How do competencies and standard work together? An analogy for the road

In this post, we use the analogy of a marathon to explore how competencies and standards can work together to help connect your Profile of a Graduate (or Desired Student Learning Outcomes)to the daily learning experiences of students in your learning syste m.

STANDARDS VS. COMPETENCIES AT A GLANCE

Let's start with a quick overview of major differences between standards and competencies. The table below captures some fundamental distinctions between standards and competencies. Note that there are different a pproaches to competency design in the field; this particular table reflects our perspective at reDesign on some of these key distinctions.

Standards	Competencies
Teacher - facing	Student - facing (e.g., I can…)
Describe learning outcomes in terms of **discipline - specific skills and knowledge**	Describe learning outcomes in terms of **transferable skills and practices** ; may include both academic (e.g., Lead Inquiry) and SEL/efficacy outcomes (e.g., Navigating Conflict)
Constructed as **grade - based performance levels** , designed backwards from college/career expectations	Constructed as **developmental performance levels** detached from grade levels, designed to articulate a vertically aligned pre - K to professional skill trajectory
Learning evaluated using **categorical rating system** (proficiency scales by grade level)	Progress assessed using a **continuous rating system** (single, stable learning progression enabling longitudinal growth measures)
Used by teachers to: plan curriculum, define objectives, design assessments, and evaluate student learning	Used by teachers to: plan curriculum, define learning targets, design assessments, provide student feedback, rate student work, measure short and lon g- term growth
Typically not used by students	Used by students to: self - assess, set goals, monitor, measure and reflect on progress, make decisions about learning needs

What stands out to you in this table? What resonates?

Fundamentally, standards and competencies have different blueprints. One is organized by time; the other by evidence of learning. One is designed backward from college readiness expectations; the other is designed forward as a developmental progression. On e is organized by discipline - specific skills and

knowledge; the other by transferable skills and processes that span disciplines.

These are important differences, and navigating a path to competency implementation within a standards - based environment can feel both complex and confusing. In service of greater clarity about the relationship between standards and competencies in practice, let's explore an analogy that illustrates how standards and competencies, though very different, can work together in ser vice of important learner outcomes.

LIKE A MARATHON

Our analogy for tying together our standards, competencies, and Profile of a Graduate (or system - wide definition of desired student outcomes), is a marathon. While there are certainly some limitations to this analogy, it highlights a few key important aspects of the relationships between standards, competencies, and the Profile of a Graduate that may be helpful.

The finish line of the marathon represents the Profile of a Graduate (or Desired Student Lear ning Outcomes). In an equitable learning system, we are committed to every runner crossing the finish line. The race is not just about effort; it's about completing that 26.2 mile journey. Different runners may set different goals for their experience or participation; differently - abled athletes may participate in the race in different ways or have different needs to support their best performance; but everyone is invested in the accomplishment of crossing the finish line.

The mile markers represent the performance expectations described in standards (or other time - bound benchmarks in your learning system). Mile markers are fixed, as are grade - based standards. It's impossible to reach the finish line without progressing through each mile marker; you can't reach mile 14 until you've passed through mile 13 and every marker before

that. Similarly, standards - based learning systems establish benchmarks in the form of grade - based pro ficiency targets that are important for staying on track for graduation. To prepare for the marathon, runners need to learn how to run long - distance, and they need to build their stamina through practice at increasingly long distances so that they'll have developed the level of fitness needed required for the marathon.

The skills, strategies, and dispositions that support the "how" of your race are the competencies. For example: the ability to develop a strategy for the race; to engage with a coach or ment or to integrate feedback and improve your running form; the ability to sustain motivation and make strategic decisions amidst dynamic conditions - such as changing weather, dips in energy, or changes in the lead or pack's pacing.

Notably, these skills, s trategies, and dispositions are *transferable* . While they are important and valuable in the context of a marathon, they have value in many other contexts beyond sports. It's also important to note that the effort and attention invested in developing these s kills, strategies, and dispositions is not in competition with the importance of spending time running long distances to build stamina. Both long - distance running and skill and strategy development are critical to a successful race; they work hand - in - hand in service of the desired outcome. In the same way, transferable competencies and discipline - specific knowledge and skills (standards) are not in competition; they work together in service of deep learning and successful demonstrations of learning. Certain ly, stamina alone is not sufficient for an optimal performance. Similarly, motivation, strategy, and great running form won't be sufficient to get you through every mile marker.

NO PERFECT ANALOGY

There are limitations to this analogy; to avoid misconcep tions, let's be terribly explicit about two important ones. First, the

notion of linearity and a single path may be true for a marathon, but it is certainly not the case for learning. A better example might be a marathon with multiple paths to the finish l ine, much like the famous Mount Marathon 5K in Seward, Alaska, where runners typically follow a similar path, but are permitted to break from the trail if desired as they s ummit and then descend the peak of Mt. Marathon.

A second limitation of this analogy is the notion that learning is a time - bound race. Unfortunately, school can feel very much like a time - bound race! We should let go of the notion of a single best pace th at we're all racing for, or that we expect of all students. The marathon analogy can illuminate a much more important reality, which is the very natural, predictable expression of *human variability in learning* , just as in any sports performance.

