

We have designed each “White Paper” to explore a fundamental educational principle and key issues engaging the education community we serve. It is our goal to partner with our readers as they meet the challenges they face.



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Benchmarks & Castle Learning Online

“Are you measuring up?” might be the question asked of many people who engage in any activity that requires a knowledge base. Enter the world of the **benchmark**. Outside the school environment, here are some definitions of this term with which you might be familiar:

- The United States *Environmental Protection Agency* uses the term “benchmark” to describe the “[measures of progress toward a goal, taken at intervals prior to the program's completion or the anticipated attainment of the final goal.](#)”
- The United Nation’s *World Health Organization* interprets a “benchmark” to mean some “[reference point or standard against which performance or achievements can be assessed.](#)”
- In the world marketplace, a “benchmark” is defined by portfolio managers to mean “a reference index that serves as a basis for performance comparison.” For example, a well-known company, *Charles Schwab*, uses this term to mean “a standard used for comparison,” such as “[the performance of some index mutual funds is compared to the performance of the S&P 500® Index which serves as a benchmark.](#)” For the uninitiated, the S&P 500® is considered to be the benchmark of the overall U.S. stock market. It is made up of 500 widely-held, Blue Chip stocks representing industrial, transportation, utility, and financial companies with a heavy emphasis in industrials.

Educators view a **benchmark** in their own way as it relates to learning. In education, it is a detailed description of a specific level of student knowledge or performance expected of students at particular ages, grades, or development levels. **Benchmarks** often are used in conjunction with **standards**. Attempting to bring clarity to the term, the Buffalo City Schools (NYS) states that “[benchmarks are also known as standards; standards define the knowledge, skills, and understandings students should demonstrate as a result of their instruction within the subject and grade level.](#)”

Because *Castle Learning Online* is correlated to state standards, teachers using *Castle Learning* have a “friendly” way to apply benchmark testing with automatic grading and reports that can evaluate student understanding. Here’s how it works. In the *Castle Learning Online* course for **Biology**, the unit title “**Unity and Diversity Amongst Living Things**” will allow the educator to read the “Standards” that apply to all questions within that unit of study. For instance, educators in **North Carolina** can view a section called **Unity of Life (The Cell, Instrumentation)** and find the Standard listed as Competency Goal 2 (The learner will develop an understanding of the physical, chemical and cellular basis of life) and a related Objective 2.02 (Investigate and describe the structure and functions of cells). Continuing, the teacher will also see the Standard listed as Competency Goal 4 (The learner will develop an understanding of the unity and diversity of life) and a related Objective 4.02 (Analyze the processes by which organisms representative of the following groups accomplish essential life functions).

Castle Learning Online has been a leader in educational technology and has built its reputation around a mission “*To combine 21st-century technology with proven educational principles, allowing teachers and administrators to empower every student to reach his or her full academic potential.*”