

## **What's in a Name? Authentic Education, Competency based learning, Differentiated Instruction, Experiential Education, Learning/Student Centered Learning, Performance Based Education, Proficiency Based Learning**

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### **Abstract**

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*The authors have during their years in education come upon the saying "there is nothing new in education except names." After doing the research on learner centered instruction and the various types of "new" assessment it came to mind that the names are new but the educational philosophy is nothing more than Dewey rehashed. As the title suggests you as readers can decide.*

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**Key Words:** Authentic Education, Competency based learning, John Dewey, Differentiated Instruction, Experiential Education, Kurt Hahn, Learning/Student Centered Learning, Performance Based Education, Proficiency Based Learning

### **Introduction**

All the rage today in education is student/learner-centered education. Student-centered learning, also known as learner-centered education, broadly encompasses methods of teaching that shift the focus of instruction from the teacher to the student (1, 2, 3).

Hansen and Stephens (2000) saw in the last 10 years a revolution in the ways we talk about student learning and classroom instruction. Terms such as "student empowerment," "learning communities," "joint knowledge construction," "the learning paradigm," "cultural diversity," and "lifelong learning" dominate professional literature. All are based on notions of learner-centered education, variously represented as collaborative, cooperative, active, inquiry-based, and so on. These instructional approaches emphasize the student as the main agent of learning, who not only takes more initiative but does so in conjunction with other students to make learning socially interactive rather than a one-way transfer of pre-packaged information.

McCombs (2001) enumerated the role of learner-centered principles and practices in school reform (characteristics and dispositions of learner-centered teachers, characteristics of learner-centered practices, sharing power and control with learners, and building positive personal relations and meaningful connections).

Paris and Combs (2000) provides a descriptive definition of the term learner centeredness comprised of five elements: the teacher's focus is on the learners; the teacher guides and facilitates learning; the teacher promotes active learner engagement; the teacher promotes learning through interactive decision making; and the teacher is a reflective, ongoing learner.

Dunlap (1999) is more specific in defining student-centered learning by proving the attributes of student-centered to (1) promoting intentional learning by encouraging the growth of student responsibility, initiative, decision making, and intentional learning, including support for transition to an online learning environment, setting goals, metacognitive awareness, and time management; (2) applying dynamic, generative learning activities that promote high level thinking processes (i.e., analysis, synthesis, problem solving, experimentation, creativity, and examination of topics from multiple perspectives) to help students integrate new and old knowledge and, thereby, create rich and complex knowledge structures, including creating and providing access to resources; (3) utilizing authentic learning contexts to promote study and investigation, including contextualizing learning, making learning complex, increasing meaningfulness and realism of activities, and encouraging research; (4) encouraging collaboration to cultivate an atmosphere supportive of knowledge building communities; and (5) reinforcing reflection by embedding opportunities to reflect on the learning process as well as on the content acquired to promote both learning and metacognitive skill development.

Starnes, Paris, and Stevens (1999) break down Dunlap's attributes into core practices. The first being the work teachers and learners do together is infused from the beginning with learner choice, design, and revision. (2) The role of the teacher is that of facilitator and collaborator. (3) The academic integrity of the work teachers and learners do together is clear. (4) The work is characterized by active learning. (5) Peer teaching, small group work, and teamwork are all consistent features of classroom activities. (6) Connections between the classroom work, the surrounding communities, and the world beyond the community are clear. (7) There is an audience beyond the teacher for learner work. (8) New activities spiral gracefully out of the old, incorporating lessons learned from past experiences, building on skills and understandings that can now be amplified. (9) Imagination and creativity are encouraged in the completion of learning activities. (10) Reflection is an essential activity that takes place at key points throughout the work. (11) The work teachers and learners do together include rigorous, ongoing assessment and evaluation.

This framework allows teachers to weave fragmented pieces of classroom life into an integrated whole, providing guidance in implementing mandated activities that do not fit together easily or well. In this process, a cohesive approach emerges to help teachers construct rich, meaningful, experience-based educational environments. When applied as "a way of thinking" rather than "a way of doing," the core practices make the complexities of teaching decisions explicit and manageable (Starnes, Paris, & Stevens, 1999).

Regardless of how student/learner centered education is defined at least four situations are responsible for this revolution in teaching: 1) increasingly diverse yet marginally prepared student populations are entering higher education, calling for new methods to foster student engagement; 2) the demands of a rapidly changing information society stress the importance of flexible competencies and team-based work structures; 3) trends in our political culture favor teaching philosophies that "empower" students and make classrooms more democratic; and 4) research on learning and teaching effectiveness confirms the efficacy of learner-driven approaches.

## **LEARNING**

Today we have the following philosophies/programs that are presented as student centered. Each has in the opinion of the authors a large number of similarities.

### **Authentic Education**

Authentic education is situated learning that lets students encounter and master real life situations or situations that resemble real life (7). In education, the term authentic learning refers to a wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications. The basic idea is that students are more likely to be interested in what they are learning, more motivated to learn new concepts and skills, and better prepared to succeed in college, careers, and adulthood if what they are learning mirrors real-life contexts, equips them with practical and useful skills, and addresses topics that are relevant and applicable to their lives outside of school (7).

In education, the term authentic learning refers to a wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications. The basic idea is that students are more likely to be interested in what they are learning, more motivated to learn new concepts and skills, and better prepared to succeed in college, careers, and adulthood if what they are learning mirrors real-life contexts, equips them with practical and useful skills, and addresses topics that are relevant and applicable to their lives outside of school (36).

Authentic learning is a set of methods or techniques for assessing the academic achievement of a student that includes activities requiring the application of acquired knowledge and skills to real-world situations and that is often seen as an alternative to standardized testing (37).

### **Competency-Based-Learning**

Competency-based learning refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education (17).

Competency-based learning is a system of education, often referred to as proficiency or mastery-based (see definition below), in which students advance and move ahead on their lessons based on demonstration of mastery. In order for students to progress at a meaningful pace, schools and teachers provide differentiated instruction and support (38).

