Introduction

Authenticity is the curriculum goal in which we help students acquire real-world skills and knowledge by developing their abilities to read, write, solve problems, and apply concepts in a manner that prepares them for their lives beyond school.

—Strong, Silver, and Perini (2001, pp. 96–97)

DEFINITION ■

Authentic learning focuses on what is real. The word *authentic* comes from the Greek word *autarkos*, meaning self-originating. Strong, Silver, and Perini (2001) describe how the word was transformed by Rousseau and later by Heidegger and Sartre into the emblem for the fullness of being. Authenticity to the philosophers meant a life lived without falsehoods, built upon a genuine and everexpanding knowledge of the world and oneself. Strong, Silver, and Perini believe that "by placing a premium on authenticity in education, someone was obviously attempting to think differently about education, to consider fully the question of how school and life are interrelated" (p. 94). Relevance becomes an essential motivator for students of all ages. Students search for ways to connect their schoolwork to their own lives in order to find value in education beyond grades, credits, and standardized test scores.

RATIONALE ■

When students try to solve real-life problems, they see the relevance of school-work and are more likely to transfer the content and skills they learn in class by applying them to real problems or challenges. When students write letters to city council members supporting a ban on smoking in public places, they have not only a purpose for writing but also a purpose for using letter-writing skills. When students organize an orientation program to welcome new students to their school, they integrate problem-solving skills, writing skills, technology skills, and interpersonal skills in order to complete an authentic project. They understand why one has to utilize a variety of interrelated skills from different subject areas to accomplish the task of welcoming new students to their school.

If schoolwork is authentic and relevant, students engage in their learning and become active participants in the class.

■ RESEARCH

Authentic learning with its rich open-ended projects, performances, portfolios, and problem-solving tasks necessitates the need to develop authentic assessments to measure progress toward meeting the goals. Traditional multiple-choice tests that include only restricted and extended response items are limited when it comes to assessing open-ended, subjective, or creative work. Assessment, moreover, differs from evaluation. Evaluation is viewed as the summative measure of how much content a student has retained. It is most often used for grouping students and for assigning final grades. Assessment, on the other hand, requires the ongoing gathering of information that provides valuable insight to the teacher about how to guide and re-adjust instruction to meet the needs of all students.

Costa and Kallick (2004a) believe assessment should be neither summative nor punitive. They believe instead that assessment is a mechanism for providing ongoing feedback to the learner and to the organization as a necessary part of the spiraling processes of continuous renewal: self-managing, self-monitoring, and self-modifying. They believe students need to take ownership of their learning. When teachers provide students with tools such as study questions, graphic organizers, checklists, and rubrics, the students become empowered to take the lead in self-assessing and self-modifying their work. As Costa and Kallick state:

We must constantly remind ourselves that the ultimate purpose of evaluation is to have students learn to become self-evaluative. If students graduate from our schools still dependent upon others to tell them when they are adequate, good, or excellent, then we've missed the whole point of what self-directed learning is about. (p. 117)

Jerald (2001) did an analysis of high-flying schools where students succeeded despite socioeconomic differences. His analysis showed that schools that were successful despite disadvantages had seven characteristics in common. The majority of the characteristics deal with standards, assessment, and appropriate professional development. One characteristic is the importance of using state standards to not only design curriculum and instruction but also assess student work. Another key characteristic is the importance of using assessments to help guide instruction. Stiggins (2002) discusses how assessment in the United States over the past five decades has evolved into a new belief system. The public's perception of assessment focuses on school improvement that includes higher achievement standards, rigorous assessments, and the expectation of accountability on the part of educators for student achievement, as reflected in test scores. Stiggins says that the public relies on "high-stakes assessments of learning to inform our decisions about accountability. These tests tell us how much students have learned, whether standards are being met, and whether educators have done the job they were hired to do" (p. 759).

Standards-Based Teaching

- Teams of teachers work together to embed the language of the standards (vocabulary, people, events, and concepts) from their state standards into their curriculum, instruction, and assessment.
- 2. Teachers monitor students' progress toward meeting the standards by the ongoing use of formative assessments used to provide feedback to *improve* student learning (assessment *for* learning).
- 3. Teacher teams examine student work, analyze and interpret the data, and differentiate their instruction as needed to meet the diverse needs of their students.
- 4. At the end of the learning segment, teacher teams review all student work and create summative assessments in order to make a final evaluation to *prove* students have met or exceeded the standards (assessment *of* learning).