A few we eks ago, I asked a large group of educators to rate themselves on South Carolina's *Sustaining Wellness* continuum, which ranges from Level 1 (pre - K) to Level 7 (professional). The Sustaining Wellness competency has skill components related to understanding and celebrating your own identity, learning to advocate for yourself, engaging in practices that foster health, and so on.

I asked everyone to follow two rules as they self - assessed:

> 1) Apply the "whole enchilada" rule: to rate yourself at a particular level on the continuum, you need to demonstrate all of the indicators listed, not just some, or partially
> 2) It only counts if you can identify evidence from your life of your ability to demonstrate the indicator.

When the rating time came to a close, I lifted up my own version of the continuum, with bright green squares highlighting my ratings. In some skill domains, I was as low as a level 3, in others,

a level 5, 6, or 7. In short, I was all over the map, and as it turned out, so was everyone else in the room.

There's no shame in this. Human variability is not the problem; it's par for the course. While this idea runs counter to the principles of standardization, a competency - based learning system embraces this reality, and commits to an approach that meets every learner where they are, and works to optimize their growth and the conditions that support it.

TWO APPROACHES TO STANDARDS AND COMPETENCIES WORKING TOGETHER

We've seen learning systems take different ap proaches to integrating standards and competencies; there's certainly no one right way. Let's take a look at two examples.

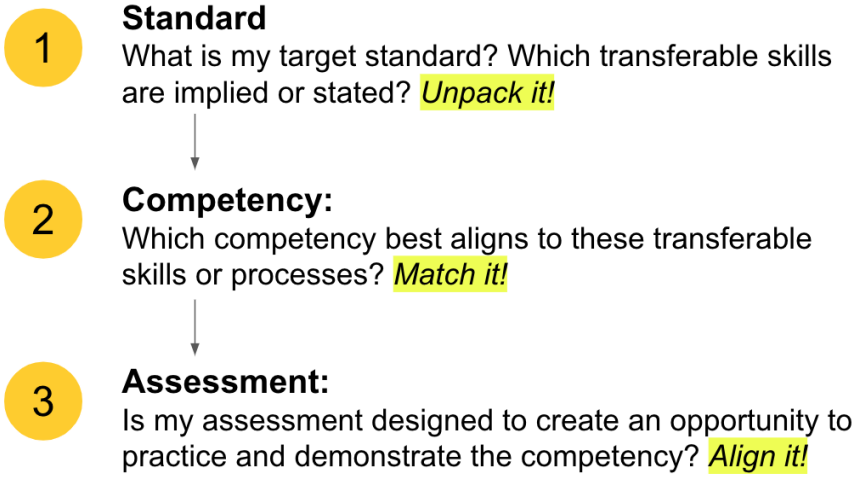
Competencies as "filling the gaps" of standards

For example, some learning systems develop competencies to "fill in the gaps" left by standards that strictly focus on academics. In these cases, competencies that focus more on social and emotional development (like our Sustaining Wellness example, above) are created to supplement standards and address skills, strategies, or dispositions that simply do not exist in disciplinary standards.

Competencies as companion to standards

In other learning systems, standards and competencies complement each other in a very different way: standards become the lighthouse of *content knowledge* (What do students need to know?), and competencies provide the detailed trajectory for skill development (What do we need to be able to do, and how can I continue to improve how wel l I can do it?). In this context, teachers typically begin by unpacking standards and following a matching process to identify a target competency, to help plan units and design lessons. The unpacking process might look

something like this, where we look f or the “verb” in the standard to engage in competency matching:



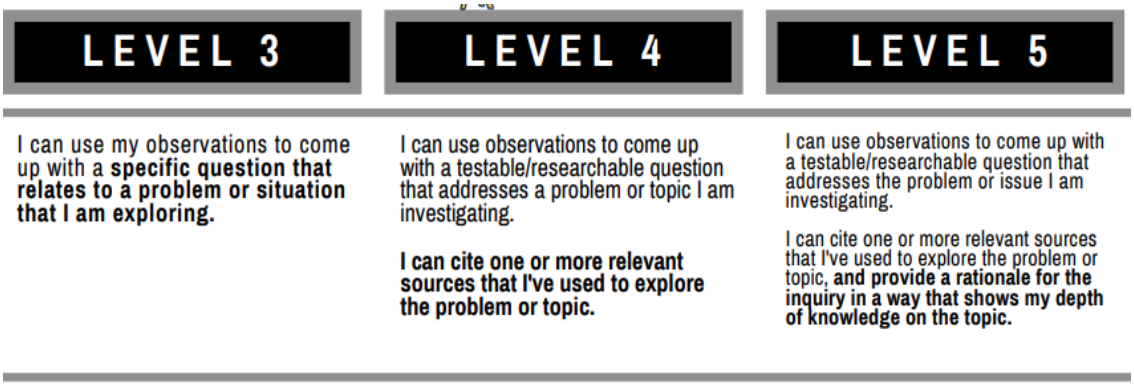
In these contexts, we hear from teachers that competency continuums are immensely helpful, because they provide detailed and observable language that brings clarity to teaching the “verbs” in standards. Let’s look at this science standard progression from the state of South Carolina. What changes most notably in the standards as you read from left to right?

