## Sound Practices—Hearing Voices

**By Larry Francis** 

Seeing yourself as others see you can be a worthy goal, a rude comeuppance, a nice surprise — maybe even all of the above. Hearing yourself as others read you can be healthy in the same sorts of ways. Text-to-speech software enables you and your students to put yourselves at a distance from what you've written and think about it critically. Text-to-speech freeware allows you to do all that without spending any money.

Does it make sense? and What does it mean? are the first questions about any piece of writing. There may be missing words or missing punctuation or there may be words that

don't sound right important sign of a text-to-speech is of proofreading speech-generating



(the first and most misspelling). Digital perfect for this sort task because its algorithms are totally

based on phonological and spelling conventions and totally affect-free. Robots don't pass judgment; they just call 'em the way they see 'em. Students, knowing what they meant to say, have to listen to the robots read what they wrote, try to fix those things that sound wrong, and then give them another listen. When students find something that sounds wrong and then don't know how to fix it, that's a teachable moment—and a reason for you—the teacher—to exist.

Here are a few reasons to use robot text-to-speech:

Without punctuation, those robots just read right on. For your not-yet-fully-literate students, oral language is where it's at; and when they write, punctuation seems (to them) superfluous. They don't see the need or sense of it, so they leave it out, or sprinkle it in sometimes as an afterthought. But, as we literati know, punctuation marks tell the reader when to pause. Listening to robots just mow senselessly through words will establish a need for punctuation in students' minds and make that crucial eye-ear punctuation connection.

**Evaluating robots' reading is high level thinking**. Whatever taxonomy you're a fan of, evaluative thinking is 'way up there. To evaluate performance you have to reflect on it in respect to some standards, so when children evaluate a robot's reading of something they've written, they are reflecting on their own work—one, if not *the*, mark of an educated person.

**Compelling spelling**. Spelling is something everyone struggles with, some of us more, others less. And sometimes

incorrect spelling is euphemized as "invented spelling." But not all misspellings are equal: some inventions work and others don't. Robots will generally output correct-sounding English or Spanish from phonologically correct spellings in either language. (Keep in mind that all robots are monolingual, limited to and by the algorithms in their program.). So we can make some fine pedagogical distinctions in the area of incorrect spelling. In my book, phonetic misspellings beat misremembered juxtapositions or just plain typos and jumbles. Phonetic misspellings are inventions that show a mastery of phonics and a lack of practical sophistication in reading or simple lack of application in proofreading. The word *said*, for example, when spelled *sed* will sound right, but when spelled *siad* will not.

**Robots make good curricular confidants—saving teacher time**. *Hay más trabajo que vida*; everyone knows that, and teachers know it most and best of all. If you have 30 students and they write something, and if you allot 3 minutes to each student's work, you're sitting down for an hour and a half. If you're a middle school or high school teacher and you have over 100 students you'll be sitting down for a loooong time. The only answer besides forgetting all about it, having kids do workbooks, or plugging them into programmed (CAI) instruction—and they all amount to the same thing; some just take more money and space than others—is to loosen the reins and have the kids do lots of writing and reading with less teacher oversight and criticism. Robots can help.

**Robots make good tutors for struggling readers**. Often poor readers are hurried on from selection to selection without ever getting a chance to master anything. This gives them lots of experience with mediocre performance and very little practice reading fluently. Affectless feedback is important for not-yet-fluent readers/writers/learners who hear—or think they hear—frustration in the voices of human interlocutors when they're not getting something, even after many repetitions. Robot feedback is affectless and tireless. Students can get as many reps as they need, even more.