Competency-based learning refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education. In public schools, competency-based systems use state learning standards to determine academic expectations and define “competency” or “proficiency” in a given course, subject area, or grade level (although other sets of standards may also be used, including standards developed by districts and schools or by subject-area organizations). The general goal of competency-based learning is to ensure that students are acquiring the knowledge and skills that are deemed to be essential to success in school, higher education, careers, and adult life. If students fail to meet expected learning standards, they typically receive additional instruction, practice time, and academic support to help them achieve competency or meet the expected standards (39).

Defining competency-based learning is complicated by the fact that educators not only use a wide variety of terms for the general approach, but the terms may or may not be used synonymously from place to place. A few of the more common synonyms include *proficiency-based*, *mastery-based*, *outcome-based*, *performance-based*, and *standards-based* education, instruction, and learning, among others (39).

### **Differentiated Instruction**

Differentiated instruction is a process to teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is and assisting in the learning process (9).

Differentiation refers to a wide variety of teaching techniques and lesson adaptations that educators use to instruct a diverse group of students, with diverse learning needs, in the same course, classroom, or learning environment. Differentiation is commonly used in “heterogeneous grouping”—an educational strategy in which students of different abilities, learning needs, and levels of academic achievement are grouped together. In heterogeneously grouped classrooms, for example, teachers vary instructional strategies and use more flexibly designed lessons to engage student interests and address distinct learning needs—all of which may vary from student to student.

The basic idea is that the primary educational objectives—making sure all students master essential knowledge, concepts, and skills—remain the same for every student, but teachers may use different instructional methods to help students meet those expectations.

Teachers who employ differentiated instructional strategies will usually adjust the elements of a lesson from one group of students to another, so that those who may need more time or a different teaching approach to grasp a concept get the specialized assistance they need, while those students who have already mastered a concept can be assigned a different learning activity or move on to a new concept or lesson.

In more diverse classrooms, teachers will tailor lessons to address the unique needs of special-education students, high-achieving students, and English-language learners, for example. Teachers also use strategies such as formative assessment—periodic, in-process evaluations of what students are learning or not learning—to determine the best instructional approaches or modifications needed for each student.

Also called “differentiated instruction,” differentiation typically entails modifications to *practice* (how teachers deliver instruction to students), *process* (how the lesson is designed for students), *products* (the kinds of work products students will be asked to complete), *content* (the specific readings, research, or materials students will study), *assessment* (how teachers measure what students have learned), and *grouping* (how students are arranged in the classroom or paired up with other students). Differentiation techniques may also be based on specific student attributes, including *interest* (what subjects inspire students to learn), *readiness* (what students have learned and still need to learn), or *learning style* (the ways in which students tend to learn material best).

### **Experiential Education**

Itin (1999) sees experiential education is not just experiential learning, but also a philosophy of education that involves the interaction between learner and teacher and recognizes the larger system-level issues within education. Viewing experiential education as a philosophy allows for its various expressions to argue collectively for educational reform that would support experiential education in all settings.

Jacobs (1999) viewed experiential education as an enhancement to more didactic educational approaches. Educators use experiential lessons and initiatives to foster excitement in students or to take a break from the daily grind of handouts, lectures, and assignments. Rarely is experiential education seen as a central approach to learning. Common misconceptions of experiential education suggest that it must include high adventure and that experiential learning is achieved by simply designing lessons that are active. However, experiential education is a process through which a learner constructs knowledge, skill, and value from direct experiences and from opportunities in order to process, generalize, and apply learning.

The methodologies reflected in experiential education have evolved since the time of Hahn (44) and Dewey (\*). For experiential education to become efficient pedagogy, physical experience must be combined with reflection. Adding reflective practice, allows for personal introspection of challenges and key learnings. That is, physical challenges provide a gateway in which we can observe qualities about ourselves, and those whom we are working with. Further, for the efficacy of experiential education, experiences must be separated, giving the learner sufficient time to process the information (10).

Experiential learning is a method of educating through first-hand experience. Skills, knowledge, and experience are acquired outside of the traditional academic classroom setting, and may include internships, studies abroad, field trips, field research, and service-learning projects (11).

The concept of experiential learning was first explored by John Dewey (\*) and Jean Piaget (\*), among others. It was made popular by education theorist David A. Kolb (\*), who, along with Ron Fry (\*), developed the experiential learning theory, which is based on the idea that learning is a process whereby knowledge is created through transformation of experience. It is based on four main elements which operate in a continuous cycle during the learning experience:

- Concrete experience
- Reflective observation
- Abstract conceptualization
- Active experimentation (11).

### **Performance Based Education**

Performance-based learning is when students participate in performing tasks or activities that are meaningful and engaging. The purpose of this kind of learning is to help students acquire and apply knowledge, practice skills, and develop independent and collaborative work habits. The culminating activity or product for performance-based learning is one that lets a student demonstrate evidence of understanding through a transfer of skills (8, 29).

Performance-based funding is a system based on allocating a portion of a state’s higher education budget according to specific performance measures such as course completion, credit attainment ... (12).

Normally, students are presented with an open-ended question that may produce several different correct answers (Chun, 2010; McTighe, 2015). In the higher-level tasks, there is a sense of urgency for the product to be developed or the process to be determined, as in most real-world situations (13).

The performance-based approach to education enables pupils to use their knowledge and apply skills in realistic situations. It differs from the traditional approach to education in that as well as striving for mastery of knowledge and skills; it also measures these in the context of practical tasks. Furthermore, performance-based education focuses on the process pupils go through while engaged in a task as well as the end product, enabling them to solve problems and make decisions throughout the learning process.

In addition, performance-based education stimulates the development of other important dimensions of learning, namely the affective, social and metacognitive aspects of learning. Regarding the affective (emotional) aspect of learning, performance-based education motivates pupils to participate in interesting and meaningful tasks. It helps pupils develop a sense of pride in their work, fostering confidence in the target language. Encouraging pupils to experiment with their increasing control of the language alleviates anxiety over “making a mistake.” This further motivates them to invest in learning the foreign language (13).

