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Creating native-like but comprehensible listening texts for EFL learners using NaturalReader

Title	NaturalReader, version 12
URL	http://www.naturalreaders.com/
Type of product	Text-to-speech synthesis software
Platform	Mac, Windows
Supplementary software	MS Office add-in
Price	Standard (online text-to-speech with limited features)—free Personal (allows saving speech output as audio files)—US\$69.50 Professional (allows conversation control)—US\$129.50 Ultimate (includes optical character recognition, or OCR)—US\$199.50

Introduction

Native English speakers are often thought to bring benefits to English as a foreign language (EFL) classrooms. The native speaker is often called upon to answer vocabulary and pronunciation issues from non-native speakers (Medgyes, 1994). Within this perspective, the native speaker is believed to promote the best model for language users (see Carless, 2006; Lasagabaster & Sierra, 2002) and may encourage extrinsic motivation for EFL learners (Carless, 2006; Harmer, 2007), particularly in listening sessions. However, many EFL learners encounter difficulty in comprehending the speech of native speakers. Speech rate is believed to be one of the factors leading to such problems (see Griffiths, 1991; Hirai, 1999).

Text-to-speech (TTS) technologies, which allow users to “make the computer talk” by transforming text input into speech, offer one way to control the speed of the input learners receive (Handley, 2009, p. 906). Although speech synthesis was originally developed for people with visual impairments (Kilickaya, 2006), some teachers have begun to adopt TTS technology in foreign language classrooms. Handley (2009) states

that integration of TTS within the computer-assisted language learning (CALL) environment may involve three different roles: reading machine, pronunciation model, and dialogue partner. In reference to these roles, TTS technology offers increased opportunities for EFL learners to access the target language with a native-like, but accessible model.

NaturalReader, originally developed by NaturalSoft Ltd in Canada, is TTS synthesis software that promotes natural voice conversion from text input. With supplementary add-in and floating bar features, the software is not only able to carry out text-to-speech conversion from MS office documents, PDFs, webpages, and email, but also to convert these texts into audio files in MP3 or WAV formats (NaturalReader, 2014). The advanced version 12 of this software now has made optical character recognition (OCR) possible, and this makes the number and types of texts available for TTS conversion even greater.

This article describes the basic operational functionality and features of NaturalReader as a text-to-speech synthesis system. It will also discuss some ways that NaturalReader may be used to facilitate the provision of native-like, but comprehensible input to EFL learners.

Basic operation

In order to use NaturalReader, the software requires installation onto PCs or laptops. Although a free online version of this software is available, it lacks many useful features, such as the ability to convert text input into saveable audio files. Once the software is installed and started up, a simple editing screen appears (see Figure 1).