Classroom assessments correlated with curriculum goals and standards provide feedback on an ongoing basis to teachers and students. The continuous flow of information targeted at student achievement helps students improve. Teachers focus on adjusting instruction based on the results of the classroom assessments. They modify, adapt, and regroup as needed. Since formative assessments are ongoing, they provide continuous feedback about the students' strengths and weaknesses. The teacher uses observations and feedback to modify the *content*, *process*, and *product* and adjust the pace for all or some of the students, depending upon their needs (Tomlinson, 1999).

BALANCED ASSESSMENT

Classroom assessments come in many shapes and sizes, but most of them fit into three categories: traditional, portfolio, and performance. All three provide valuable data to assess the whole child. Traditional assessments such as quizzes, teacher-made tests, benchmark or interim tests, and high-stakes standardized tests measure knowledge of content and skills. Portfolios focus on a student's products, process, and progress over time and help students selfassess their work as well as set new goals for themselves. Portfolios also allow students to express themselves utilizing a wide variety of assessment methods. Performance assessments show how the performance standards are implemented. They require students to apply their knowledge of the content and their skills in a real task. Because many of the performances, projects, and products are creative and subjective in nature, teachers need to assess them in different ways. A traditional multiple-choice test would not be suitable to evaluate an oral presentation or a letter to the editor. Therefore, criteria checklists and rubrics, or scoring guides, provide the guidelines and the criteria for grading. No single form of assessment by itself is adequate to measure the whole child. If a teacher uses all three measurements in appropriate proportions for the grade level, however, a true portrait of the student as a learner emerges.

Figure 0.2 Balanced Assessment Model

Type of Assessment	Focus	Features
Traditional	Knowledge Curriculum Skills	Classroom Assessments
Portfolio	Process Product Growth	 Growth and Development Reflection Goal Setting Self-Evaluation
Performance	Standards Application Transfer	TasksChecklistsRubricsExamination of Student Work

Source: Adapted from Belgrad, S., Burke, K., & Fogarty, R. (2008). The Portfolio Connection: Student Work Linked to Standards, 3rd Ed., p. xvii. Thousand Oaks, CA: Corwin. Used with permission.

DIFFERENTIATION

In today's differentiated classroom, assessments provide diagnostic as well as continuous feedback. Tomlinson (1999) believes the goal of assessment is to provide teachers with day-to-day data on students' readiness for particular ideas and skills based upon their interests and their learning profiles. Assessment is essential to teaching. Classroom assessments and grading procedures constitute integral components of instruction. The relationship between instruction and assessment has been compared to the infinity sign, where one cannot see where instruction ends and assessment begins. It is a continuous feedback loop. In fact, many people believe assessment drives instruction because teachers begin with the end in mind—achieving the standards—and then plan backward and create the tasks the students will need to complete in order to achieve the targeted outcomes. Because most states now provide standards to all teachers, the amount of guesswork teachers use to determine what's really important compared to what's "nice to know" has been greatly reduced. Now all the stakeholders know the target and are working together toward meeting the same goal.

Assessment is the ongoing process of gathering information for the purpose of making sound decisions to guide the teacher's instruction. Teaching is conceptualized today as a process of effective decision making. "This includes deciding what to teach, how to teach it, how long to teach, whether to group students, what questions to ask, what follow-up questions to ask, what to review, when to review, and so forth" (McMillan, 2001, p. 3). Because each class and each student are different, it doesn't make sense for a school or district to mandate prescriptive lesson plans and timelines. Specific lesson plans provide needed guidelines, of course, but each teacher adjusts the timelines and requirements as needed. If the students master the standards early, why prolong the unit? By the same token, if all the students need more time, or if some of the students need more time, they should get it. Staying on topic or meeting the deadline should not take precedence over student understanding.

Assessment is more than a documentation of learning—it is learning. Teachers who integrate relevant and valid assessments on an ongoing basis with their teaching and who are willing to make necessary adjustments to facilitate student learning help their students not only achieve higher academic goals but also achieve more fulfilling personal goals.

