

Decision Considerations

Article 1

Bennett, R.E. (2002). Inexorable and inevitable: The continuing story of technology and assessment. *Journal of Technology, Learning, and Assessment*, 1(1). Available from <http://www.jtla.org>.

This paper has argued that the advance of technology is inexorable in at least two ways. First, technological capability is increasing exponentially. Second, new technology is pervading our work, and it is beginning to infuse learning. The paper also argued that the incorporation of technology into assessment is inevitable because, as technology becomes intertwined with what and how students learn, the means we use to document achievement must keep pace. However, it is similarly inevitable that this incorporation will not be easy. There are still enough open issues, especially of cost and measurement, that at least some significant setbacks will occur. But even if all of the existing issues were resolved, the history of technology is one of unanticipated consequences that are not always positive. The decisions based on these tests addresses the issues measurement quality, technological dependability, and security; moving too quickly to high-stakes tests would maximize risk—political, financial, legal, and instructional. Similarly, the use of multiple-choice questions is very sensible. They can be easily presented on-screen and require little computer skill for responding. Incorporating significant numbers of performance tasks at this stage would raise costs, demand more sophisticated presentation software, and increase the potential for construct-irrelevant variance in responding.

What the states are doing now, however, must be only a beginning. If all we do is put multiple-choice tests on computer, we will not have done enough to align assessment with how technology is coming to be used for classroom instruction. Our progress in using the computer to improve assessment has been limited. Fortunately, K–12 agencies have educational responsibilities that may force them to go beyond the present assessments status that supports learning and instruction in ways that paper tests cannot. Researchers can help meet this challenge by discovering how to cost-effectively design coherent systems of assessment that have both summative and formative components (Pellegrino, Chudowsky, & Glaser, 2001). These systems might include simulations and other complex performances that not only indicate achievement level, but offer proficiency inferences with clear instructional implications. Creating such systems will be a difficult challenge, but it is aided by an emerging science of assessment design (Mislevy, Steinberg, Almond, Breyer, & Johnson, 2001; Pellegrino, Chudowsky, & Glaser, 2001). To be perfectly clear, it is not at all inevitable that we will incorporate technology into assessment in ways that bring lasting educational benefit. The question is no longer *whether* assessment must incorporate technology. It is how to do it responsibly, not only to preserve the validity, fairness, utility, and credibility of the measurement enterprise but, even more so, to enhance it.