

THE NEXT GENERATION OF ASSESSMENTS: SIMULATIONS

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Online assessment is a phenomenon that has become central to recruitment. Computer-based testing has existed for more than 20 years, but the advent of the Internet age has pushed psychometric testing out of the interviewers' offices and into the candidates' homes.

The first generation of online testing consisted of paper-and-pencil tests such as verbal reasoning. This format of text-based tests was easy to implement at a time when broadband connectivity was limited to business and educational institutions.

The second generation witnessed the introduction of graphics into online testing, allowing for charts, tables and diagrams of numerical and logical reasoning tests to be displayed with fidelity very close to traditional printed tests.

These first two generations spanned from the late 1990s to 2005. Now, well into a third generation, online testing is undergoing a rapid and dramatic transformation—one where tests don't have to look like tests and candidates take a much more active role in their own assessment.

The most immediate development has been the visual integration of online tests with employers' recruitment processes. Where previous attempts at branding tests were limited to using the employer's logo and color, current tests can be infinitely configured, resulting in a seamless fit with the employer's brand.

In addition, where previous tests relied on the tried-and-trusted multiple choice format, new response methods are now commonly used. For example, imagine a memory test. The candidate must remember the location of 15 items after viewing them for 20 seconds. Instead of choosing one correct answer out of five possible options, he/she can place the items in the appropriate place by dragging and dropping them. So now, instead of simply getting the answer right or wrong, we can measure how close or far the candidate was from the perfect answer. Not only does this reduce the chance that the candidate gets the answer right just by luck, it also allows for a much higher resolution of measurement (Figure 1).

Test authors can now design the test interface from scratch instead of having to "shoehorn" new tests into old formats. This means that intuitive interfaces can be designed to reduce the risk of misinterpreting the instructions or looking at the wrong screen location (Figure 2). Candidates are shown a situation (in this example, a hair dryer has been put in a sink full of water while still plugged in) and must choose from four possible options. A narrator also reads any text that appears on screen. When choosing an option, the candidate sees small animations of the possible action. This has the effect of minimizing the literacy level that the candidate must have to understand the instructions and complete the test.

FIGURE 1: SIMULATION MEMORY TEST (SPANISH LANGUAGE OPTION SHOWN)

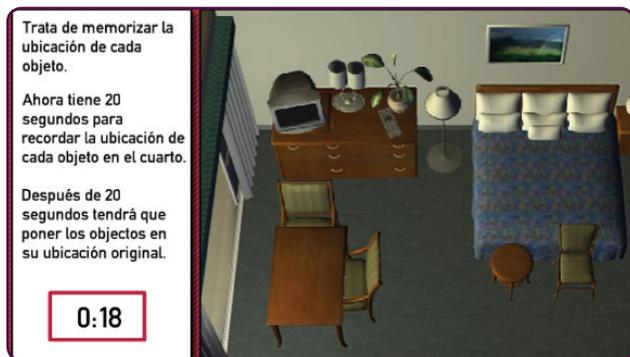
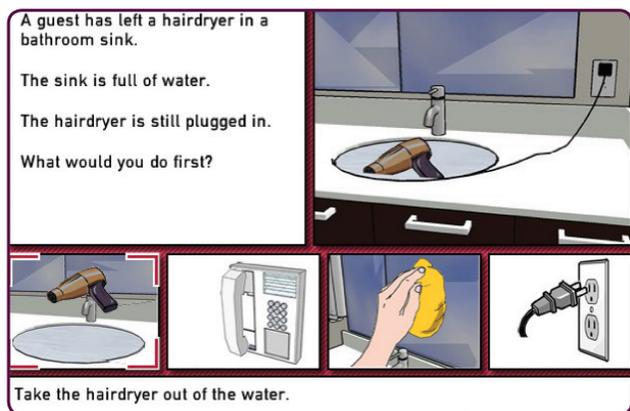


FIGURE 2: REDUCTION OF MISINTERPRETATION



That last point is significant. Through careful interface design, coupled with the use of animations and audio, we are able to reliably assess candidates with lower levels of literacy. Many jobs will attract candidates with lower-than-average literacy, so this style of assessment may prove extremely useful.