The social aspect of learning is reflected in the peer interaction that performance-based tasks require. Pupils thus develop helpful social skills for life. Such cooperative work leads to peer guidance and other kinds of social interaction such as negotiating, reaching a consensus, respecting others’ opinions, individual contribution to the group effort and shared responsibility for task completion (NCREL), (2001).

As for the metacognitive aspect of learning (pupils’ thinking about their own learning), skills such as reflection and self-assessment also contribute to the learning process. When teachers require pupils to think about what they are learning, how they learn and how well they are progressing, they develop skills which make them more independent and critical pupils (NCREL), (2001).

Performance-based learning and assessment represent a set of strategies for the acquisition and application of knowledge, skills, and work habits through the performance of tasks that are meaningful and engaging to students. ... Performance-based learning and assessment achieve a balanced approach by extending traditional fact-and-skill instruction (14).

### **Proficiency Based Learning**

Proficiency-based learning refers to systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education. In public schools, proficiency-based systems use state learning standards to determine academic expectations and define “proficiency” in a given course, subject area, or grade level (although other sets of standards may also be used, including standards developed by districts and schools or by subject-area organizations). The general goal of proficiency-based learning is to ensure that students are acquiring the knowledge and skills that are deemed to be essential to success in school, higher education, careers, and adult life. If students fail to meet expected learning standards, they typically receive additional instruction, practice time, and academic support to help them achieve proficiency or meet the expected standards (15, 16, 40, 41).

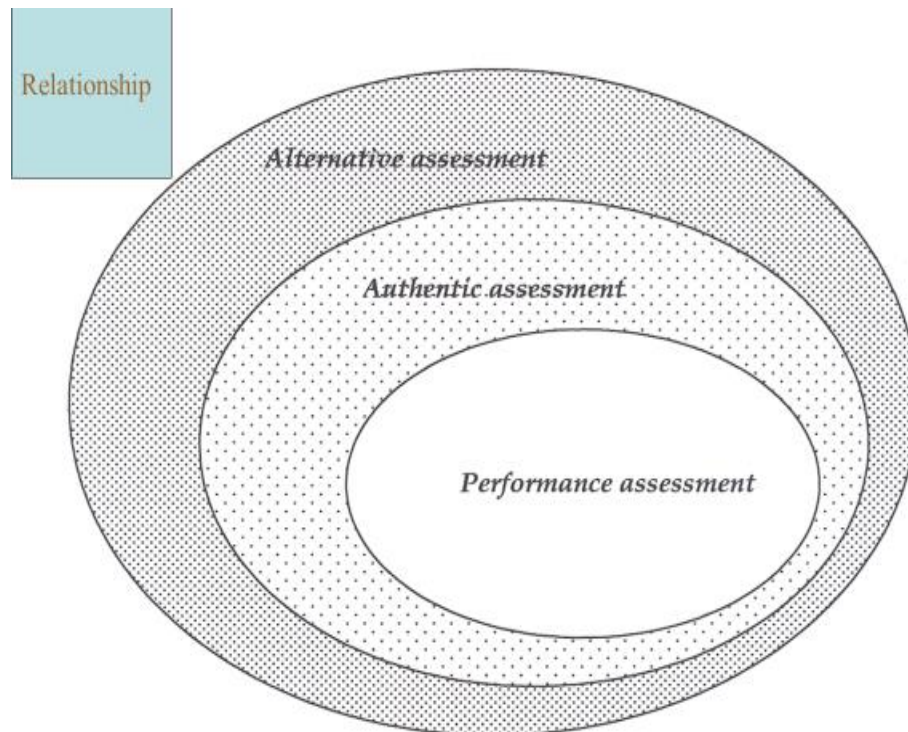
The focus of proficiency-based learning is on students’ demonstration of desired learning outcomes. Students not only gain the skills, abilities, and knowledge required in an area of study, but more importantly, those necessary to be successful in college, career, and civic life. Proficiency-based learning is designed to identify and address gaps in order to provide equitable learning opportunities for each and every student (42).

Proficiency-based education is a personalized approach to education that awards credit on the basis of a student’s demonstrated mastery of desired learning outcomes—regardless of how long that learning takes. In a proficiency-based model, the level of expectation for student learning is high for all students, with each student responsible for meeting common established learning goals— or, proficiencies (43).

### **ASSESSMENT**

Figure 1 provides the relationship of alternative, authentic and performance assessment. The movement is directed at establishing qualitative, more democratic, and task-based methods of evaluation in testing a learner’s language proficiency (Brown & Hudson, 1998; Aschbacher, 1991; Herman, Aschbacher, & Winters, 1992; Huerta-Macías, 1995). It contrasts with traditional methods of testing by involving the learners in the evaluation process, and having the tendency to locate evaluation in a real-life context and, as result of these two features, being longitudinal. Thus, the insights emanating from these methods, alongside being used for decision-making about the future of learners, contribute to and furnish additional instructional purposes. As McNamara (2000) points out:

“This approach stresses the need for assessment to be integrated with the goals of the curriculum and to have a constructive relationship with teaching and learning” (as cited in 32). Alternative assessment is in direct contrast to what is known as "**traditional testing**" "**traditional assessment,**" or "**standardized assessment.**" Instead of traditional selected-response or constructed-response tests that look for discrete facts or knowledge students recall in a standard way (45).



Mertler, C. A. (2003). Classroom Assessment: A Practical Guide for Educators. Los Angeles: Pyczak Publishing, 112.

Figure 1: Relationship between alternative, authentic and performance assessment. Mertler, C. A. (2003). Classroom assessment: A practical guide for educators. Los Angeles: Pyczak Publishing, 112.

### Alternative Assessment

The term alternative assessment, and particular testing practices associated with it, have recently come into vogue in language testing. Alternative assessment is any classroom assessment practice that focuses on continuous individual student progress. Perhaps the best way to define alternative assessment is to say that it is the counter to traditional forms of standardized assessment. Let's take a closer look at what alternative assessment is and is not.

