

# COMPETENCY 1

## KNOWLEDGE OF VARIOUS TYPES OF ASSESSMENT STRATEGIES THAT CAN BE USED TO DETERMINE STUDENT LEVELS AND NEEDS

### SKILL 1.1 Identify measurement concepts, characteristics, and uses of norm-referenced, criterion-referenced, and performance-based assessments

In evaluating school reform for school communities, educators may implement and assess student academic performance using a variety of tools, including norm-referenced, criterion-referenced, and performance-based assessments.

Effective classroom assessment can provide educators with a wealth of information on student performance as well as teacher instructional practices. Student assessment can provide teachers with the data needed to analyze student academic performance and make inferences about the effectiveness of student learning plans, which can foster increased academic achievement and success for students.

### Assessment

The process of collecting, quantifying, and qualifying student performance is defined as **ASSESSMENT**. A comprehensive assessment system must include a diversity of assessment tools such as norm-referenced, criterion-referenced, performance-based, or student-generated alternative assessments, which can measure specific learning outcomes or goals for student achievement.

### Norm-referenced assessments

**NORM-REFERENCED TESTS (NRT)** are used to classify student learners for homogenous groupings based on ability levels or basic skills into a ranking category. In many school communities, NRTs are used to classify students into AP (Advanced Placement), honors, regular, or remedial classes that can significantly impact students' future educational opportunities or success. NRTs are also used by national testing companies such as Iowa Test of Basic Skills (Riverside), Florida Achievement Test (McGraw-Hill), and other major test publishers to test a national sample of students, which are used to develop norms against standard test-takers. Stiggins (1994) states, "Norm-referenced tests (NRT) are designed to highlight achievement differences between and among students to produce a

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dependable rank order of students across a continuum of achievement from high achievers to low achievers.”

Educators may use the information from NRTs to provide students with academic learning that accelerates students’ skills from the basic level to higher skill applications and thereby enables them to meet the requirements of state assessments and/or core subject expectations. NRT ranking ranges from 1–99 with 25 percent of students scoring in the lower ranking of 1–25 and 25 percent of students scoring in the higher ranking of 76–99. Florida uses a variety of NRTs for student assessments that range from the Iowa Tests of Basic Skills to the California Achievement Test for measuring student learning in reading and math.

## Criterion-referenced assessments

**CRITERION-REFERENCED ASSESSMENTS** examine specific student learning goals and performance compared to a norm group of student learners. According to Bond (1996), “Educators or policy makers may choose to use a criterion-referenced test (CRT) when they wish to see how well students have learned the knowledge and skills which they are expected to have mastered.” Many school districts and state legislation use CRTs to ascertain whether schools are meeting national and state learning standards. The latest national educational mandates of No Child Left Behind (NCLB) and Adequate Yearly Progress (AYP) use CRTs to measure student learning, school performance, and school improvement goals as structured accountability expectations in school communities. CRTs are generally used in learning environments to reflect the effectiveness of curriculum implementation and learning outcomes.

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## Performance-based assessments

**PERFORMANCE-BASED ASSESSMENTS** are currently being used in a number of state testing programs to measure the learning outcomes of individual students in subject content areas. Washington State uses performance-based assessments for the Washington Assessment of Student Learning (WASL) in reading, writing, math, and science to measure student-learning performance. It has been a graduation requirement to pass the required state assessment since the class of 2008; this has created high-stakes testing and educational accountability for both students and teachers in meeting the expected skill-based requirements for tenth-grade students taking the test.

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In today’s classrooms, performance-based assessments in core subject areas must have established and specific performance criteria that start with pretesting in the subject area and continue with daily or weekly testing to gauge student progress toward learning goals and objectives. To understand a student’s learning is to understand how a student processes information. Effective performance

assessments will show the gaps or holes in student learning, which then allows the teacher to focus on providing fillers to bridge nonsequential learning gaps. Typical performance assessments include research papers, oral presentations, class projects, journals, student portfolios, and community service projects.

## Summary

With today's emphasis on student accountability, the public and legislature demands for effective teaching and assessment of student learning outcomes will remain of utmost importance.

Performance-based assessments are being used in some areas in the state testing of high school students. Before a state, district, or school community can determine which type of testing is the most effective, there must be a determination of testing outcome expectation, content learning outcome, and a decision as to the effectiveness of the assessment in meeting these learning goals and objectives.

