PROVIDING EQUITY AND INCLUSION WITH TEXT TO SPEECH

"UNIVERSITY MANAGEMENT HAS ALSO BEEN EXCITED THAT WE ARE CONTINUALLY INCREASING SUPPORT FOR OUR STUDENTS WITH DISABILITIES ON OUR LEARNING MANAGEMENT SYSTEM, THEREBY PROVIDING AN EQUIVALENT LEVEL OF LEARNING EXPERIENCE FOR ALL OUR STUDENTS, WITHOUT DISCRIMINATION."
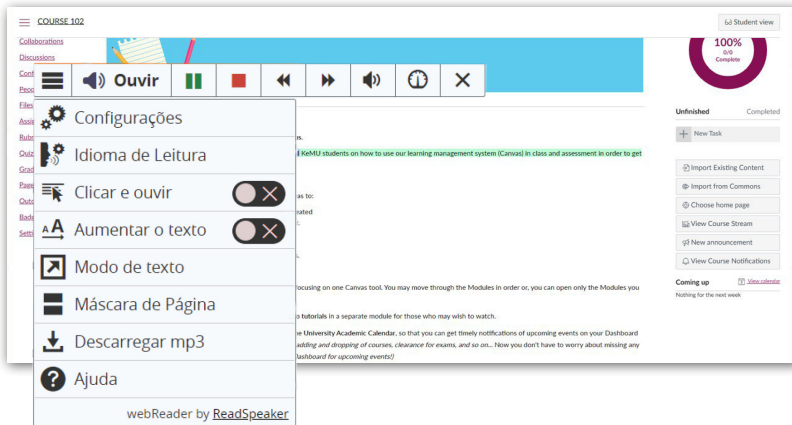
JENU JOHN, DIRECTORATE OF VIRTUAL AND BLENDED LEARNING

Kenya Methodist University (KeMU) is a private chartered Christian university founded over 25 years ago. KeMU places a premium on developing well-rounded individuals who are not only academically sound but also enriched in character, values, and skills that extend beyond the lecture room.

Cognizant of the fact that the university has different types of learners with different abilities, and wishing to provide an inclusive education for all, KeMU focuses on finding the tools needed to support accessibility and engagement. With this goal in mind, the university has an opportunity to target a greater population, such as those with literacy difficulties, learning disabilities, reduced vision, and those learning in a different language.

Finding a Solution that Works

When looking for a text to speech option that would work for them, KeMU found ReadSpeaker. ReadSpeaker provided excellent TTS and a suite of speech-enabled learning tools. The implementation process in Canvas was simple and seamless, and the functionality was available across the learning environment.

Since adding TTS to their website, both students and management indicate a growing satisfaction in using the tools. KeMU believes that while visuals are a big part of what makes the content interesting, presenting content in both audio and visual formats makes it more inclusive. Audio helps make it more engaging for everyone, and helps learners of all types engage with the content. The combination of the reading, highlighting and learning tools makes communication more effective, as hearing and seeing content simultaneously make it easier to grasp and understand.

THE FUTURE OF TEXT TO SPEECH FOR AFRICAN EDUCATION

"READSPEAKER BELIEVES THAT PROVIDING TTS VOICES IN AFRICAN LANGUAGES AND REGIONAL DIALECTS CAN HELP PRESERVE THE CULTURAL RICHNESS OF LANGUAGE, AS WELL AS EXTEND THE REACH OF CONTENT TO A MORE DIVERSE POPULATION, MAKING EDUCATION MORE EQUITABLE AND INCLUSIVE ACCROSS THE CONTINENT."

PAUL WALSTRA, READSPEAKER

AN INTERVIEW WITH JENU JOHN

ReadSpeaker: How long have you been aware of text to speech technology?

Jenu John: For the better part of a decade or so. Microsoft Windows has had inbuilt speech recognition and text-to-speech technology that users with reading disability can use. Adobe Reader also has the Read Out Loud tool.

ReadSpeaker: You are one of our first customers in Kenya. Do you think there is a growing awareness and need for accessibility tools, such as TTS, in your region?

Jenu John: Yes there is. Our new constitution that was passed in 2010 encourages more inclusivity for people with disability in society – both in education, and at the workplace. Accessibility tools offer opportunities for them to learn and participate in social discourse.

ReadSpeaker: What were the challenges you faced, or the reasons you had, that made you consider getting a text-to-speech tool?

Jenu John: We use a self-hosted learning management system (Canvas) that does not have inbuilt TTS capability. This means that for a majority of our students (who use smartphones to access the LMS), there's no access to a TTS tool as they would have if they were using a desktop computer. This is especially important for visually-impaired students.

Secondly, in this digital age, a lot of our learners would rather use supplement their learning materials with multimedia (audio/ video) and, a TTS tool like ReadSpeaker which offers the ability to download teaching notes in MP3 format is great for them.

ReadSpeaker: Once you started the process of finding a TTS tool, what made you decide to go with ReadSpeaker?

Jenu John: ReadSpeaker is recommended by Canvas as a great tool that integrates with the LMS via LTI. It is easy to install and setup. The ReadSpeaker team allowed us to try/demo the tool for a few months before making a decision.

In addition, their customer support team is on point and very responsive.

ReadSpeaker: How has adding ReadSpeaker TTS to your website helped? What were the results?

Jenu John: Integration into Canvas means that ReadSpeaker is available to all our users, on any device that accesses the LMS, regardless of platform. We did a test run between October – December 2022 which was received very well by both our students and faculty and helped us decide to subscribe in full.

ReadSpeaker: Have you had any feedback from learners?

Jenu John: Yes. The tool is being used by a number of our students with visual disability and they have found it quite useful. In addition to identifying and transcribing text in the learning content offered, they are able to select the reader's voice, determine the reading speed, and even download a recording (mp3) of the learning content to listen to at a later time.

ReadSpeaker: Have you had any feedback from educators or administrators?

Jenu John: Faculty members have learnt to prepare their content in a format that can be easily "read" by ReadSpeaker to our students. In addition, the Web-reader has also proven useful in translating PDF and text documents that they upload for the students as learning and assessment material.

The University Management has also been excited that we are continually increasing support for our students with disabilities on our learning management system, thereby providing (an almost) similar level of learning experience for all our students without discrimination.

ReadSpeaker: Is there anything you would recommend to other organizations when it comes to TTS?

Jenu John: In addition to LMSs, we have also seen ReadSpeaker work for a couple of other institutional websites. This would be something we would recommend to ensure accessibility by all types of readers who access website(s).

ReadSpeaker: What benefits do you see in having content being presented in visual and audio formats at the same time?

Jenu John: Inclusivity, which has been key to delivery of our learning content and cognizant that we have different types of learners with different abilities.

– Portability - learning on the go.

– Improving teaching and learning experience both for faculty and students - today we need to make teaching and learning as exciting and engaging as possible.

ReadSpeaker: We are currently working on developing more indigenous languages. How do you think African countries, such as Kenya, will benefit from having TTS in regional dialects or languages?

Jenu John: We believe this will allow us to reach an audience that does not speak /understand English well. In Kenya, integrating Kiswahili which is our national language and spoken by all, will enable Institutions like KeMU to customize education (learning content) to reach all.