

9) Assess 21st century skills

“The infusion of technology in schools has opened the door for opportunities...to provide student assessment that will measure their abilities for connecting knowledge learned with real-world applications.”
(Moore, 2003, p. 22)

While it is important to measure basic skills, it is increasingly necessary to measure those skills which students will need in order to succeed in the 21st century workplace. These two goals are best achieved through a strategy involving multiple modes of assessment, including technology-infused objective and alternative assessments. Incorporation of multimedia elements and simulations in innovative items can elevate traditional tests to measure higher-level thinking. Technology also makes it much easier to create and administer alternative assessments (i.e., authentic tasks such as performance or portfolio assessment).

The portable laptop computer allows us to turn the corner in assessment practices. Instead of having students stop their school work to go to the computer lab to complete drill and practice exercises, the computer now comes to them to be used as an essential tool in completing their tasks. Authentic assessments can be made of student productions using real world tools to solve real world problems. Electronic portfolios can be created incorporating many types of electronic media. Technology-infused performance assessments often results in positive externalities. For example, a performance task might require a student to create a multimedia module to teach a science concept. One of the outcomes of this assessment might be a class presentation. Thus, not only has the student producing the product learned the concept through creating the module, but also other students in the class have learned through the presentation of their assessment outcomes.

While improvement in summative (end-of-unit or course) assessment is very beneficial, perhaps an even greater benefit of technology-enhanced assessment is the ability to improve and increase formative (ongoing) assessment. Measurement experts are recommending that assessment become more closely integrated within instruction (Brookhart, 2003; Shepard, 2000). Great strides can be made toward this goal through improving and increasing the use of formative assessment. Portable laptop computers can greatly enhance a teacher’s ability to make authentic assessments part of day-to-day instruction. As students are engaged in authentic, creative tasks, the teacher can provide continuous, individual feedback. Thus the assessment can become more meaningful, as students can be involved in evaluating their performance and setting learning goals (Brookhart, 2003).

□ Guiding principle: In addition to the testing of basic skills, students should be given the opportunity to demonstrate 21st century skills through the use of technology-infused, authentic assessments. Assessment should become more integrated with instruction.



“...Classroom assessment must change... to better represent important thinking and problem solving skills in each of the disciplines.... Therefore, a broader range of assessment tools is needed to capture important learning goals and processes and to more directly connect assessment to ongoing instruction.”

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