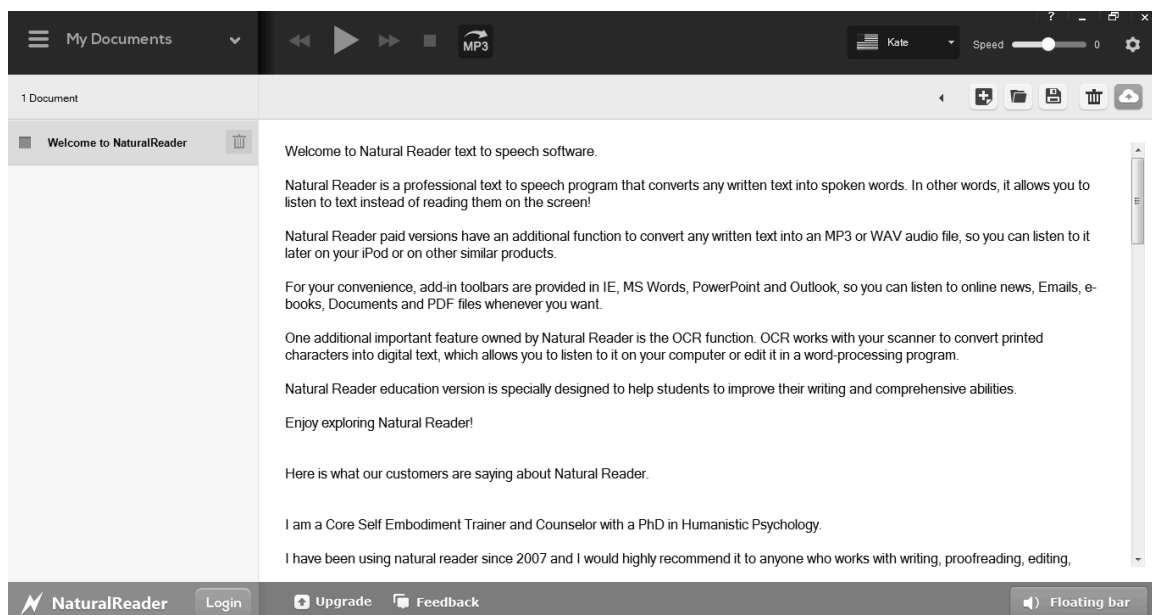


Figure 1. *Editing screen from NaturalReader*

The operation of NaturalReader is easy. Users may input text by typing (or copying-and-pasting) or by retrieving it from common file types such as .docx and .pdf. When the text is ready, users simply click the play button, and the system automatically reads it aloud. On the screen, blue and yellow colours highlight the spoken text. This highlighting facilitates EFL learners' ability to match the written words with their pronunciation.

Features

NaturalReader provides excellent features for its users. Users can choose from among a number of natural sounding voices for the speech synthesis. Additionally, users may change the speech rate of each voice to their preference (see Figure 2).

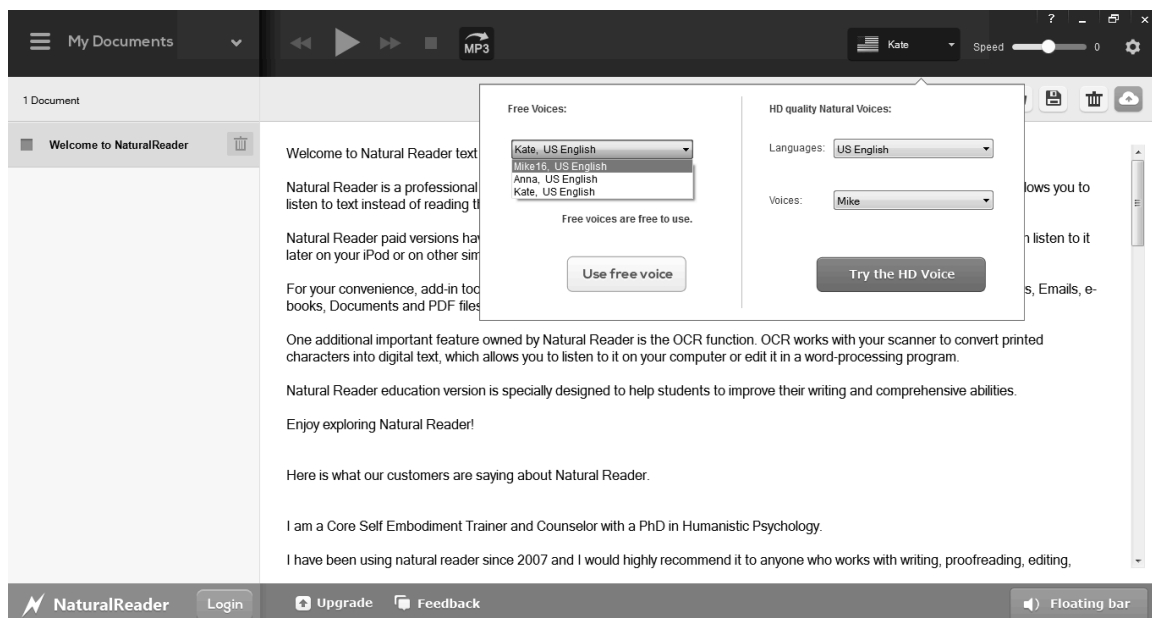


Figure 2. *Choosing from the natural sounding voices*

The add-in feature in MS Word is allows users to convert texts into speech effortlessly (see Figure 3).

