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Chapter X

Assessment and Evaluation

Introduction

Some teachers view assessment as a necessary evil. Some view assessment as their only real tool of discipline and power. Still other teachers view assessment as an integral part of C&I, and the pivotal practice around which teaching methods and communication turns. Most teachers appreciate local, teacher-controlled assessment and loathe the high stakes assessment that produces anxiety, fear, and competitive tactics. For many administrators, parents and politicians, assessment has its justifications in accountability to standards. Indeed, it is difficult to navigate through the various forms of assessment and perspectives on assessment that teachers face on a daily basis. Everyday assessment entails hundreds of observations that teachers make of their students. This involves informal discussions, feedback and deliberate, staged activities and performances. Assessment involves volumes of documentary evidence, from daily assignments, quizzes, and tests to observations, projects, and digital artifacts. In its most stereotypical form, assessment in technology studies simply meant putting a mark on a completed project, much like a merchant places a price on a product. By current standards, this was inauthentic assessment. Since the late 1980s and early 1990s, authentic assessment has transformed the way we think about and carry out assessments in the schools. Technologies of assessment had similar effects

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Evaluation, which typically pertains to facility, program, or teacher evaluation, has conflicts and interpretations that are similar to those of assessment. With both assessment and evaluation, the goals are to provide feedback, to rank or sort and to provide a means of communication. However, in many cases there is a lot at stake for those who are being assessed and evaluated. It is no secret that, in light of these stakes, students can resort to desperate means to beat the assessment system. On the Web, an entire market for cheating has been generated in response to demands for devices to beat the system. The purpose of this chapter is to provide an overview of assessment and evaluation. We will focus on the types of assessments and evaluations that are complementary to practice in technology studies. We will also raise fundamental questions regarding the relevance of high stakes tests of technological literacy.

Assessment in Technology Studies

Currently, I administer a Scale of Design Capability each year to my new groups of students. This scale tells me, with some degree of accuracy, the varied levels of the students and exactly who will succeed as a design and technology teacher. The scale is tuned to a simple, particular performance. I have the entire group remove their shoes and, with my scale safely secured on my clipboard, monitor each student's

Table 1. Scale of design capability

Sorting process	Student	Possible
All shoes sorted		5
Small sizes sorted first		5
Boots sorted first		5
Trainers sorted second		5
Other shoe types sorted last		5
Shoes sorted within 6 minute limit		5
6.4	G ₄ 1 4	D 11
Sorting outcome	Student	Possible
Size presented from small to large		5
Shoes presented by colors (blues with blues, reds with reds, etc.)		5

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