Grade 2	Grade 4	Grade 6	Grade 8	BIOLOGY
2.P.3A.3 Conduct structured investigations to test how adding or removing heat can cause changes in solids and liquids.	4.P.4A.5 Plan and conduct scientific investigations to explain how light behaves when it strikes transparent, translucent, and opaque materials.	6.P.3B.1 Plan and conduct controlled scientific investigations to provide evidence for how the design of simple machines helps transfer mechanical energy by reducing...	8.P.2A.1 Plan and conduct controlled scientific investigations to test how varying the amount of force or mass of an object affects the motion (speed and direction), shape...	H.B.2A.2 Plan and conduct investigations to determine how various environmental factors (including temperature and pH) affect enzyme activity and the rate of biochemical reactions.

The transferable skills (or competency) described in the science standards above are about leading an inquiry process, which has utility in the science discipline, but also in many other disciplines and contexts as well.

Now let's compare the language of the standards with the language of the competency designed for South Carolina's Profile of a Graduate, *Leading Inquiry*, which was developed with the following skill components:

- Frame a research question
- Form a hypothesis
- Develop and strengthen a plan
- Collect and analyze data
- Share findings
- Follow writing conventions



LEVEL 3	LEVEL 4	LEVEL 5
I can use my observations to come up with a **specific question that relates to a problem or situation that I am exploring.**	I can use observations to come up with a testable/researchable question that addresses a problem or topic I am investigating. **I can cite one or more relevant sources that I've used to explore the problem or topic.**	I can use observations to come up with a testable/researchable question that addresses the problem or issue I am investigating. I can cite one or more relevant sources that I've used to explore the problem or topic, **and provide a rationale for the inquiry in a way that shows my depth of knowledge on the topic.**

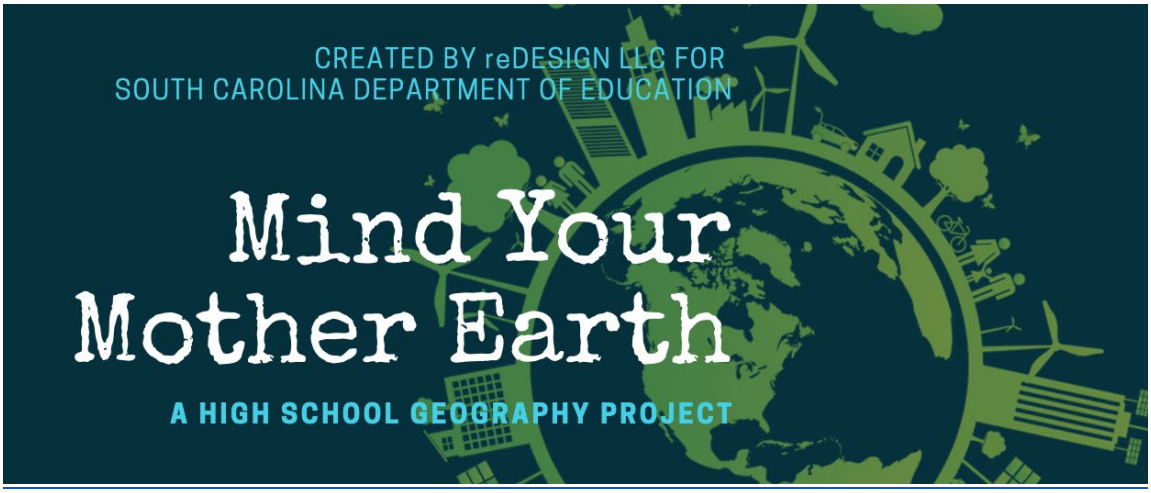
Here is an excerpt from the continuum (view full continuum here) for the skill component, "Frame a research question:" The skill component, "Frame a research question," provides guidance into the "how" of this part of the process: for example, using observations, generate questions connected to the investigation, drawing on evidence to articulate a rationale. This level of detail is absent from the standards.

The standard without the competency leaves teachers and students without a clear articulation of the novice-to-expert path of skill development for the inquiry process. The

competency without the standard leaves teachers and students without guidance as to which skills and content to focus on throughout the course. Taken together, teachers and learners are provided with specific guidance related to the knowledge and skills that ultimately reflect the South Carolina Profile of a Graduate.

One last resource to illustrate what standard - competency partnership can look like in action when both are used to shape the academic program. In this model competency - based unit, both standards and contents not only coexist, but deeply shape the design of the learning experiences for students on a daily basis.

As you click into to explore le ssons, notice the careful pairing of standard and competency, synthesized in the form of explicit learning targets that build toward the final product.



For a deeper look at the differences between competencies and standards, consider reading the post, *What is the difference between competences and standards?*