### SKILL 1.2 Interpret assessment data (e.g., screening, progress monitoring, diagnostic) to guide instructional decisions

The information contained within student records, teacher observations, and diagnostic testing reports is only as valuable as the individual teacher's ability to comprehend the information. Although the student's cumulative record will contain some or all of this information, it is the responsibility of each teacher to read and interpret the information.

Diagnostic test results are generally uniform and easy to interpret. These reports usually include a scoring guide that tells the teacher how to interpret the information. Teachers must be aware that the scores should be interpreted with some caution, as there are always uncontrollable factors; therefore, test scores alone cannot be the ultimate indicator of a child's ability or learning needs. Many other factors influence these scores, including the rapport the child had with the tester, how the child was feeling when the test was administered, and how the child regarded the value or importance of the test. Therefore, the teacher should regard these scores as a ballpark figure.

When a teacher reads another teacher's observations, it is important to keep in mind that each person brings to an observation certain biases. The reader may also influence the information contained within an observation with his or her own interpretation. When using teacher observations as a basis for designing learning programs, it is necessary to be aware of these shortcomings.

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Student records may provide the most assistance in guiding instruction. These records contain information that was gathered over a period of time and may show student growth and progress. They may also contain information provided by several people, including teachers, parents, and other educational professionals. By reading this compilation of information, the teacher may get a more accurate understanding of a student's needs. All of this information is only a stepping stone in determining how a child learns, what a child knows, and what a child needs to know to further his or her education.

**SKILL 1.3 Identify appropriate methods, strategies, and evaluation instruments for assessing student levels, needs, performance, and learning**

Assessment language has been deeply rooted in key terms such as the following:

- **Formative:** Sets targets for student learning and creates an avenue to provide data on whether students are meeting the targets
- **Diagnostic testing:** Used to determine students' skill levels and current knowledge
- **Normative:** Establishes rankings and comparatives of student performances against an established norm of achievement
- **Alternative:** Nontraditional method of helping students construct responses to problem solving
- **Authentic:** Real life assessments that are relevant and meaningful in a student's life (for example, calculating the dollar amount for a 20 percent discount on a pair of sneakers)
- **Performance-based:** Judged according to pre-established standards
- **Traditional:** Diverse selection of teacher assessments that either come with the textbooks or are directly created from the textbooks

### Using Assessment to Adjust Instruction

Assessment skills should be an integral part of teacher training. Teachers need to be able to monitor student learning using pre- and post-assessments of content areas, analyze assessment data in terms of individualized support for students and instructional practice for teachers, and design lesson plans that have measurable outcomes and definitive learning standards. Assessment information should be used to provide performance-based criteria and academic expectations for all

students in evaluating whether students have learned the expected skills and content of the subject area.

For example, in an Algebra I class, teachers can use assessment to see whether students have acquired enough prior knowledge to engage in the subject area. If the teacher provides students with a pre-assessment on algebraic expression, he can ascertain whether the lesson plan should be modified to include a pre-algebraic expression lesson unit to refresh student understanding of the content area. If needed, the teacher can then provide quantifiable data to demonstrate the need for additional resources to support student learning. Once the teacher has taught the unit on algebraic expression, a post-assessment test can be used to test student learning, and a mastery exam can be used to test how well students understand and can apply the knowledge to the next unit of math content learning.

Teachers can use assessment data to inform and impact instructional practices by making inferences on teaching methods and gathering clues for student performance. By analyzing the various types of assessments, teachers can gather more definitive information on projected student academic performance. Instructional strategies for teachers would provide learning targets for student behavior, cognitive thinking skills, and processing skills that can be employed to diversify student learning opportunities.

One of the simplest and most efficient ways for the teacher to get to know her students is to conduct an entry survey. This is a record that provides useful background information about the students as they enter a class or school. Collecting information through an entry survey will provide valuable insights into a student's background knowledge and experience. Teachers can customize entry surveys according to the type of information that is valuable to them individually. Some of the information that may be incorporated include the student's name and age, family members, health concerns, special interests, strengths, needs, and fears; parent expectations; languages spoken in the home; what the child likes about school, and so on.

At the beginning of each school term the teacher will likely feel compelled to conduct some informal evaluations in order to obtain a general awareness of his or her students. These informal evaluations should be the result of a learning activity rather than a traditional testing format and may include classroom observations, collections of reading and writing samples, and notations about the students' abilities as demonstrated by classroom discussions and participation. The value of these informal evaluations cannot be underestimated. These evaluations, if utilized effectively, will drive instruction and facilitate learning.