Alternative assessment is any classroom assessment practice that focuses on continuous individual student progress. Perhaps the best way to define alternative assessment is to say that it is the counter to traditional forms of standardized assessment (46).

The procedures used within this paradigm include checklists, journals, logs, videotapes and audiotapes, self-evaluation, teacher observations, portfolios, conferences, diaries, self-assessments and peer-assessments (Brown & Hudson, 1998, as cited in 32). These procedures have been diversely called alternative or performance assessment as opposed to traditional assessment techniques such as multiple choice, cloze test, dictation, etc.

While the new movement promises more humanistic and rewarding methods of testing and thus has a lot to offer, most teachers are not quite familiar with the new concepts and practices within the emerging paradigm. To enlighten the views of interested teachers, it can be a good start to answer a basic question about the so-called alternative methods of testing which may have occupied their minds. This question is concerned with the relationship of these other methods with the traditional methods normally used within classrooms.



Or to put the question another way, how can we place both traditional and alternative assessment methods in perspective to get a panoramic view of both in the pieced together jigsaw of language testing? To this purpose, it seems necessary to draw on the concepts of testing, measurement and evaluation (32).

### Characteristics of Alternative Assessment

Alternative assessment is also known as formative assessment and portfolio assessment. The characteristics of alternative assessment may include:

- Is usually teacher-generated, as opposed to being passed down from an administration, government or third-party organization.
- Takes into account the individual background and needs of every unique learner.
- Considers the big picture of individual student progress over an extended period of time.
- Is flexible, responsive and continually developing according to curricular objectives.
- Takes into consideration different learning styles and preferences.
- Allows language learners to demonstrate content knowledge and skills mastery without language barrier difficulties.
- Is highly effective for use with students who are entitled to accommodations and/or modifications.
- Is normally documented with qualitative data, such as performance descriptors, comparisons with previous work and skills demonstration (33).

Learn-centered instruction has required a major shift in assessment practices (Figure 2). Authentic assessment has become the umbrella name for the shift in assessment.

Figure 2: Major Shifts in Assessment Practices

Away from	Toward:
<ul style="list-style-type: none"> <li>• Assessing students' knowledge of specific facts and isolated skills</li> <li>• Comparing students' performance with other students</li> <li>• Designing "teacher-proof" assessment systems</li> <li>• Making the assessment process secret, exclusive, and fixed</li> <li>• Restricting students to a single way of demonstrating their knowledge</li> <li>• Developing assessment by oneself</li> <li>• Using assessment to filter and select students out of the opportunities to learn</li> <li>• Treating assessment as independent of curriculum or instruction</li> <li>• Basing inferences on restricted or single sources of evidence</li> <li>• Viewing students as the objects of assessment</li> <li>• Regarding assessment as sporadic and conclusive</li> <li>• Holding only a few accountable for assessment results</li> </ul>	<ul style="list-style-type: none"> <li>• Assessing students' full knowledge base</li> <li>• Comparing students' performance with established criteria</li> <li>• Giving support to teachers and to their informed judgement</li> <li>• Making the assessment process public, participatory, and dynamic</li> <li>• Giving students multiple opportunities to demonstrate their full knowledge</li> <li>• Developing a shared vision of what to assess and how to do it</li> <li>• Using assessment results to ensure that all students have the opportunity to achieve their potential</li> <li>• Aligning assessment with curriculum and instruction</li> <li>• Basing inferences on multiple sources of evidence</li> <li>• Viewing students as active participants in the assessment process</li> <li>• Regarding assessment as continual and recursive</li> <li>• Holding all concerned with learning accountable for assessment results</li> </ul>

Source: Regional Educational Laboratories (1998, February). *Improving classroom assessment: A toolkit for professional developers (Toolkit 98)*, Portland, OR: Northwest Regional Educational Laboratory. Reprinted with permission.

Regional Educational Laboratories, 1998.

Educators define authentic assessment as an approach to measure student performance in a direct, relevant way to see if the learning objectives were met (25). Authentic assessment, also called direct, alternative or performance-based assessment, gives students other opportunities to show what they know (25).

Performance Assessment (or Performance-based) -- so-called because students are asked to *perform* meaningful tasks. This is the other most common term for this type of assessment. Some educators distinguish performance assessment from AA by defining performance assessment as performance-based as Stiggins has above but with no reference to the *authentic* nature of the task (e.g., Meyer, 1992).

For these educators, authentic assessments are performance assessments using real-world or authentic tasks or contexts. Since we should not typically ask students to perform work that is not authentic in nature, I choose to treat these two terms synonymously (26)

Alternative assessment is an alternative to traditional assessments (26) Alternative assessment or portfolio assessment is in direct contrast to what is known as performance evaluation, traditional assessment, standardized assessment or summative assessment. Alternative assessment is also known under various other terms, including:

- authentic assessment
- holistic assessment
- integrative assessment
- assessment for learning
- formative assessment (47).