**Text-to-speech freeware is available for both Macintosh and Windows** computers and is easy to install and use. Text-to-speech capability is built in to the Mac OS (and has been since Mac OS 7.5.5, maybe even before). Just open *Simple* 

Text (which comes with every Mac and go below Sound in the menu bar to voices. Pick one you like and then hit Speak All. To hear your work read this way, you need to copy your work from your word processor and paste it into *SimpleText*. But there is a faster, better way: the freeware HearIt! control panel. With HearIt! you can get robots to read whatever you have highlighted, simply by hitting ctrl-t. Download the HearIt! control panel, drop it into the Control Panels folder in your System Folder and restart. It'll work automatically with Apple's free text-to-speech software, Plain-Talk, so you can highlight any text just about anywhere (like in AppleWorks or on the web) and get a robot voice to read it. If you don't have any voices for some reason, just download and install PlainTalk. If you want voices that know Spanish phonology, download Mexican Spanish Text-to-Speech and choose Catalina or Carlos. Once you have all your voices, if you're using MS Word 98 or better on your Mac, you can select text and go up to Tools > Speak Selection to get your text read. I think highlighting text and hitting ctrl-t is easier, but, you know, whatever...

## **Text-to-speech for Windows** 95, 97, NT and beyond is available in many different pack-

and beyond is available in many different packages. But, as one Peanuts character says, "I like

to get stuff free." You can find scads of applications, freeware and shareware, at download.com. *ReadPlease* seems to me at this point to be the easiest to use. All you have to do is highlight your text from within your word processor, copy and paste it into *ReadPlease*, and hit play. The bad news is it's more cumbersome than *HearIt!* The good news is you can do some thoroughly nifty things like change the reading rate and font size with little slider goodies and even click on pictures to choose among four different gringo (sorry!) voices.

**Changing the reading rate in** *ReadPlease* by just upping or downing the ever-present slider is to me its most wonderful feature, one that makes it so great for struggling readers and writers. The Mac seems to give you the opportunity to slow down the reading rate in the speech control panel, but I have never been able to make the changes stick or even apply outside the Control Panel window. The downside to *ReadPlease* is that you have to copy your text to the Windows Clipboard and then paste it into the *ReadPlease* application. MoneyTree Software has a great tutorial on how to use the Windows Clipboard. (See "Links" below.)

We want kids to reflect on their own work, since reflection is essential attribute of academic excellence, lifelong learning, and all sorts of great stuff. If somebody—even a robot—will read us our own work, we can ignore the oral production part and focus exclusively on sound and sense. If the production seems off, we can fix details like spelling or punctuation to make it sound right or fix details like telling the story coherently so that the story makes sense. If we ask kids, before they submit their writing to us, to make sure it sounds all right when a robot reads it, we structure self-reflection into our assignments. That way it's more likely we'll be looking at kids' best efforts rather than something merely churned out.

## Downloads

Speed

Font

Size

- *READPLEASE 2003* can be previewed at and downloaded from *www.readplease.com*
- HEARIT! can be downloaded from ftp:// www.soesd.k12.or.us/pub/it/lf/
- ENGLISH TEXT-TO-SPEECH can be downloaded from www.info.apple.com/support/oldersoftwarelist.html or from ftp://ftp.mesd.k12.or.us/pub/mac/EnglishTexttoSpee ch.sit.bin or from ftp://www.soesd.k12.or.us/pub/it/lf/
- *MEXICAN SPANISH TEXT-TO-SPEECH* can be downloaded from *www.info.apple.com/support/oldersoftwarelist.html* or from *ftp://ftp.mesd.kl2.or.us/pub/mac/MexicanTexttoS peech.sit.bin* or from *ftp://www.soesd.kl2.or.us/pub/it/lf/*

## Links

- AT&T LABS-RESEARCH INTERACTIVE MULTI-LINGUAL TEXT-TO-SPEECH DEMO allows you to type in and hear phrases in English, French, Latin American Spanish, and German. Go to http://www.research.att.com/ projects/tts/demo.html
- Sound Practices, my own text-to-speech and audio recording pages: http://www.soesd.k12.or.us/it/staff/lf/ soundpractices

Questions, comments, suggestions? Contact Larry Francis.

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