

The Great Divide

Lance Knowles confronts the challenge of mixing teachers with technology

Technology is transforming language education throughout the world, but the nature of its role needs to be clarified. Both cultural and theoretical issues need to be addressed including: the differences between the cultures of technology and education, the strengths and limitations of technology, insights from other disciplines (such as cognitive neuroscience) that can help us better understand the interface between the learner and the technology, and a rethinking of the roles that the teacher and technology should play in the language learning process.

Culture and Change

First, the professional use of technology requires a support infrastructure. Networks, connections to the Internet, computers, headsets and microphones need to be installed and continuously maintained. Record-keeping and security issues pose another set of challenges. Managing this infrastructure, which has a direct impact on student experience and motivation, requires a set of skills few educators have.

Contrasting Cultures

One of the chief characteristics of the technology culture is its openness to innovation and change. Anyone working in technology must be open to and adept at learning new things and ways of doing things. If you compare the technology of 20 years ago with now, the changes are clear and profound. In fact the most exciting changes are referred to as disruptive technologies, those that force changes in how things are done. Disruption is welcome in this culture because it creates new industries and economic rewards for those who cause the disruptions.

In contrast, in the field of language education, if you compare classrooms of 20 years ago with classrooms of today, you will find little change, except perhaps in the very best schools. In my own experi-

ence, visiting classrooms throughout the world, I see little change: students sitting in rows, memorizing lists of vocabulary words and sentences, and passively listening to teacher-talk. Sometimes you'll see students sitting at a computer, but the focus is almost always on the written skills. It's rare to see students working on their oral skills, though the role of listening as the key language skill has been known for years.

Where technology is used, it's often used as a supplement or as a means to connect learners with other learners. Teachers still teach, and students still memorize vocabulary and learn grammar in basically the same way. Textbooks are used extensively, and students end up not being able to speak the target language well enough to use it in any practical way. Language tests are basically the same, though there are now attempts to add more listening components. As a result, after hundreds of hours, students who need language skills to get a job must go to private language schools.

One conclusion we might draw from these observations is that the education community resists change, especially if that change means to actually change. In Korea, for example, there is talk about the necessity to change how English is taught, yet upon further investigation there is an implicit expectation that change should not really disrupt how things are done. There is a need to satisfy parents, for example, who want change but who still think of language learning in the traditional way, the way they learned, with a reliance on textbooks and memorizing vocabulary. It failed for the parents, yet they expect the same approach for their children to work.

In other words, there is pressure to change education but no actual change. This of course is not surprising. The figure on the right shows how people generally react to change, especially if it's a paradigm shift, which is what technology represents. Some are more open than others, and can take a leading role. Others are resistant to the point



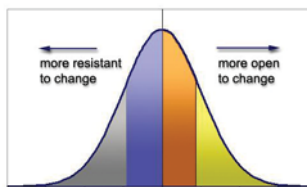
that efforts to sway them can be counter-productive. Therefore, it's important to identify those who can facilitate progress. These are the people who can help build successful models. Equally important is to identify those who work against change or who remain skeptical, often for good reason. Attempts to push them too soon are seldom successful, and can be a waste of valuable resources.

I bring this up because it's important to recognize that not everyone is ready for change, especially when the benefit of such adjustments is unclear, or when the skills required, such as oral fluency in English, are not present. Therefore, significant change should be done in incremental steps, with the right people, and with a support plan in place to help those who would like to develop the necessary skills.

An example of a good first step is the use of technology to improve the oral skills of teachers. We have been involved in such programs in China and Mongolia, for example. These countries are making serious efforts to improve English language education, and have recognized that the traditional ways of doing things are not meeting their needs.

What we found in these programs was a very low level of oral proficiency, too low for the teachers to move beyond traditional ways of teaching, regardless of any theory that says they should do so. The decision to improve their oral fluency was a good first step. Not only did it provide an immediate and clear benefit to the teachers, but it served to familiarize them with the technology itself, lessening the fear factor.

Another benefit of this training was that while the teachers were using the technology to develop their oral fluency, they were experiencing it as learners. They were using it to address a need that they were aware of in their own teaching, and they could see their progress.



In fact, the lack of oral fluency among teachers is a major problem and an impediment to educational improvements. It impedes change because it limits what kind of change is possible. Even in affluent countries like Japan and Korea, there are a significant number of English teachers who have so little confidence in their English that they avoid contact with native speakers. This problem is one that can be addressed with technology.

At the other end of the spectrum, there are large numbers of native-speaker English teachers who, though fluent, lack basic teaching skills. They resist attempts to change what they are doing. These teachers can also impede change, perhaps because it's more difficult for them to admit that their methods are not meeting the long-term needs of their students.

To expedite change for all groups, there first needs to be a recognition of what isn't working. Problems need to be identified. For example, it needs to be pointed out that many students with very large vocabularies cannot hold a simple conversation. Secondly, there needs to be leadership and a willingness to understand that change takes time. The success or failure of change must also be measured. There needs to be accountability. And this requires testing, including a realization that existing tests and metrics are inadequate to the task. Old metrics, for example — tests that measure passive vocabulary or relatively obscure points of grammar — are part of the problem.

Again, this is an area where technology can play an important role.

Strengths and Limitations of Technology

It seems though technology is here, it hasn't been integrated into how we teach languages. Teachers have come up with ways to use technologies in very creative ways, but the vast majority of the programs are an extension of the old teaching paradigm. Instead of using