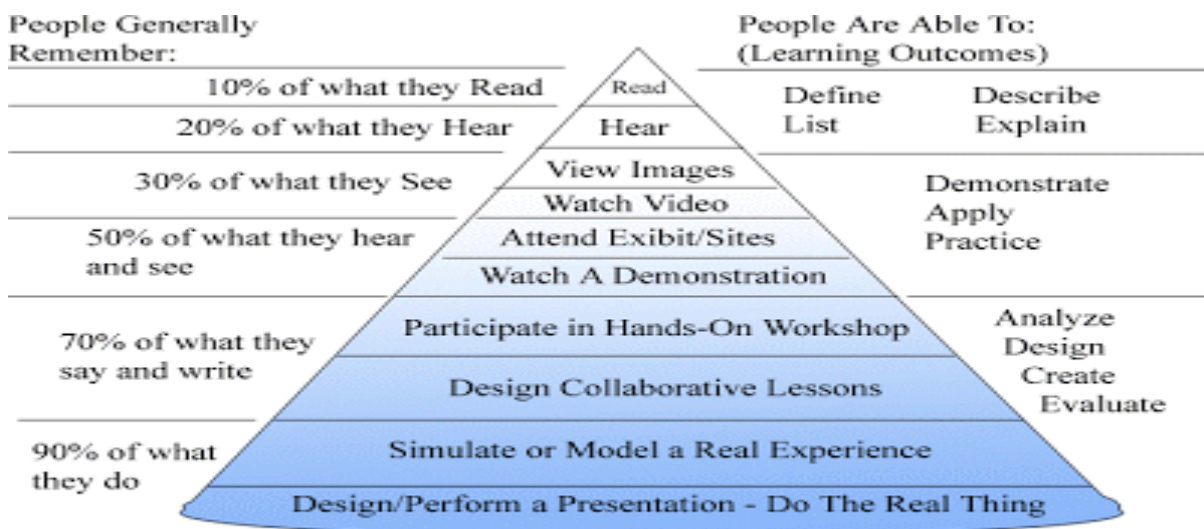
Direct Assessment -- so-called because AA provides more *direct* evidence of meaningful application of knowledge and skills. If a student does well on a multiple-choice test, we might infer *indirectly* that the student could apply that knowledge in real-world contexts, but we would be more comfortable making that inference from a direct demonstration of that application such as in the golfing example above (26)

Why might I use authentic assessment methods in my classroom? (26) This shift is due to many teachers being dissatisfied with only using traditional testing methods. They believe these methods do not test many skills and abilities students have and need to be successful. Students must be prepared to do more than memorize information and use formulas to solve simple problems. They believe students should practice higher-order thinking skills, and see tests they feel do not measure these skills (21).

Authentic assessments help students analyze what they’ve learned and apply it their own experience. They don’t have to memorize facts for a test, so they can use their creativity to show what they’ve learned. For older students who can use a combination of writing and speaking, authentic assessment helps them refine their writing and oral presentation skills. Authentic assessment works great for groups, so students can get experience collaborating on projects with their peers (25).

**Authentic Assessments**

Authentic assessments include context that is realistic, performance-based, and cognitively complex. Scoring criteria for authentic assessments are understood and sometimes developed by students either through multiple indicators or portfolios. Figure 3 provides Dale’s Cone of Experiences provides a bases for why Performance-based Assessments (PBA) and Authentic Assessment are seen as more reliable and valid assessments of learning. Figure 4 provides a modern pictorial presentation called the continuum of realism.

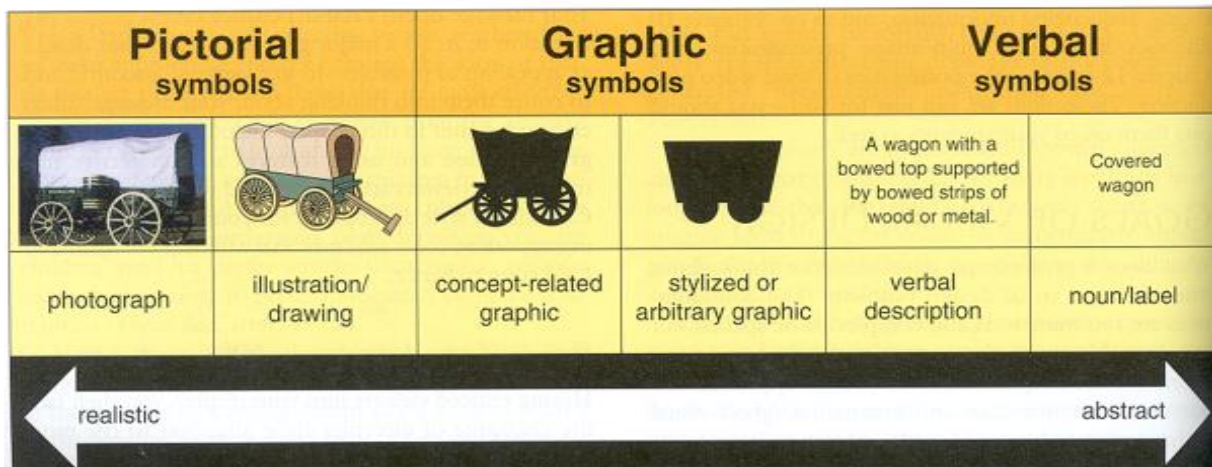


Dale’s Cone of Experience

Figure 3: Dale’s Cone of Experience (54).



### Continuum of Realism



Smaldino, S. E., Russell, J. D., Heinrich, R., & Molenda, M. (2005). *Instructional Technology and Media for Learning*. (8th ed.). Columbus, OH: Pearson Merrill Prentice Hall, 88.

**Figure 4: Continuum of realism**

Smaldino, S. E., Russell, J. D., Heinrich, R., & Molenda, M. (2005). *Instructional technology and media for learning*. (8<sup>th</sup> ed.). Columbus, OH: Pearson, Merrill Prentice Hall, 88.

Most often, teachers will elect to use one of the four major assessment approaches: summative assessments, formative assessments, performance-based assessments, and authentic assessments. Dixson and Worrell (2016) provide an overview of summative and formative assessment use in the classroom. It is important to note that many assessments can be used interchangeably meaning a formative assessment can be designed for use as a summative assessment and summative assessments used as a formative assessment.

Authentic assessments are based on the application of knowledge and the use of meaningful, complex, relevant skills to produce products or simulate real-life activities in real-world settings rather than in artificial or contrived settings.

They can be administered within the context of instruction and easily incorporated into daily activities. Authentic assessments can be real or perceived, the more real-life, the more authentic. These diagnostic assessments include teacher-made tests, performance-based assessments, portfolio assessments, curriculum-based assessments, criterion-referenced tests, skill inventories, daily observations, analyses of work samples, and student interviews (Spinelli, 2006).

