Accessibility in the *i-Ready Diagnostic** and Growth Monitoring

Feature Overview: Audio Support

Contents

**i-Ready Diagnostic* for Mathematics is included in *i-Ready Classroom Mathematics*.

Dedicated to Creating an Accessible Experience

At Curriculum Associates, we believe every student has the potential for educational excellence. That's why we're dedicated to creating accessible materials that maximize usability for students with disabilities. We strive to ensure that accessibility and accommodation support considerations are incorporated into our product development process from the very beginning, and we've developed a continuous improvement approach to accessibility that ensures we're always improving and learning.

Assessment Products Covered in This Document

The *i-Ready Diagnostic* (including the *i-Ready Diagnostic* for Mathematics in Spanish) and *i-Ready* Growth Monitoring provide audio support to students. Throughout this document, the term "*i-Ready Diagnostic*" refers to both the *i-Ready Diagnostic* (including the *i-Ready Diagnostic* for Mathematics in Spanish) and *i-Ready* Growth Monitoring. The *i-Ready Diagnostic* for Mathematics is included in *i-Ready Classroom Mathematics*.

How Does Audio Support in the *i-Ready Diagnostic* Help Students?

Audio support in the *i-Ready Diagnostic* uses professionally recorded, human-voiced audio that is curated by our creative and editorial teams to maximize pedagogical impact of the content. This feature includes:

Universal Audio Support	Designated Audio Support
Available for certain items to all students without system setting or other educator action	Available in Mathematics items in Grades 6+ in which universal audio support was not already available. This is intended for students with documented needs and must be turned on/off by educators via a student setting.

Universal and designated audio support can be used for read-aloud/text-to-speech accommodations that comply with the Universal Design for Learning guidelines.

Universal Audio Support

The *i-Ready Diagnostic* includes universal audio support for certain items (item grades and domains are detailed in the tables on). These universal supports are available to all students regardless of IEP or 504 plan requirements. Unlike designated audio support (see information on), universal audio support does not require educator assistance or management. With universal audio support in the *i-Ready Diagnostic*:

- Students can access the feature independently without educators enabling it in the system
- Some audio can be played automatically (i.e., is auto read)
- Some audio can be played on demand so students can pace the flow of information
- Audio buttons can be used to play and replay information
- Audio can be interrupted by pressing the escape (esc) key
- The pace of reading cannot be slowed or accelerated
- Standard computer speakers/headphones are the only extra hardware required

The embedded audio support in the *i-Ready Diagnostic* does not read aloud alternative text for user interface features and test item images. Alternative text is typically intended for students who are blind or who have low vision, and it can only be accessed by using a supported screen-reader/browser combination.

The table below provides an overview of universal audio support coverage by grade and domain.

Universal audio support is available in Diagnostic items in the following grades and domains:

Please note that the term "item grades" refers to the designated grade level of the item. Because the test is adaptive, students may encounter items above or below their chronological grade level.

Item Grades/ Domains	Phonological Awareness	Phonics	High-Frequency Words	Vocabulary	Comprehension	Mathematics (All Domains)
K	Yes	Yes	Yes	Yes	Yes	Yes
1	Yes	Yes	Yes	Yes	Partial**	Yes
2	N/A	Yes	Yes	No*	No	Yes
3	N/A	Yes	N/A	No	No	Yes
4	N/A	N/A	N/A	No	No	Yes
5	N/A	N/A	N/A	No	No	Yes
6+	N/A	N/A	N/A	No	No	No[†]

*Some Grade 2 items follow the rules of Grades K–1, but these items are being phased out over time.

**Some Grade 1 passages and items include audio support to provide transitional questions in the bank when students at a Grade 1 reading level may struggle with reading/decoding the written text but are able to comprehend the text when it is read aloud. Other Grade 1 questions do not include any audio support for when students can read/decode successfully on their own.

[†]For Mathematics items in Grades 6+, while universal audio support is not available, designated audio support can be turned on for individual students. See more information on .