After initial informal evaluations have been conducted and appropriate instruction implemented, teachers will need to fine-tune individual evaluations in order

to provide optimum learning experiences. Some of the same types of evaluations that were used to determine initial general learning needs can also be used on an ongoing basis to determine individual learning needs.

It is somewhat more difficult to choose an appropriate evaluation instrument for elementary-aged students than for older students; teachers must be mindful of developmentally appropriate instruments. At the same time, teachers must be cognizant of the information that they wish to attain from a specific evaluation instrument. Ultimately, these two factors—students' developmental stage and the information to be derived—will determine which type of evaluation will be most appropriate and valuable. There are few commercially designed assessment tools that will prove to be as effective as the tool that is constructed by the teacher.

A simple-to-administer, information-rich evaluation of a child's reading strengths and weaknesses is the **running reading record**. "This technique for recording reading behavior is the most insightful, informative, and instructionally useful assessment procedure you can use for monitoring a child's progress in learning to read" (Traill, 1993). The teacher uses a simple coding system to record what errors and strategies a child uses while reading text out loud. At a later time, the teacher can go back to the record and assess what the child knows about reading and what the teacher still needs to address in an effort to help the student become a better reader.

If the teacher is evaluating a child's writing, it is a good idea to discourage the child from erasing his or her errors and to train the child to cross out errors with a single line so that the teacher can see the process that the student used throughout a writing assignment. This method becomes an important means of getting to know about students' writing.

Mathematics skills can be evaluated informally by observing students as they work at their seats or perform calculations at the board. Teachers can see if the students know basic computation skills, if they understand place value, or if they transpose numbers simply by watching them as they solve computation problems. Some teachers may prefer to administer some basic computation tests to determine a student's mathematical strengths and weaknesses. Although these methods are not as effective or thorough in assessing students, they are quick and easy to administer.

## SKILL 1.4 Identify and sequence learning activities that support study skills and test-taking strategies

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Tests are essential instructional tools. They can greatly influence students' learning and should be given due regard for their importance when they are being prepared. Several studies have been carried out that indicate conclusively that students perform better when they understand what type of test they are going to take and why they are taking the test before they take it. If students perceive a test to be important or to have relative significance, they will perform better. In a recent study, students whose teachers informed them as to how their test scores would be used and urged them to put forth their best effort scored higher on the Differential Aptitudes Test than students who did not receive this coaching.

Motivation to perform well on tests begins with the student. The intrinsic motivation is an internal drive by the student who aspires to do his or her best in school. The extrinsic motivation may be as simple as a student wanting to learn a basic mathematical skill to complete a remedial math class, or as complex as a student needing to pass a pre-calculus class to take an AP (Advanced Placement) calculus class during his senior year so that he may gain college credit and enter university as an early admission applicant.

Students will also attain higher test scores if they are familiar with the format of the test. It is important for the student to know whether he will be taking a multiple choice test or an essay test. Being prepared for a specific test format can enhance performance. Teachers can help students boost their test performance by providing them with explicit information in regard to the content of the test.

If the focus is on improving student performance on tests, then students must become familiar with the diversity of test taking formats. Students must understand that there are basic study skills and preparations that maximize student outcomes.

In researching the effects of sleep deprivation on student learning and test-taking, Carlyle Smith, a professor of psychology at Trent University in Ontario, determined that when students are taught a complex logic game of memorization, their performance on the logic game decreased by 30 percent when the students were in a sleep-deprived state on the first night. In testing a second group of volunteers who had been deprived of sleep on a second night and another group given a full three nights' rest, the results were similar in that the sleep-deprived students' performance on the logic game was poorer than the performance of the well-rested students. For students, the best performance for test taking begins with a good night's sleep.

Effective test taking includes an ability to size up testing formats and quickly eliminate incorrect answers from a listing of possible choices. The good news is that a student has a 25 percent chance of getting the correct answer from a choice of four answers and a 50 percent chance once the decoys and incomplete answers have been eliminated so that two answers remain. Knowing how the test is constructed will get a student those better odds.

## Objective Tests

Most objective tests will include multiple choice questions, matching, and true/false questions that include a selection of answer choices. The correct answer can be found using a simple process of elimination of decoy or incomplete answers. Helping students review material needed for the tests and providing them sample practice questions will increase student testing performance. Listed below are basic strategies for taking multiple choice tests such as the SAT, ACT, state tests, and class assessment.