The contexts for authentic assessments are students' natural environment (e.g., the classroom, playground, and gymnasium). They occur during typically routine activities (e.g., cooperative group activities; activities in learning centers; large-group discussions; social interactions on the playground, in the cafeteria, and in the auditorium; and dramatic play activities), and in creative settings [e.g., in art and music classes] (Spinelli, 2006).

Authentic assessment drives the curriculum. That is, teachers first determine the tasks that students will perform to demonstrate their mastery, and then a curriculum is developed that will enable students to perform those tasks well, which would include the acquisition of essential knowledge and skills. This has been referred to as *planning backwards* (e.g., McDonald, et al., 1993).

Authentic assessment is a set of methods or techniques for assessing the academic achievement of a student that includes activities requiring the application of acquired knowledge and skills to real-world situations and that is often seen as an alternative to standardized testing (22).

Authentic assessment is any type of assessment that requires students to demonstrate skills and competencies that realistically represent problems and situations likely to be encountered in daily life. Authentic assessment aims to evaluate students' abilities in 'real-world' contexts. Authentic assessment values the thinking behind work, the process, as much as the finished product. It values the learning process as much as the finished product.

Authentic assessment aims to evaluate students' abilities in 'real-world' contexts (Hiebert, Valencia & Afflerbach, 1994; Wiggins, 1993 as cited in 23). In other words, students learn how to apply their skills to authentic tasks and projects. Authentic assessment does not encourage rote learning and passive test-taking. Instead, it focuses on students' analytical skills; ability to integrate what they learn; creativity; ability to work collaboratively; and written and oral expression skills. It values the learning process as much as the finished product (30).

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More specifically "Assessment is authentic when the tasks, content, expectations, and evaluation methods of the assessment are similar to the meaningful tasks, content, expectations, and evaluation methods outside the classroom in the real world" (Frey, 2014, 203). Authentic assessments include context that is realistic, performance-based, and cognitively complex. Scoring criteria for authentic assessments are understood and sometimes developed by students either through multiple indicators or portfolios. Furthermore, authentic assessment values the thinking behind work, the process, as much as the finished product (Pearson & Valencia, 1987; Wiggins, 1989; Wolf, 1989 as cited in 23).

From the teacher's perspective, teaching to such tasks guarantees that we are concentrating on worthwhile skills and strategies (Wiggins, 1989 as cited in 23). Students are learning and practicing how to apply important knowledge and skills for authentic purposes. They should not simply recall information or circle isolated vowel sounds in words; they should apply what they know to new tasks. For example, consider the difference between asking students to identify all the metaphors in a story and asking them to discuss why the author used particular metaphors and what effect they had on the story. In the latter case, students must put their knowledge and skills to work just as they might do naturally in or out of school (23). Many have claimed this type of assessment an excellent means of evaluating a student's knowledge of subject matter (24). Figure 5 provides some types of authentic assessment.

Figure 5: Authentic Assessment

FIGURE 3.2 Types of Authentic Assessment

Authentic Assessment	Description
Portfolios	Collection of student work to show progress over time. All work should not be included. The student and teacher should choose artifacts jointly and reflective pieces should accompany each entry.
Projects	Posters, science projects, models, brochures, pamphlets, PowerPoint presentations, designed to indicate the learner's understanding of particular content concepts. Can be done individually or in pairs.
Experiments and demos	Students complete an experiment or demonstrate how to do something. The method of demonstration can be oral, written, or both.
Writing samples	Students write a narrative, expository, persuasive, or research paper. Learning logs and journals are helpful for formative assessment.
Reading comprehension	Students give main ideas and pertinent details or answer questions from a book, orally, or in writing to demonstrate comprehension.
Teacher observation	Teacher observes student attention spans, interactions with other students, nonverbal behaviors.
Role-play and simulation	Teacher observes student performances and participation to determine understanding and identify misconceptions.
Constructed-response items	Students respond in writing or orally in interviews to open-ended questions.

Baldwin, M. D., Keating, J. F., & Bachman, K. J. (2006). *Teaching in Secondary Schools: Meeting the Challenges of Today's Adolescents*. Columbus, OH: Pearson Merrill Prentice Hall, 66.

### Performance-based Assessments (PBA)

This type of assessment is considered the oldest form of testing commonly used throughout the 1800s prior to being replaced by multiple choice test items around 1914 (Mertler (2003) provides a brief definition of performance-based assessments: assessments that address real life situations. Where multiple choice type assessments identify how well a student knows information (recall, identify, list, match), performance-based assessments show how students can apply their knowledge (classify, compare, analyze, evaluate). Performance-based assessments go beyond measuring lower level thinking skills through application and evaluation. Research findings suggest that performance-based assessments increase students' vocabulary and writing skills while developing motivation and self-confidence in addition to improving teaching practices (Espinosa, 2015). The typical use for performance-based assessments is to assess skills or ability through the "3 P's: Performance, portfolios and products" (Madaus, & O'Dwyer, 1999, 688).

The definition of performance-based assessments varies greatly depending on author, discipline, publication, and intended audience (Palm, 2008). In general, a performance-based assessment measures students' ability to apply the skills and knowledge learned from a unit or units of study. Typically, the task challenges students to use their higher-order thinking skills to create a product or complete a process (Chun, 2010). Tasks can range from a simple constructed response (e.g., short answer) to a complex design proposal of a sustainable neighborhood. Arguably, the most genuine assessments require students to complete a task that closely mirrors the responsibilities of a professional, e.g., artist, engineer, laboratory technician, financial analyst, or consumer advocate (13).

Performance-based assessments are often thought of as one in the same with authentic assessment, however, not all authentic assessments are considered performance-based assessments. The key difference between performance-based assessments and authentic assessments is that the latter requires “students to perform in ways that are valued outside of the classroom” (Frey, 2014, 7) in simpler terms authentic assessments align with real-world application and higher-order thinking skills.