Information on Configuration of Universal Audio Support

When on-demand audio support is available, students may click on an audio button to hear the text of a question and/or answer read aloud.

Details on the configuration of universal audio support, including when audio plays automatically (i.e., is auto read) and when students can choose to play audio on demand by pressing an audio button, are in the Reading and Mathematics tables on the following pages.

Configuration of Universal Audio Support for Reading Assessment Content*

Please note: This table indicates the grade level of items. Because the *i-Ready Diagnostic* is an adaptive assessment, students can receive items outside of their grade level, and this can impact the availability of audio support students receive during testing.

Domain	Item Grade Level	Configuration	Notes
Phonological Awareness	K–1 Items	• Questions are auto read. • Answer options are read aloud on demand.	
Phonics	K–3 Items	• Questions are auto read. • Answer options are read aloud on demand.	
High-Frequency Words	K–2 Items	• Questions are auto read. • Answer options are read aloud on demand.	
Vocabulary	K–1 Items	• Questions are auto read. • Answer options are read aloud on demand.	
	2–12 Items	• No audio support is available.	Some Grade 2 items follow the rules of Grades K–1, but these items are being phased out over time.
Comprehension	K Items	• Reading passage is auto read. • Questions are auto read. • Answer options are read aloud on demand.	
	1 Items	• Some Reading passages are auto read. • Some questions are auto read. • Some answer choices are read aloud on demand.	The provision of audio support in early Grade 1 items is to allow for transitional questions in the bank for students who are developing the ability to read/decode words in a text but have the capacity to comprehend the concepts if the text is read to them.
	2–12 Items	• No audio support is currently available.	

*Includes content in the *i-Ready Diagnostic* for Reading and *i-Ready* Growth Monitoring

Configuration of Universal Audio Support for Mathematics on next page

Configuration of Universal Audio Support for Mathematics* (*All Domains*)

Item Grade Level	Configuration	Notes
K–2 Items	• Questions are auto read. • Answer options are read aloud on demand.	Exceptions: • Stems and answer options that are numbers, expressions, and equations may not have audio. Because we're assessing mathematics, students should read numbers, expressions, and equations on their own when they are given in isolation in the questions. Some legacy (i.e., older) questions may still have audio for these kinds of answer options, but we no longer follow this convention. • Text is not read aloud for stems and answer options in which reading the text likely will give away the answer. Example: Which is the same as "three"? A. 1; B. 2; C. 3; D: 4. • Answer choices that are illustrations, tables, or graphs are not read aloud. For screen-reader users, alt text is available for these items. Exceptions to the "no audio for art" rule in Grade K: Audio for an illustration can be included: • To avoid displaying a word that is not easily decodable by early readers, like "squirrel," with an illustration • For an illustration of an object that may be confused with another object by young students, such as a whole watermelon being mistaken as a green grape
3–5 Items	• Questions are read aloud on demand. • Answer options are read aloud on demand.	Exceptions: • Stems and answer options that are numbers, expressions, and equations may not have audio (same reasoning as for Grades K–2 as noted above). Some legacy (i.e., older) questions may still have audio for these kinds of answer options, but we no longer follow this convention. • Text is not read aloud for stems and answer options in which reading the text likely will give away the answer. Example: Which is the same as "two hundred"? A. 200; B. 2; C. 2,000; D. 20. • Answer choices that are illustrations, tables, or graphs are not read aloud. For screen-reader users, alt text is available for these items.
6+ Items	• On-demand audio support is available as a designated support only (see section below).	Audio exceptions for designated audio support in items for Grades 6+ are the same as in universal audio support for Grades 3–5.