CLASSROOM ASSESSMENTS |

Even though the public and policymakers look to high-stakes standardized test results to measure learning, the classroom assessments created by teachers are truly the key to improving student learning. The quizzes, writing assignments, journals, performances, projects, and portfolios that teachers administer on a regular basis provide the data teachers use to monitor and adjust their teaching to help students each day. Guskey (2003) asserts that teachers "trust the results from these assessments because of their direct relation to classroom instructional goals. Plus, results are immediate and easy to analyze at the individual student level" (p. 7). Teachers need to realize the importance of their ongoing assessments because they are an integral part of the instructional process. Teachers who get immediate results can adjust, modify, or redirect their teaching to help the students before the final evaluations. Because formative assessments are ongoing, they provide the most valuable feedback both to the student and to the teacher in real time. Teachers can make immediate adjustments based upon students' questions or their work and clarify misunderstandings before the end of the learning segment. Darling-Hammond (2010) believes that external test items administered to students should be supplemented by more extensive school-based tasks that are part of the formal assessment system. She says that, "school-based assessments, developed and scored by teachers based on guidance from curriculum documents and syllabi, are the primary tools for evaluating students and providing information about students and school progress" (p. 287).

Because summative evaluations usually represent the "final attempt," it is often too late to make any adjustments or to change strategies because they come at the end of the assessment cycle and represent the final judgment of the students' performance. McMillan (2001) discusses several of the purposes of classroom assessments. He believes classroom assessments should identify whether

students have mastered a concept or skill. They should, he states, also communicate their expectations to students as well as motivate them to learn and take more ownership in self-evaluating their own work. By thoughtfully using assessment data, the teacher can modify the content, process, or product (Tomlinson, 1999).

■ STANDARDIZED TESTS

Large-scale assessments are designed for a specific purpose. The tests used in most states today are designed to rank-order schools and students for the purposes of accountability. Guskey (2003), however, feels that "assessments designed for ranking are generally not good instruments for helping teachers improve their instruction or modify their approach to individual students" (p. 7).

The No Child Left Behind Act of 2001 mandates annual testing of students in Grades 3–8 in reading and mathematics, and recent proposals advocate yearly end-of-course testing throughout high school. According to Amrein and Berliner (2003), the federal legislators who overwhelmingly passed this act into law apparently assumed that high-stakes tests would improve student motivation and raise student achievement. Amrein and Berliner state:

Unfortunately, the evidence shows that such tests actually decrease student motivation and increase the proportion of students who leave school early. Further, student achievement in the 18 high-stakes testing states has not improved on a range of measures, such as the National Assessment of Educational Progress (NAEP), despite higher scores on the states' own assessments. (p. 32)

States that design high-stakes tests to correlate with their state standards differ from the more traditional norm-referenced testing system, which was designed to be secret and normed to fit a bell curve. Meier (2002) believes the new kind of state test can be directly taught to and does not require as much secrecy regarding content. It also no longer requires scores distributed along a predetermined curve. Meier states that the tests "are intended to show whether teachers and students are doing their prescribed jobs: teachers teaching to the tests and students learning what's on them. It's called curriculum and test alignment" (p. 192). Meier worries about the states scoring their own tests under the direction of political officials in state departments. She feels the officials have the power of "weighting" subsections, and "thus the actual scores and what constitutes failure, what constitutes needs improvement, what constitutes proficient—are in many states not decided until after the results are in and state officials can estimate the impact of their decisions" (p. 192). She says that the meaning of a score on these new tests rests not with the neutral bell curve, but with judgments made by some politically appointed body—ideally in collaboration with educational experts.

Researchers report that when states attach rewards and sanctions to performance on tests, students become less intrinsically motivated to learn and less likely to engage in critical thinking. Sheldon and Biddle (1998, as cited in

Amrein & Berliner, 2003) found that high-stakes tests cause teachers to take greater control of the learning experiences of their students, thereby denying their students opportunities to direct their own learning and construct knowledge for themselves. When the stakes get high, teachers no longer "encourage students to explore the concepts and subjects that interest them. Attaching stakes to tests apparently obstructs students' paths to becoming lifelong, selfdirected learners and alienates students from their own learning experiences in school" (pp. 32–33). Instead of using their natural curiosity to solve a problem that is relevant to them, students tend to become passive learners who listen to their teacher's instruction rather than become active learners who search for deeper understandings that impact their own lives. Sousa (1995) reviewed the research that describes how much students retain 24 hours later based upon the type of teaching. The lecture method alone fosters a 5% retention rate and is at the top of the pyramid; students who discuss retain 50%, students who perform a task retain 75%, and students who either teach others or use the information immediately retain 95% (see Figure 0.3). Thus, the image of a teacher lecturing and a student passively taking notes without interacting with the teacher, the class members, or the information foreshadows a marginal learning experience. It also foreshadows a student who remembers the information for Friday's test, but will probably forget the information when it is time to apply it in a real-life situation. Azzam (2008) reviewed the results of the most recent High School Survey of Student Engagement where Indiana University's Center for Evaluation and Education Policy surveyed 81,499 students from 110 high schools in 26 states. One of the questions they were asked was, "Have you ever been bored in high school?" Fifty percent of the students reported being bored every day. Students indicated various reasons:

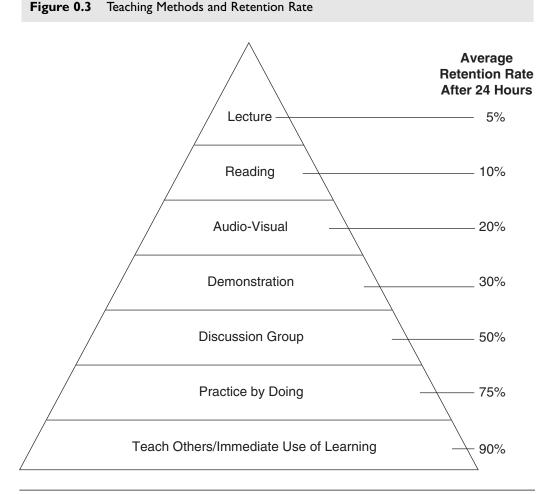
The coursework wasn't interesting (75%), relevant (39%), or challenging enough (32%). Approximately one-third of students were bored because they had no interaction with the teacher (Azzam, 2008, p. 93). Moreover, 60% of the students did not see any value to the work they were asked to do. In the survey, one-third of the students attended suburban schools, one-third attended urban schools, and one-third attended rural schools.

In addition to not finding their coursework interesting, Sheldon and Biddle (1998) found that older students also depict themselves as anxious, angry, and withdrawn from high-stakes tests; moreover, they are more disillusioned and hostile toward tests than are younger students. Younger students may not yet realize the importance of the tests to their academic futures, and they still value their love of learning without the fear or pressure of failing a test and being retained.

STANDARDS-ALIGNED ASSESSMENTS

Because of the increased emphasis on standardized testing, many teachers have totally abandoned or greatly reduced the time spent setting a relevant context for learning experiences. Teachers sometimes dismiss proven instructional strategies, such as interdisciplinary curriculum that is vibrant and relevant, because they feel such strategies are too time consuming or impossible to implement in today's climate of high-stakes testing. Drake and Burns (2004) believe the advent of standards-based education, with its emphasis on disciplines, has largely displaced integrated curriculum, where students see the connections among subject areas and synthesize their learnings to solve problems. They fear that teachers have time to cover *only* "topics" such as dinosaurs or Canada without delving into the big concepts such as extinction and interdependence that lead to a deeper understanding of a topic. Although the search for connections, deeper meanings, and critical thinking does take more time, the students who achieve this in-depth understanding will be better equipped to transfer all the skills to other classes and life.

On the Program in International Student Assessment tests in 2006, the United States ranked 35th among the top 40 countries in mathematics and 31st in science, and in each disciplinary area tested, U.S. students scored lowest on problem-solving items. Darling-Hammond and McCloskey (2008)



report that European and Asian nations that have steeply improved student learning have focused explicitly on creating curriculum guidance and assessments that focus on the so-called 21st century skills: "the abilities to find and organize information to solve problems, frame and conduct investigations, analyze and synthesize data, apply learning to new situations, self-monitor and improve one's own learning and performance, communicate well in multiple forms, work in teams, and learn independently" (p. 264). Furthermore, these countries emphasize project-based, inquiry-based learning that includes research-based projects, scientific investigations, products, reports, and other open-ended items that require students "to analyze, apply knowledge, and write extensively" as opposed to the U.S. testing that relies primarily on multiple-choice items that "evaluate recall and recognition of discrete facts" (p. 264).

Specific content standards indicate what students must be able *to know* and *to do* at each grade level. In many cases, educators align these standards with evaluation procedures, both local assessments and standardized tests. Drake and Burns (2004) worry that the demands to cover the standards and help students perform well on standardized tests overwhelm teachers and students and take the joy out of teaching. They believe that when educators simply "cover" the standards, the students lack engagement because some of the lessons become dull and tedious for both teachers and students. When there are too many standards to address, teachers "cover" the information superficially and sometimes sacrifice quality for quantity. Instead of achieving deep understanding of key concepts, students focus on cursory coverage that concentrates on factual knowledge at the expense of enduring understanding.

