![ReadSpeaker — pioneering voice technology]

What you need to know about Text to Speech for Education

11 FAQs on how to use text to speech to **attract** and **retain students**, helping them **succeed**.

Audio is an essential tool in today's education landscape.

With the advent of education technology, the learning landscape has changed rapidly. There are more and more ways for learners to consume course content and both students' and teachers' expectations for how content is provided are higher than ever.

With the availability of different technology tools levelling the playing field and allowing learners to learn in many different ways, organizations, course designers and educators must be aware of the many different available content forms.

Audio is an important and growing segment of this education technology revolution and savvy institutions know how to exploit this powerful medium.

At ReadSpeaker we are specialists in voice technology and understand both why and how to implement audio in course work. Our aim is to help educational institutions understand and utilize audio in their educational offer. To further those aims, we have put together a list of the questions that we hear from institutions about text to speech and audio-enhanced content for education.

1. You hear a lot of acronyms bandied about in the educational technology field. What exactly is TTS?
Not to be confused with speech to text, text to speech, or TTS, converts text into spoken voice output. Text to speech systems offer a computer-generated spoken voice that «reads» text to the user.

2. Isn't TTS just providing audio files?
Most text to speech tools also provide 'bimodal presentation', which incorporates accompanying highlighting so that students can read along with the highlighted text as they listen to the content. TTS may also be integrated in various other ways so that the student can listen to what they are typing, what they look up on the Internet and used in any number of other speech enhanced tools.

3. What exactly is bimodal presentation?
Bimodal presentation simply refers to information that is presented in both audio and visual formats at the same time; reading a text, listening to it, and having the words (and/or sentences) highlighted at the same time. Bimodal content presentation aligns to the Universal Design for Learning (UDL).

4. What is Universal Design for Learning?
UDL is a way of giving all learners an equal opportunity to learn, preparing the learning environment with flexible tools and materials to better meet the needs of every student.

5. Isn't text to speech just for blind people, or those with learning disabilities?

Traditionally text to speech has helped those with learning disabilities overcome decoding challenges so that they can concentrate on the meaning of their reading. It is also a useful tool for those with impaired vision.

However, with students having become accustomed to many different ways of consuming content, depending on their various circumstances and needs, more and more frequently text to speech and audio support is being used by all sorts of learners, whether those learning in a second language, those needing to consume a large quantity of content, adults needing to multitask, or the many other individual scenarios students experience.

6. How exactly does listening help students?

Text to speech and bimodal presentation are facets of UDL, providing a number of flexible ways to meet the needs of a diverse population of individual learners, giving all students an equal opportunity to learn and succeed. While bimodal presentation has been used for accessibility needs for several years, learning professionals are now recognizing the benefits for all students. **There has been a considerable amount of research done which shows the effectiveness of bimodal learning on student success.** From this research proven benefits of bimodal content presentation that emerge are:

- Improved reading comprehension
- Improved word recognition
- Increased information recall
- Facilitated decoding
- A more positive outlook on reading
- Increased reading time
- Increased ability to pay attention and remember information while reading.
- Focus on comprehension instead of decoding words.
- Increased endurance for reading assignments.
- Recognition and ability to fix errors in a student's own writing
- Helps students with disabilities stay at peer level in all of their subjects
- Improves self-esteem, motivation and self-confidence

7. Is there any scientific basis to this? How can I be sure that this will really help my students?

Much research has been done on the results of using TTS in an educational environment. A recent piece of research at Barcelona University clearly shows how TTS is an efficient tool for higher education. Dr Trish Trifilo of Wayland Baptist University explains the neurological processes implicated, what Universal Design for Learning is and how it helps all students be successful.

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8. Isn't listening to text 'cheating'?

When discussing educational technology and assistive literacy tools, the question often arises whether using text to speech is real reading. How will students learn to read if a computer reads to them? And, what happens when we take it away? The issue is not just reading, but the amount of time and energy it takes to read and whether the reader is able to do anything with the information. As Dr Parr, a specialist on text to speech in education says, *"I offer that it is not our role to take something away, especially if it is enabling student engagement and self-efficacy...if you introduce it TTS, you'll be amazed at just how far your students can go..."*

Read the series on TTS by Dr Parr

9. There are plenty of free solutions out there. Why don't I just use one of those?

While TTS is proven to help students of all types, there are some caveats. One being the quality of the voice. Recent studies have shown that with the continual advances of voice technology, when paired with a virtual human, modern synthetic voices can actually produce better learning results than either human voices or old text-to-speech engines.

But it doesn't have to be expensive to be a high quality service. Text to speech is actually a surprisingly affordable technology to provide, either on a student-by-student or campus-wide level.

ReadSpeaker's suite of audio enhanced learning tools

10. It must be difficult to integrate this into content. How do you keep all the content speech enabled?

Text-to-speech (TTS) technology, such as ReadSpeaker's suite of audio enhanced learning tools, is surprisingly easy to implement, easy to use and cost effective. Gone are the days of choosing between robotic voices or voice actors and recording studios. With cloud-based, dynamically produced speech, **course content is instantly speech-enabled as soon as it is uploaded**. What is more, the advancing state of the art text to speech technology provides high-quality lifelike voices.

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Implementations are often just plug-ins or lines of code that take a minimum of man-hours to implement and maintain. Most major LMSs have specific integrations that simply require just to be turned on.

This gives educational institutions the ability to easily provide bimodal presentation to all learners. With TTS-enabled courses, lessons, tests, quizzes, assessments, reading assignments, and any other text-based content can be read aloud while students follow along with highlighted text, letting them engage with and absorb content in multiple ways.

11. Isn't this just a 'flash-in-the pan' technology gadget?

Text to speech is being integrated in content around the world, not only in the education sphere. From government websites to corporations, thought leaders understand and are leveraging the power of speech. Innovative educational institutions such as **Taylor & Francis**, **Derby University**, **Oxford University Press**, **Erasmus University**, **Learnosity**, **Cengage**, **MindTap**, **Ebsco** and many other educational institutions and publishers worldwide are using ReadSpeaker text to speech technology, providing innovative ways to consume content in order to attract more students, retain them and help them complete their course.

Join their ranks. Let us set up a free, personalised demo so you see how easy it is to integrate audio in your institution.

Contact Us

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Have we answered all your questions?
If not don't hesitate to contact us:

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