Sound Practices II

By Larry Francis

Explanation must be understood as a particular form of insight.
—Michael Polanyi, "Logic and Psychology"

Anyone trying to learn a language knows it's so hard and so important to get speech to stand still so you can remember meaningful chunks. In olden times, music and poetry helped people remember stories, but the big breakthrough for capturing and recalling language was literacy, the Writing/Reading technology. Before that, language meant oral language. Nowadays, of course, a big part of schooling is the task of installing, coordinating, fine-tuning, and exercising that literacy technology in our students' eyes, ears, mouths, hearts, and minds, to name a few organs.

Now we've got multiple literacies—and a much newer technology for getting speech to hold still and be easily and universally accessible: digital audio recording and playback. Digital audio captures idiosyncrasy, voice, rhythm, and mood way better than text does, but it lacks text's flexible generalizability. With software that comes built-in with Windows and is downloadable freeware for Macs, plus cheap mics that generally come built-in with Macs and cost only about $6 for PCs, there's no reason why we shouldn't take advantage of both technologies in our teaching–the old text one and the new digital one and use them to enhance each other.

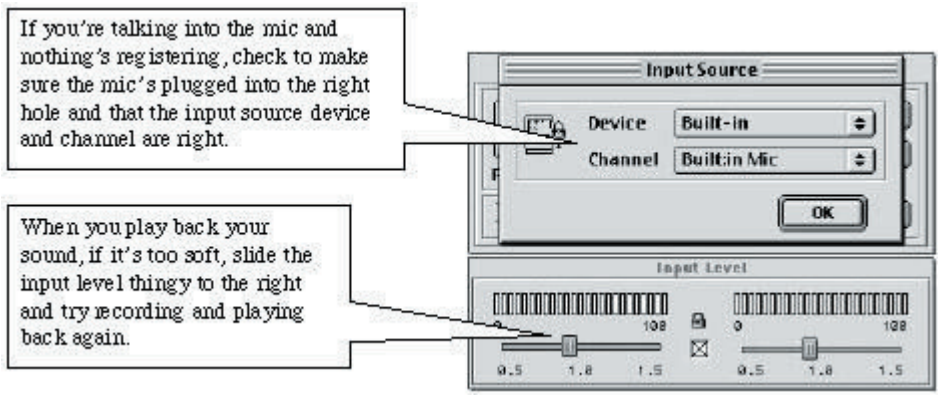
Capturing voices is easy on both Macs or Windows, but you just gotta have:

(1) a microphone
(2) software for capturing audio
(3) a sound card to hear audio (if its not installed on your PC; Macs always have 'em)

Here at Jackson ESD, the microphones we use on our Macs came built-in on the laptops and were included in the same box as the towers. On the Windows side, we had to buy them, but they were only about $6 each. (Contact Gary Wagoner in Repair (541.776.8570 or 800.636.7454). The software, **SoundRecorder**, is a free download on the Mac side and built-in to the Windows operating system.

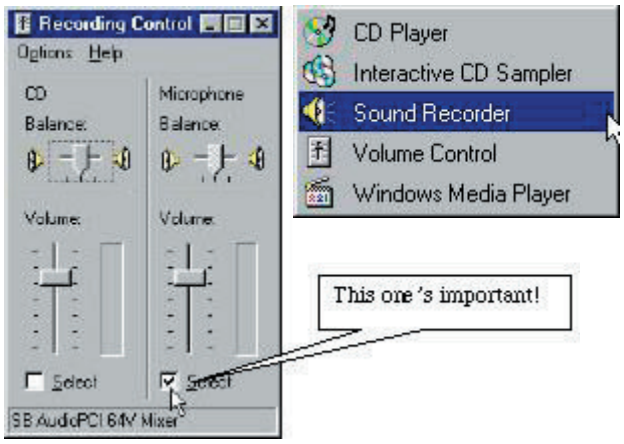
To download SoundRecorder, go to *ftp://soesd.k12.or.us/pub/it/lf/* and click on SoundRecorder (no space). Then just double-click on the SoundRecorder icon to open it. You have to configure it. There's a nice how-to for SoundRecorder at *www.emsb.qc.ca/recit/aamemo/sr_mac.pdf* . The key things to remember if things don't work right are

1. If the recording isn't happening, check the source to make sure it's looking to the correct mic for input (usually built-in or external), and



2. If the sound's not loud enough, slide the input level to the right a bit. I like it about halfway between zero and one.

On the Windows side, there's nothing to download since it's built (buried, actually) into the Windows OS. To access it, go to Start > Programs > Accessories > Entertainment > SoundRecorder. You may need to configure the volume properties for the microphone and make sure the mic is not muted. The normal Volume Control properties are for Playback, not Recording. To get to Recording Control, you need to go Volume Control > Options > Properties > select Adjust Volume for Recording (not Playback). Then when you get there, select Microphone Balance, not CD Balance.



Left: Windows users have a built-in program for recording voices called SoundRecorder–and you have to dig to find it. To access it, go to Start > Programs > Accessories > Entertainment > SoundRecorder.

Inserting Sounds

Once you've captured your sound, you can put sounds in lots of documents. Here is how to do it in a few major applications for Mac or Windows:

AppleWorks *or* ***ClarisWorks***—you'll be inserting a QuickTime movie (File > Insert)

Word—you're inserting a Movie (Insert > Movie)

Kidspiration—lets you *record* your own sound from within the application (Sound > Record) but you can't insert a sound captured somewhere else.

