accommodate the 8½-by-11-inch paper provided by your test administrator. You should transcribe each selection exactly as written. Skip one line between selections. All three selections should be transcribed onto the same piece of paper.

The three selections include:

1. a name, address, and phone number;
2. a shopping list; and
3. a note to a student from a teacher.

The following errors will be counted as incorrect in your transcription.

1. contractions omitted or misused;
2. characters misformed (including added or omitted dots);
3. characters omitted or misused or extra ones inserted (including hyphenation of words not hyphenated in the text);
4. words omitted or repeated;
5. punctuation marks or composition signs omitted or misused or extra ones inserted;
6. spacing errors (including improper spacing between words, lines, or selections);
7. formatting errors (including improper line breaks or margins); and
8. erasures detectable by touch.

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

If you need additional braille paper, notify your test administrator. When you have completed your final version of the transcription, check the appropriate box at the bottom of the page containing your final version. **Your score for this section will be based solely on the version of your transcription that you designate as the final version.**

Sample Question

COMPETENCY 002

7. Use a slate and stylus to transcribe the following selections into contracted braille. Transcribe the selections exactly as written. Skip one line between selections. Transcribe all selections onto the same piece of paper.

Jose Saldana
709 North Street
Waco, TX
413-987-0256

bananas
butter
tea
sugar
juice
eggs

I am so proud of what you did on this paper.

Score Scale

The score scale shown below is the one that will be used to score your slate and stylus transcription. Your response will be scored based on the number of transcription errors you make.

Score Point	Score Point Description
4	3 or fewer errors
3	4–7 errors
2	8–11 errors
1	12 or more errors
U	Illegible
B	Blank

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Answer Key

Question Number	Competency Number	Correct Answer
Reading Contracted Braille		
1	001	B
2	001	D
Reading Nemeth Code		
3	001	D
Producing Contracted Braille with a Braillewriter		
4	002	
Producing Nemeth Code with a Braillewriter		
5	002	
Referring to Nemeth Code Rules to Produce Nemeth Code with a Braillewriter		
6	002	
Producing Contracted Braille with a Slate and Stylus		
7	002	

NOTE: After clicking on a link, right click and select "Previous View" to go back to original text.

Preparation Resources

The resources listed below may help you prepare for the TExES test in this field. These preparation resources have been identified by content experts in the field to provide up-to-date information that relates to the field in general. You may wish to use current issues or editions to obtain information on specific topics for study and review.

JOURNALS

Journal of Visual Impairment and Blindness, American Federation for the Blind.

OTHER RESOURCES

Ashcroft, S., Henderson, F., Sanford, L., and Koenig, A. (1991). *New Programmed Instruction in Braille*, Second Edition. Nashville, Tenn.: Scalars.

Craig, R. H. (1987). *Learning the Nemeth Braille Code: A Manual for Teachers and Students*. Louisville, Ky.: American Printing House for the Blind.

English Braille, American Edition. (1994). *Compiled under the authority of the Braille Authority of North America*. Louisville, Ky.: American Printing House for the Blind.

Rex, E. J., Koenig, A. J., Wormsley, D. P., and Baker, R. L. (1994). *Foundations of Braille Literacy*. New York, N.Y.: AFB Press.

ONLINE RESOURCES

Light House International — www.lighthouse.org

Texas School for the Blind and Visually Impaired — www.tsbvi.edu

Central Association for the Blind and Visually Impaired — www.cabvi.org