

TECHNOLOGY AND LANGUAGE ASSESSMENT

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Can you imagine leaving home without a mobile phone? Or getting into a car to drive somewhere unknown and not setting the sat-nav to guide you? Well, in the same way that technology is part of everyday life in the 21st century, it's also very much part of modern language assessment.

Let's look at three uses of technology that have become incredibly important in all forms of assessment, including language assessment.

Every aspects of test security is important, including keeping test content safe. But one of the most important things is to be sure that the person who's doing the test and getting the test score is really the person they say they are. We can check ID cards and other forms of photo identification, but that means there has to be a person there to do the checking. Now that we have online tests that can be done anywhere, we need more sophisticated ways of checking someone's identity.

Most people know that everyone's has unique fingerprints, but did you know that everyone's irises are also unique? So a technique called 'iris recognition' is one way of making sure a person is who they say they are. And unlike ID cards or passports, irises can't be stolen or forged. That's why iris recognition is used at many airports.

Let's imagine a test-taker has successfully completed iris recognition and is about to start an online test. How can we be sure that the same test-taker is actually doing the test? Well, how we strike the keys on a computer, how long we spend pressing a key and the time we take between one keystroke and the next is also unique. And this can't be faked either so another technique that's used to ensure test security is 'keystroke logging'. It's a very useful way of making sure the person who starts the test is actually the same person who finishes it.

You may have heard the term 'computer-adaptive tests'. Not all computer-based tests are adaptive, but those that are allow a test-taker to very quickly complete a test at their own proficiency level. The computer constantly monitors a test-takers performance and 'adapts' questions to fit their level. This means that test-takers don't spend long completing tasks that are too easy for them but they don't lose motivation by attempting a lot tasks that are too difficult for them. A computer-adaptive test stops testing once it has enough evidence of performance at a particular level, so test time is shorter. Although they're efficient, computer-adaptive tests aren't not particularly useful for assessing performances of writing and speaking.

But non-adaptive computer-based tests have lots of advantages over pencil-and-paper tests, especially when they can be offered when and wherever a test-taker chooses. And they can include question formats that can't be offered in traditional pencil-and-paper tests. For example, instead of writing answers to questions, computer-based test-takers can use a 'drag and drop' technique where answer options can be moved around the screen to the appropriate place. This is often used for matching-type questions and for gap-filling tasks. In addition, multimedia can be integrated into a test to provide more authentic and relevant contexts.

Many computer-based tests these days also include writing and speaking tests including those from well-established test providers such as British Council, Cambridge English

Language Assessment, Pearson and TOEFL. Computer-based writing tasks are usually very similar to pencil-and-paper writing tasks except that they are typed on a keyboard instead of written by hand.

Computer-based speaking tests are very different from traditional face-to-face speaking tests. On computer-based speaking tests, test-takers respond to a prompt provided by the computer and there's no human interaction. Although there's a lot of evidence to show that computer-based speaking tests assess some speaking skills very well, they're often criticized for not assessing interactive skills. But this might change soon as a new format has been developed where test-takers and examiners interact face-to-face through video-conferencing. In trials, this type of interaction was very popular with both test-takers and examiners.

More than eighty years ago, one of the first uses of technology in assessment was for scoring responses to pencil-and-paper tests. These days, computers are also used for scoring performance tests, as there are some technical features of writing and speaking that computers can measure very reliably. However, since computers can't assess the actual sense of what has been written or spoken, most major test providers use a combination of computer and human scorers for writing and speaking tests. The one exception to this is the Pearson Test of English, which relies entirely on technology.

Of course there are many more uses of technology in assessment than we have mentioned here. For example, the use of eye-tracking technology in validation studies of listening and reading is currently very common. Without a doubt, we will see further uses that haven't even been thought of yet!