Even though politicians and policymakers may expect all standards to be addressed equally, teachers need to prioritize the most important standards and integrate them into relevant tasks. Drake and Burns (2004) note that teachers "can chunk the standards together into meaningful clusters both within and across disciplines. Once teachers understand how standards are connected, their perception of interdisciplinary curriculum shifts dramatically. What they once saw as an impossible venture becomes an attractive alternative" (p. 2).

CLASSROOM ASSESSMENTS VERSUS ■ STANDARDIZED TESTS

In the balanced assessment model, teachers utilize traditional teacher-made tests, benchmark or short-cycle tests, and standardized tests as well as class-room assessments to develop an accurate learning profile of each student. When used together, they both provide valuable data for the purpose of improving student achievement. It is evident that both standardized tests and classroom assessments used in conjunction with each other provide different types of data that present a more accurate profile of a student as a learner.

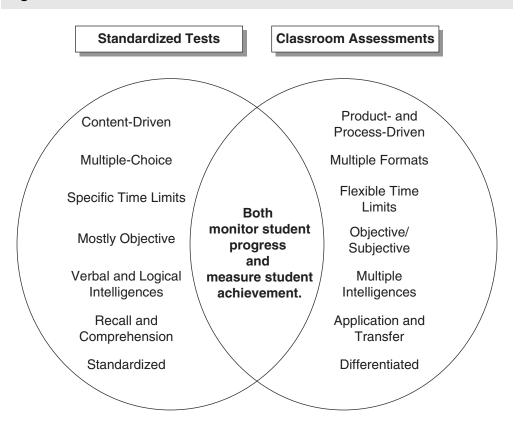


Figure 0.4 Standardized Tests vs. Classroom Assessments

Source: Burke, K. (2009). How to Assess Authentic Learning, 5th Ed. Thousand Oaks, CA: Corwin. Used with permission.

■ THE BALANCED LIFE

Philosophers Rousseau, Heidegger, and Sartre saw the value of the authentic life, lived without falsehoods and built upon a genuine and ever-expanding knowledge of the world and oneself. So, too, should educators place a premium on authenticity in education and focus on how to help students realize how school and life are interrelated. To achieve the balance in life and the balance in assessment, teachers need to integrate standardized tests and classroom assessments. They can accomplish this task by constructing meaningful and relevant learning experiences and assessments to target standards within the context of real-life problems that prepare students for the challenges of life.

■ THE SIX-STEP PROCESS

One way that teachers can target the standards and address real problems is to follow a six-step process when planning their curriculum units. The steps include targeting the important standards according to the data. Once teachers target the standards, they "unpack" them to find the big ideas and the essential questions that will help guide their instruction (Wiggins & McTighe, 1998). Using the criteria

embedded in state standards to create a teacher checklist will guide their teaching by "chunking" the big ideas and organizing them in a developmentally appropriate sequential order that will make sense to the students. Any assignment or assessment that integrates the key ideas of the standards will make the work more valid. Once the teachers target the standards, find the big ideas and essential questions, and organize their teaching, they are ready to design a meaningful and complex performance task that will motivate students to learn.

The final two steps involve helping the students understand the process for meeting a goal by giving them student checklists to guide them through the specific steps of completing an assignment. Once the students acquire the information or skills they need in the checklist, they are ready to improve the quality of their work. The rubric provides the quality descriptors that tell students, "How good is good enough?" Students now know exactly what they have to accomplish to meet or exceed expectations for excellence.

The following six chapters review in more detail how to develop a process that moves the teachers and students from the standards to the rubrics in order to meet academic goals.

Figure 0.5 From Standards to Rubrics in Six Steps

Step 1: Target the Standards	How can teachers work collaboratively to analyze data and target the standards?
Step 2: Find the Big Ideas	How can teachers analyze the standards and determine the big ideas and essential questions that students will need to understand?
Step 3: Organize Teacher Checklists	How can teachers define key terms from the standards and organize the criteria into checklists to guide their instruction?
Step 4: Create Performance Tasks	How can teachers create motivating tasks correlated to curriculum and standards to establish a relevant context for the students?
Step 5: Develop Student Checklists	How can teachers guide students sequentially through each step in the process of completing an assignment?
Step 6: Design Teaching Rubrics	How good is good enough? How can students attain excellence by achieving the indicators described in the rubric?