Performance-based assessments appear to be the common denominator! Performance assessments are generally multi-step activities ranging from quite unstructured to fairly structured. The key feature of such assessments is that students are asked to produce a product or carry out a performance (e.g., a musical performance) that is scored according to prespecified criteria, typically contained in a scoring guide or rubric (Marion & Buckley, 2016, p. 51 as cited in 31).

What are the essential components of a performance-based assessment? Although performance-based assessments vary, the majority of them share key characteristics. First and foremost, the assessment accurately measures one or more specific course standards. Additionally, it is: Complex, Authentic, Process/product-oriented, Open-ended, and Time-bound (13).

Performance assessment is a term that is commonly used in place of, or with, authentic assessment. Performance assessment requires students to demonstrate their knowledge, skills, and strategies by creating a response or a product (Rudner & Boston, 1994; Wiggins, 1989 as cited in 23).

Rather than choosing from several multiple-choice options, students might demonstrate their literacy abilities by conducting research and writing a report, developing a character analysis, debating a character's motives, creating a mobile of important information they learned, dramatizing a favorite story, drawing and writing about a story, or reading aloud a personally meaningful section of a story. For example, after completing a first-grade theme on families in which students learned about being part of a family and about the structure and sequence of stories, students might illustrate and write their own flap stories with several parts, telling a story about how a family member or friend helped them when they were feeling sad (23).

The formats for performance assessments range from relatively short answers to long-term projects that require students to present or demonstrate their work. These performances often require students to engage in higher-order thinking and to integrate many language arts skills. Consequently, some performance assessments are longer and more complex than more traditional assessments. Within a complete assessment system, however, there should be a balance of longer performance assessments and shorter ones (23).

Performance objectives are usually written in a behavioral objective format and contain three specific components: a clearly stated action, conditions, and a measurable standard. The action statement ordinarily indicates what a learner should be able to do after instruction. The key element is a word, ordinarily a verb, that clearly communicates a specific behavior. For instance, if students are to “know” the first 10 amendments to the U.S. Constitution in order to more completely understand the court system and thereby become better citizens, they might be asked to write the first 10 amendments and explain their meaning, along with an example and explanation of how each protects individuals' rights. Notice that students are asked to give written examples, make written descriptions, and provide written explanations.

Performance-based assessments are often thought of as one in the same with authentic assessment, however, not all authentic assessments are considered performance-based assessments. The key difference between performance-based assessments and authentic assessments is that the latter requires “students to perform in ways that are valued outside of the classroom” (Frey, 2014, 7) in simpler terms authentic assessments align with real-world application and higher-order thinking skills. More specifically “Assessment is authentic when the tasks, content, expectations, and evaluation methods of the assessment are similar to the meaningful tasks, content, expectations, and evaluation methods outside the classroom in the real world” (p. 203).

A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills -- Jon Mueller (27).

"...Engaging and worthy problems or questions of importance, in which students must use knowledge to fashion performances effectively and creatively. The tasks are either replicas of or analogous to the kinds of problems faced by adult citizens and consumers or professionals in the field." -- Grant Wiggins -- (Wiggins, 1993, p. 229).

"Performance assessments call upon the examinee to demonstrate specific skills and competencies, that is, to apply the skills and knowledge they have mastered." -- Richard J. Stiggins -- (Stiggins, 1987, p. 34).

### **Authentic Assessment Complements Traditional Assessment**

Authentic assessment is a contrast to traditional educational testing and evaluation, which focuses on reproducing information such as memorized dates, terms, or formulas based on rote learning and passive test-taking.

But a teacher does not have to choose between authentic assessment and traditional assessment. It is likely that some mix of the two will best meet your needs. To use a silly example, if I had to choose a chauffeur from between someone who passed the *driving* portion of the driver's license test but failed the *written* portion or someone who failed the driving portion and passed the written portion, I would choose the driver who most directly demonstrated the ability to drive, that is, the one who passed the driving portion of the test. However, I would *prefer* a driver who passed both portions. I would feel more comfortable knowing that my chauffeur had a good knowledge base about driving (which might best be assessed in a traditional manner) and was able to apply that knowledge in a real context (which could be demonstrated through an authentic assessment).

Another way that authentic assessment is commonly distinguished from traditional assessment is in terms of its defining attributes. Of course, traditional assessment's as well as authentic assessments vary considerably in the forms they take. But, typically, along the continuums of attributes listed below, traditional assessment's fall more towards the left end of each continuum and authentic assessment's fall more towards the right end.

<i>Traditional</i> -----	<i>Authentic</i>
Selecting a Response -----	Performing a Task
Contrived -----	Real-life
Recall/Recognition -----	Construction/Application
Teacher-structured -----	Student-structured
Indirect Evidence -----	Direct Evidence

These attributes need to be clarified in the context of traditional and authentic assessments:

Selecting a Response to Performing a Task: On traditional assessments, students are typically given several choices (e.g., a, b, c or d; true or false; which of these matches with those) and asked to select the right answer. In contrast, authentic assessments ask students to demonstrate understanding by performing a more complex task usually representative of more meaningful application (48, 49).

Contrived to Real-life: It is not very often in life outside of school that we are asked to select from four alternatives to indicate our proficiency at something. Tests offer these contrived means of assessment to increase the number of times you can be asked to demonstrate proficiency in a short period of time. More commonly in life, as in authentic assessments, we are asked to demonstrate proficiency by doing something (50, 51).

Recall/Recognition of Knowledge to Construction/Application of Knowledge: Well-designed traditional assessments (i.e., tests and quizzes) can effectively determine whether or not students have acquired a body of knowledge. Thus, as mentioned above, tests can serve as a nice complement to authentic assessments in a teacher's assessment portfolio. Furthermore, we *are* often asked to recall or recognize facts and ideas and propositions in life, so tests are somewhat authentic in that sense. However, the demonstration of recall and recognition on tests is typically much less revealing about what we really know and can do than when we are asked to construct a product or performance out of facts, ideas and propositions. Authentic assessments often ask students to analyze, synthesize and apply what they have learned in a substantial manner, and students create new meaning in the process as well (52).