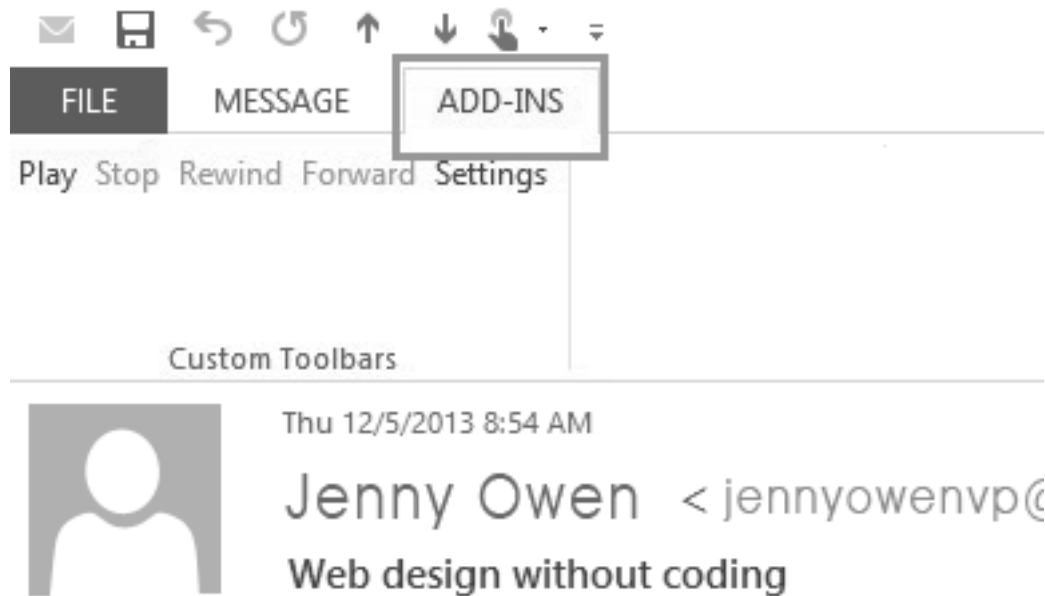


Figure 3. MS Word Add-Ins

The floating bar makes it possible to use the software in multiple windows so that users can have text read aloud from web pages and emails (see Figure 4). To do so, users are only required to highlight the text they want to convert into speech.