Additional General Notes

- All audio support can be interrupted by pressing the escape (esc) key. This was implemented to support screen-reader users who may hear overlapping screen-reader/system audio, but others may find this helpful.
- For Mathematics content, audio support removes the barrier that text—especially in word problems—creates for emerging readers, especially those in Grades K–2. For students in those grades, auto-read questions allow for accurate assessment of Mathematics skills independent from Reading skills. Questions for Grades 3–5 items are played on demand, and students can choose whether to use this tool based on their own self-assessment. This is also true for Grades 6+ items for students who have had designated audio support enabled by an educator.
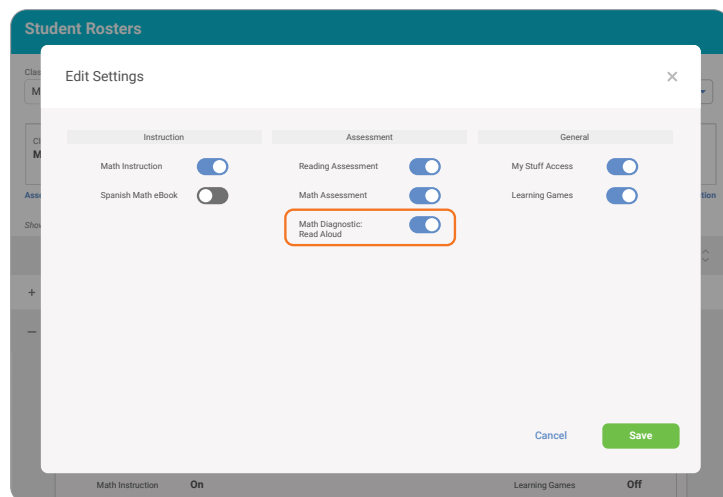
*Mathematics items referenced here are from the *i-Ready Diagnostic*, *i-Ready Diagnostic* for Mathematics in Spanish, and *i-Ready* Growth Monitoring. The *i-Ready Diagnostic* for Mathematics is included in *i-Ready Classroom Mathematics*.

Designated Audio Support, Text-to-Speech, and Test-Read/Read-Aloud Accommodations

Designated Audio Support

Since September 2021, the *i-Ready Diagnostic* for Mathematics has included embedded, human-voiced audio as a designated support for all Mathematics items for Grades 6+, where universal audio support was not already available. This designated support can be turned on via a student setting titled Math Diagnostic: Read Aloud in the educator dashboard (shown at right).

Please note that enabling this designated audio support for Mathematics items in Grades 6+ will result in audio buttons being displayed (see the example on) on those items, which students can then use on demand to hear professionally recorded, editorially curated, human-voiced audio.

While this designated support is currently only available for Mathematics items in Grades 6+, we are working on extensions to Reading domains/content where universal audio support is not already available and where the construct being measured will not be significantly impacted by the provision of this support. This work is on a longer timeframe to ensure the implementation allows for flexibility to meet a variety of students' needs, including customization by domain or content type.

Text-to-Speech Browser Extensions

Although some third-party browser extensions may be able to read aloud some portions of the text in the *i-Ready Diagnostic*, the use of these extensions is not recommended at this time, as compatibility and usability show a high degree of variance based on the item type, extension, browser, hardware, etc. For the *i-Ready Diagnostic* for Mathematics, we recommend using the universal audio support and designated audio support outlined above in lieu of these extensions. For the *i-Ready Diagnostic* for Reading, we recommend using the universal audio support where it is available and considering the test-read accommodation guidance below.

Test-Read/Read-Aloud Accommodations

Test-read/read-aloud accommodations may be appropriate for individual students. Below are supported read-aloud accommodations that can be implemented for ensuring the least impact on the validity of the inferences that can be made from test scores. These options should be considered based on individual student needs and any IEP or 504 plan available for the student.

- Read text portions of Mathematics items aloud to students. Please note that this can now also be provided through embedded universal and designated audio support.*
- Read question stems and the associated response answer choices of Reading items aloud to students and/or any content that already has embedded universal audio support.**

*Educators providing accommodations, specifically human read aloud and scribing, need to be neutral in responding to the student during test administration and must not lead a student to a particular item response. Each student's response must accurately represent their choice in order to ensure valid, reliable assessment results.