Teacher-structured to Student-structured: When completing a traditional assessment, what a student can and will demonstrate has been carefully structured by the person(s) who developed the test. A student's attention will understandably be focused on and limited to what is on the test. In contrast, authentic assessments allow more student choice and construction in determining what is presented as evidence of proficiency. Even when students cannot choose their own topics or formats, there are usually multiple acceptable routes towards constructing a product or performance.



Obviously, assessments more carefully controlled by the teachers offer advantages and disadvantages. Similarly, more student-structured tasks have strengths and weaknesses that must be considered when choosing and designing an assessment (53).

Indirect Evidence to Direct Evidence: Even if a multiple-choice question asks a student to analyze or apply facts to a new situation rather than just recall the facts, and the student selects the correct answer, what do you now know about that student? Did that student get lucky and pick the right answer? What thinking led the student to pick that answer? We really do not know. At best, we can make some inferences about what that student might know and might be able to do with that knowledge. The evidence is very indirect, particularly for claims of meaningful application in complex, real-world situations. Authentic assessments, on the other hand, offer more direct evidence of application and construction of knowledge. As in the golf example above, putting a golf student on the golf course to play provides much more direct evidence of proficiency than giving the student a written test. Can a student effectively critique the arguments someone else has presented (an important skill often required in the real world)? Asking a student to write a critique should provide more direct evidence of that skill than asking the student a series of multiple-choice, analytical questions about a passage, although both assessments may be useful (54, 55).

Teaching to the Test: These two different approaches to assessment also offer different advice about teaching to the test. Under the traditional assessment model, teachers have been discouraged from teaching to the test. That is because a test usually assesses a sample of students' knowledge and understanding and assumes that students' performance on the sample is representative of their knowledge of all the relevant material. If teachers focus primarily on the sample to be tested during instruction, then good performance on that sample does not necessarily reflect knowledge of all the material. So, teachers hide the test so that the sample is not known beforehand, and teachers are admonished not to teach to the test (56, 57).

With authentic assessment, teachers are *encouraged* to teach to the test. Students need to learn how to perform well on meaningful tasks. To aid students in that process, it is helpful to show them models of good (and not so good) performance. Furthermore, the student benefits from seeing the task rubric ahead of time as well. Is this "cheating"? Will students then just be able to mimic the work of others without truly understanding what they are doing? Authentic assessments typically do not lend themselves to mimicry. There is not one correct answer to copy. So, by knowing what good performance looks like, and by knowing what specific characteristics make up good performance, students can better develop the skills and understanding necessary to perform well on these tasks. (For further discussion of teaching to the test, see Bushweller, 28.)

### **John Dewey**

The authors have during their years in education come upon the saying "there is nothing new in education except names." After doing the research on learner centered instruction and the various types of "new" assessment it came to mind that the names are new but the educational philosophy is nothing more than Dewey rehashed. You as readers decide.

Over half a century ago, Dewey (1938) expressed the belief that "all genuine education comes through experience" (p. 25). Since then, many educators have struggled with the complex implications of that simply stated notion. Recognizing its complexity, Dewey advised using "those cases in which we find there is a real development of desirable [experiences] . . . to find out how this development took place" (p. 4) and using this new understanding to guide our efforts at teaching and learning.

Dewey often wrote about these same interwoven relationships (1902, 1933, 1964). He advocated placing the learner at the center of experiences, and defined the teacher as the learner's "co-partner and guide in a common enterprise--the child's education as an independent learner and thinker" (1964, 10). He also called for an organic connection between the school and community (1899, 76), assuming it necessary for school experiences to bear some relationship to a child's experiences at home.

The core practices of learner centered instruction defines the most powerful learning experiences as those that engage learners in posing and solving problems, making meaning, producing products, and building understandings.

Another intersection of Dewey's theories with learner centered instruction is what purpose is the content to be learned? When audience is central, course content takes on new and deeper purpose.

Dewey forcefully stressed the need for activities to be linked cumulatively, defining educative experiences as those that give rise to the learner's need to gather more facts, become more skilled, and use lessons learned in one experience as the basis for future experiences.

The purpose for learning does not lie only in the future; skills, knowledge, and experiences must have meaning in the present, too. Dewey believed skills must be useful "in the here and now" (1938, 18) and "make...an individual more capable of self-support and self-respecting independence" (1934, 11).

Dewey believed that imagination "designates a quality that animates and pervades all...meaning making and observation," allowing learners to make connections and see possibilities that may not be evident without "the adventure...of mind [meeting] universe" (1934/59, 271-272).

Dewey referred to as building a "common and shared life..." (1964, 11). The common and shared life happens by building experiences in which every *learner* is not only included, but needed, and emphasizes the value of teamwork. Both inclusion and teamwork are necessary for meeting the social, professional, and daily living requirements ...

Teachers must carefully plan time for learners to stand apart from their work to reflect consciously on what they have learned and how they have learned it (evaluation and assessment). Building reflective environments increases the transfer of knowledge and enables teachers and learners to engage in rigorous, ongoing assessment and evaluation. Because these activities take place at key points during a study--rather than just at the completion they evoke insight and give rise to revisions and refinements critical to improving learning and addressing accountability.

Dewey considered reflection central to all learning experiences, enabling "us to act in a deliberate and intentional fashion...[to] convert action that is merely...blind and impulsive into intelligent action" (1933, 212). In calling for educational experiences that open possibilities for all, Dewey recognized the need for building learning experiences upon a firm understanding of what learners know, what they need to know, and how they come to know.

## Conclusion

The authors asked you in the abstract to answer for yourselves if there is anything new in education. The authors are sure you have noticed that a large number of the references have dates back to the 1930s forward. The references with an asterisk (\*) provide history of experiential learning back to the 1800s in Augsburg, Germany. Authentic education of today is an umbrella term for a number of educational philosophies that have their roots in experiential learning. Have you as a reader figured out "What's in a Name?"

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