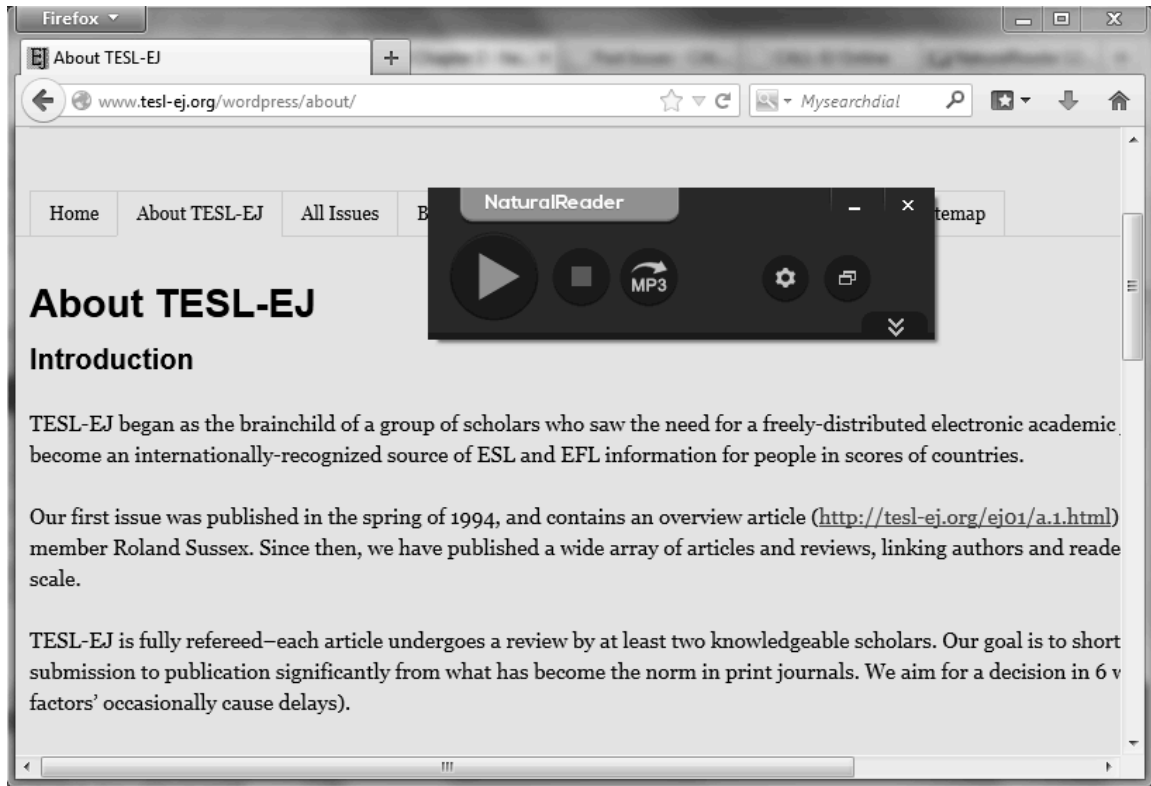


Figure 4. NaturalReader floating bar

In addition, NaturalReader allows its users to improve the system by changing or adding new abbreviations from the default settings. Unfortunately, phonetic symbols which are often used in learning pronunciation are not available in this editing feature.

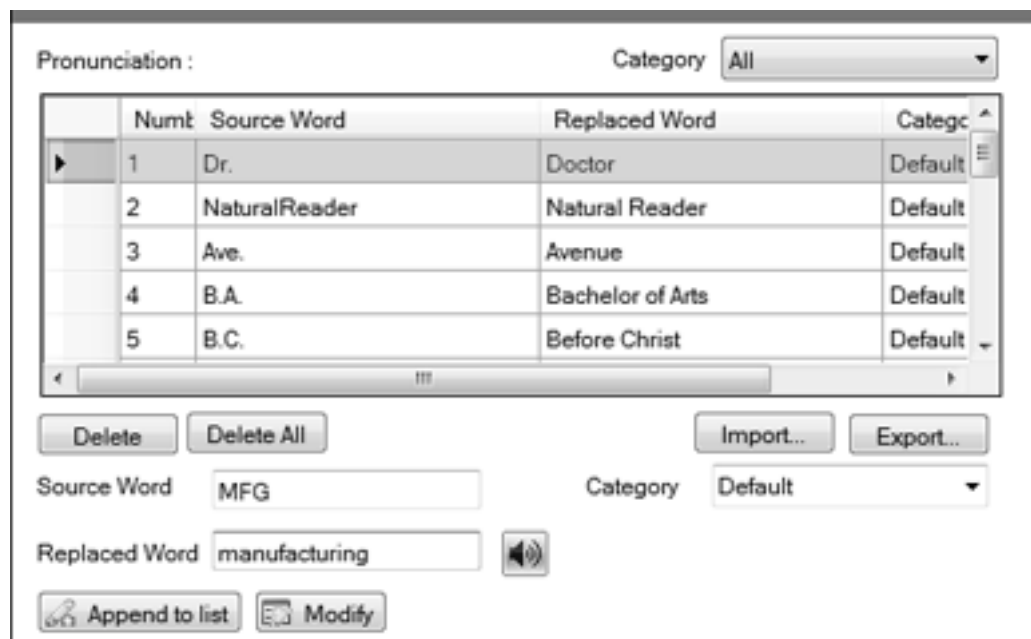


Figure 5. Changing or adding the pronunciation of abbreviations

In reference to preparing EFL language teaching and learning materials, the conversation control feature allows users to add more speakers to a single text. This control can help users create more interesting and realistic simulations of communication environments (see Figure 6).



Figure 6. *Conversation control*

Finally, the feature “Convert to audio file” allows users to save speech output as an audio file (MP3 and WAV formats). Saving the files into a local drive allows users to access the materials from portable devices such as mobile phones, tablets, or iPods.



Figure 7. *Conversion to audio file*

Evaluation

The voice quality of the NaturalReader software is cutting edge. The voice is very clear and plays without any background noise due to the maximum sampling rate of 148kHz available in the software. However, although the prosodic features of the software's voices are generally similar to natural sounding speech, rough transitions between words can occur at times.

Overall, the quality of NaturalReader is excellent, and it is a powerful application for teachers or EFL material developers who want to provide native-like but controlled listening materials for their learners. The 14 speakers that are available from two countries (the USA and UK) also allow EFL learners to access American English and British English pronunciations of texts.

Conclusion

I have personally been using TTS software for over two years. I find this software useful, not only in providing native-like materials for EFL learners, but also for providing English listening materials that match the English school syllabus and the language proficiency levels of my students. Finally, some functions of NaturalReader might also be used to aid in the development of listening comprehension tests.

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Acknowledgement

Some screenshot figures in this review (Figure 3, Figure 5, Figure 6, and Figure 7) were retrieved from the original website http://www.naturalreaders.com/pc_nr12.php#ocr on February 18, 2014.

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