PowerPoint—gives you a lot of options: you can insert a sound you've captured (Insert > Movies and Sounds > Sound from File) or pick from a gallery (Insert > Movies and Sounds > Sound from Gallery) or record your own (Insert > Movies and Sounds > Record Sound).

KidPix— like Kidspiration, lets you record but not import. Go to Goodies > Record a Sound. There is a Goodies > Pick a Movie, but I couldn't get it to work with a short QuickTime audio or a short .wav audio.

Attach your sound file to an email—Sound files don't take up much space, so you can attach 'em to emails without choking somebody's mail server or triggering a looooooong download on their dialup connection. As for format, .wav is a good choice, since Windows is happy with .wav and QuickTime can read .wav files just fine. Most Macs have QuickTime. You can download it for Mac or Windows from *www.apple.com* .

HTML–a quick page I slapped together with embedded sound is at *www.jacksonesd.k12.or.us/it/staff/lf/pollitos*.

But what sound to insert? It depends, of course, on so many things—like the presenter, her or his purpose, passion, and audience, to name a few. If you're thinking of a PowerPoint presentation or AppleWorks slideshow, don't miss Jamie McKenzie's great article, "Scoring Power Points," available online at *www.fno.org/sept00/powerpoints.html*. Here are a few more humble ideas:

1. Digital sub tub: make a digital folder for your substitute with your classroom procedures and a short recorded message from you calculated to frighten your impressionable students into impeccable behavior.
2. Story starters: use a short sound clip to get students in the mood to write about a dark and stormy night, their most unfavorite food, their happiest surprise, or whatever
3. How-to documents: break down a task (math, language arts, classroom or school procedures—any sequenced activity is fair game here) into steps, write down the steps and have a student sound clip explain each one.
4. Songs: make a singing songsheet where you have a sound clip right next to the lyrics.
5. Grab a sound file off the web and insert in a document to be read or transcribed or responded to. I went *www.dailywav.com* and snagged Margaret Hamilton's "I'll get you my pretty and your little dog, too!".

Meaning has to be personal or it's not even there, and it has to be universal or no one else will care. (Let's assume the universality of most of what we're trying to teach and focus on the personal part of meaning.) We know from Bloom's Taxonomy—and common sense—that a curricular bit has found a home in students' heads if the students can put it into their own words. This means to me that any student presentation—and probably any teacher presentation—needs a sound track that reads, interprets, explains, elaborates, something, that *personalizes* the slideshow, essay, web page, or whatever.

Text-to-Speech & Speech-to-Text

Besides amplifying, elaborating, and personalizing the tone and meaning of a chunk of text, digital audio is a great tool for students working to make the connection between oral and written language. Reading could be crudely defined as getting from text to speech. Writing could be likewise defined as getting from speech to text. As I explained last time in "Hearing Voices," students struggling with Reading (big R) can start with the text, practice reading it with robot tutors, then triumphantly record their own performance. They could, however, go the other way around, skipping the robots and just telling

See Sound on next page

their story, capturing it with SoundRecorder. Once they've gotten their story to hold still, students can review it for fluency, flair, coherence, or whatever. Then it could be re-recorded and re-reviewed until it met the students' standards (or yours). When students have their stories sounding just right, the oral output—"reading"—is taken care of, freeing them to work on encoding talk into print—that is, writing. Classmates, friendly adults, or cross-age tutors can help, of course, with the transcription. Robots, once again, provide a conventional check: by comparing the robot's text-to-speech reading of story with the student's own digitally recorded telling, students can debug their writing chops and tune up their conventions.

Full Circle—Hammering Home

The whole reading/writing game is about making meaning and communicating it conventionally. On the receiving end, the listener has to remake something like the originally intended meaning, or there really wasn't any communication at all. But you knew all that. Multiple literacies, of course, give us the chance to make our meanings more and merrier. But you knew that too. My hope is that by now we've come full circle with Sound Practices I and II, since last time was about getting robot voices out of your computer and this time we took a look at getting student voices in.

For Further On or In

If you're interested in Polanyi's philosophy, see Michael Polanyi's *Personal Knowledge*, or maybe better, *The Tacit Dimension*. Online, Stefania Ruzsits Jha has a nice bit in Chapter 5 of her PhD thesis, "Michael Polanyi's Integrative Philosophy," *www.kfki.hu/chemonet/polanyi/9602/mp1.html* or you can go to the Philosophy Research base, *www.erraticimpact.com/~20thcentury/html/polanyi_michael.htm*

For an online article on making meaning, see John Seely Brown, "Stolen Knowledge" *www.parc.xerox.com/ops/members/brown/papers/stolenknow.html*.

For a discussion of "power pointlessness," and how to avoid it, see Jamie McKenzie's classic "Scoring Power Points *www.fno.org/sept00/powerpoints.html*, and Joyce Kasman's, "PowerPoint effective, but often misused" *joycevalenza.com/powerptart.html.*

For other resources, like how to downsize bulky sound files or bulky graphics files so they don't take too long for people with dial-up connections to load and for the most current version of the forgoing, see *www.soesd.k12.or.us /it/staff/lf/soundpractices.*

This article was last updated on 12/11/2003. Please contact larry_francis@soesd.k12.or.us with suggestions, comments, or corrections.