- Read the questions and the answers thoroughly
- Look for decoy or partial answers and eliminate them
- Make an educated guess from the answers that remain
- For true/false answers, if any part of the answer given is false, then the entire answer is false, so you have a 50-50 chance of getting a correct response from true/false
- Answer the easy questions first and spend more time on the harder questions
- Listen to your gut instinct on tests; usually your first instinct is correct, but don't be afraid to second guess your gut if you know for a fact that part of the answer that you've chosen has a false component embedded in the answer

## Subjective Tests

Subjective tests put the student in the driver's seat. These types of assessments usually consist of short answer questions, essays, or problem-solving questions that involve critical thinking skills and require definitive proof from the short reading passages to support the answer. Sometimes teachers provide rubrics that include assessment criteria for high scoring answers and projects. The bottom line is that studying and preparing for any type of test will produce better student performance on tests.

# COMPETENCY 2

## KNOWLEDGE OF EFFECTIVE COMMUNICATION WITH STUDENTS, PARENTS, FACULTY, OTHER PROFESSIONALS, AND THE PUBLIC, INCLUDING THOSE WHOSE HOME LANGUAGE IS NOT ENGLISH

**SKILL** **Identify appropriate techniques for leading class discussions**  
**2.1** *(e.g., listening, identifying relevant information, probing, drawing inferences, summarizing student comments, and redirecting)*

The major teaching functions include getting the class under way; providing instruction about what to complete; developing the lesson; managing seat work, homework, and practice; and conducting reviews. All of these functions require teachers to comprehend the aptitude and achievement of students, the appropriateness of subject matter, and the kinds of difficulties students may encounter as they try to learn.

### Engaging Students in Lessons

Students' attitudes and perceptions about learning are the most powerful factors influencing academic focus and success. When instructional objectives center on students' interests and are relevant to their lives, effective learning occurs.

Learners must believe that the tasks that they are being asked to perform have some value and that they have both the ability and the resources to perform them. If a student believes a task is unimportant, he will not put much effort into it. Additionally, if a student thinks she lacks the ability or resources to successfully complete a task, even attempting the task becomes too great a risk. Not only must the teacher understand the students' abilities and interests, he must also help students develop positive attitudes and perceptions about learning tasks.

Teachers can enhance student motivation by planning and directing interactive, hands-on learning experiences. Research substantiates that cooperative group projects decrease student behavior problems and increase student on-task behavior. Students who are directly involved with learning activities are more motivated to complete a task to the best of their ability.

Students generally do not realize their own abilities and frequently lack self-confidence. Teachers can instill positive self-concepts in children and thereby

enhance their innate abilities by providing certain types of feedback. Such feedback includes attributing students' successes to their effort and specifying what the student did that produced the success. Qualitative comments influence attitudes more than quantitative feedback such as grades.

Despite a teacher's best efforts to provide important and appropriate instruction, there may be times when a teacher is required to teach a concept, skill, or topic that students may perceive as trivial and irrelevant. These tasks can be effectively presented if the teacher exhibits a sense of enthusiasm and excitement about the content. Teachers can help spark the students' interest by providing anecdotes and interesting digressions. Research indicates that as teachers become significantly more enthusiastic, students exhibit increased on-task behavior.

Teachers must avoid teaching tasks that fit only their own interests and goals and instead design activities that address the students' concerns. In order to do this, it is necessary to have a sense of students' interests and goals. Teachers can do this by conducting student surveys and simply questioning and listening to students. Once this information is obtained, the teacher can link students' interests with classroom tasks.

## Student responses

There is great value in giving assignments that meet the individual abilities and needs of students. After instruction, discussion, questioning, and practice have been provided, rather than assigning one task to all students, teachers may ask students to generate tasks that will show their knowledge of the information presented. When students are given choices, they have the opportunity to effectively demonstrate the skills, concepts, or knowledge that they, as individuals, have learned. It has been established that student choice increases student originality, intrinsic motivation, and higher mental processes.

Various studies have shown that learning is increased when the teacher acknowledges and amplifies student responses. This can be even more effective if the teacher takes one student's response and directs it to another student for further comment. When this occurs, the students acquire greater subject matter knowledge. This is due to a number of factors.

One is that the student feels that she is a valuable contributor to the lesson. Another is that all students are forced to pay attention because they never know when they will be called on—a phenomenon known as **GROUP ALERT**. The teacher achieves group alert by stating the question, pausing to allow the students to process the question and formulate an answer, and then calling on someone to answer. If the teacher calls on someone before stating the question, the rest of the students tune out because they know they are not responsible for the answer.

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