The increasing use of multimedia is having a big impact on online Situational Judgment Tests (SJTs). A SJT consists of a number of questions that describe a hypothetical scenario and ask the candidate to indicate what he/she thinks would be the best resolution. The effectiveness of SJT performance predicting job performance has long been established. However, in their usual written format, candidates with lower-than-average literacy levels may perform poorly because their comprehension of the scenario, and of the possible responses, affects their results.

Research in the 1990s indicated that replacing text-based scenarios with video and audio scenarios had a positive

effect on minimizing some of these literacy effects. Of course, the cost of producing a video SJT far exceeded the cost of producing a text-based SJT, and so video SJTs have not been commonplace in the past.

However, as production costs have decreased, video and animated SJTs have started to become more common. With the advent of low-cost animation software, animated SJTs can be created even more economically than their video counterparts. Figures 3, 4 and 5 are examples of Kenexa’s SimSJTs for healthcare, retail and call centers, respectively.

FIGURE 3: HEALTHCARE-SPECIFIC SIMSJT



FIGURE 4: RETAIL-SPECIFIC SIMSJT

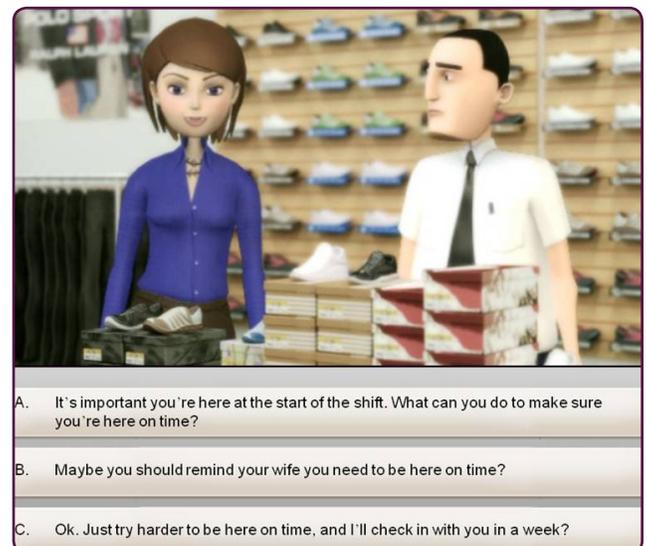


FIGURE 5: CALL CENTER-SPECIFIC SIMSJT



We are seeing a rapidly growing interest in animated SJTs. Why animation rather than video? The answer is globalization. Using video means that for every language the SJT is deployed in, new video has to be shot—unless you're aiming for that "badly dubbed foreign film" look. However, with animation, only the new audio needs to be recorded, and the software will synchronize the animation to the new voices in seconds.

Broadband take-up has boomed over the past five years. More bandwidth for domestic Internet users allows them to download more data, more quickly. At the same time, the power of the average home computer continues to increase every year. Even entry-level machines have audio and graphic capabilities that would have cost many times what they do now just five years ago.

The increase in IT literacy has also played a part in the prevalence of online testing. Approximately 25 years ago, computers were introduced to schools. Now that they are ubiquitous throughout education and the workplace, the majority of job applicants are likely to be quite comfortable using a computer to take a test.

Implications of broadband growth, better computers and increased literacy are easy to see. The same trends that have brought massive year-on-year growth in online gaming, YouTube and Voice over IP services are now impacting candidate assessment. ■

About the Author

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Ben Hawkes is the head of simulation development at Kenexa and specializes in the use of technology to deliver efficient and accurate assessment solutions. With more than 10 years of assessment experience in the U.S. and UK, Mr. Hawkes has designed and delivered assessments for organizations such as Merrill Lynch, HMRC, E.ON, Royal Mail, and the Foreign and Commonwealth Office. He also serves as a trainer for job analysis, competency modeling, interviewing, assessment centers, performance management and psychometric testing. Before joining Kenexa, Mr. Hawkes ran his own consultancy practice for six years, specializing in psychometric assessment, training and development and workplace surveys for telecom, banking, marketing, IT, manufacturing and public sector clients.

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