**Reading aloud other content, especially passages, will impact validity and inferences that can be made from the test scores, as the items were not field tested in this manner. Additionally, reading aloud specific content where universal audio support is not already embedded, such as questions in the High-Frequency Words domain, would not be appropriate, as measurement of this domain requires that students click on the correct audio for the word. Many IEPs and 504 plans include specific guidance about what parts of an assessment can and cannot be read aloud to a student, and conveying this information to individuals who are assisting with a read-aloud accommodation is critical. Districts should carefully review students' individual plans when making decisions about the provision of this (and all) accommodation(s) and should consider which accommodations were provided when interpreting scores.

Is designated audio support available for Mathematics items for Grades 6+ in the *i-Ready Diagnostic* for Mathematics in Spanish?

Yes. All the designated audio support features described here are available in Grades 6+ items in the Spanish and English versions of the *i-Ready Diagnostic* for Mathematics.

Can I only enable designated audio support by student, or can I do it by class or school?

At this time, the ability to turn on designated audio support for Mathematics items in Grades 6+ is only available on a student-by-student basis. This feature was added as a designated support to be used for students with documented needs (e.g., a read-aloud accommodation in an IEP). We will continue to evaluate whether enabling this feature more broadly will be appropriate.

Does the designated audio support setting remain for subsequent Diagnostics once it is set?

Yes. The setting defaults to off, but once it is turned on, it will remain on throughout the academic year unless an educator turns it off. Each academic year it would need to be set, presumably based on that student's IEP and/or accommodations that year.

Why am I seeing the option to turn on designated audio support/read aloud for Mathematics items in Grades 6+ when I'm an elementary school administrator/educator?

Please note that the grades referenced (i.e., Grades 6+) refer to the **designated grade level of the items**, and because the test is adaptive, students may encounter items above or below their chronological grade level. For this reason, this setting can be enabled regardless of chronological grade levels of students in a school.

Does reporting reflect whether designated audio support/read aloud for Mathematics items in Grades 6+ was enabled?

Currently, reporting does not reflect whether designated audio support was enabled for Grades 6+ items for the *i-Ready Diagnostic* for Mathematics. We will consider this as a potential enhancement in the future.

Can designated audio support/read aloud for Mathematics Grades 6+ items be turned on for an in-progress Diagnostic?

Please note that students will not have access to designated audio support if the read-aloud setting is turned on while their Diagnostic is in progress. To enable or disable designated audio support for a student whose Diagnostic is already in progress, an educator can use the reset option available on the Diagnostic Results (Student) report (only option for first Diagnostic) or cancel and reassign the test (alternative option for subsequent Diagnostics), ensuring that the read-aloud setting is enabled prior to the student beginning the Diagnostic. If a Diagnostic is assigned but not yet started when designated audio support is enabled, students will have access to the support without requiring cancelling or resetting.

Does content that contains only mathematical characters (e.g., numbers, symbols, and equations, but no words) include audio support?

Generally, our approach in both our Grades K–5 item audio support and our Grades 6+ item audio support is to not provide audio for content that solely includes mathematical characters, as the meaning of the numbers and symbols is generally part of what is being assessed. There are some legacy (i.e., older) items in our bank that do still include audio for content that contains only mathematical characters. Any content with text/words will include audio support (either universally for Grades K–5 items or when designated in a student setting for Grades 6+ items).

Will all educators have access to turning on/off the Mathematics Diagnostic: Read Aloud setting for their students?

Educators with All Assessments or Diagnostic permissions will have access to this setting for their students. Similarly, individuals with District Managing Admin, District Admin, School Managing Admin, and School Admin permissions can also edit this setting. Individuals with Teacher (Standard), Teacher (Standards Mastery), District Staff, or School Staff permissions can view but not edit this setting. This matches our approach to permissions for enabling the *i-Ready Diagnostic* for Mathematics in Spanish.

Is audio support offered in different languages?

Diagnostic items in English contain English audio support. Items in Spanish contain Spanish audio support.

Can the universal audio support function be turned off?

At this time, we are not able to offer an option for educators to turn off audio supports for individual students or groups of students.

Check out our <u>accessibility resources page</u> for up-to-date information.