

---

# Introduction

## THE NEED FOR A NEW EDITION

Even a timeless process needs to remain timely. Eight years have passed since *Common Formative Assessments: An Assessment Model to Help All Students Succeed* (2006) was first published, and thousands of K–12 educators across North America have successfully implemented the ideas and processes presented in that original volume. Established professional practices will continue to prove effective now and in the future so long as they remain relevant to the prevailing changes and educational demands of the time.

After many years presenting the CFA process to K–12 educators and leaders in districts all over the United States and Canada, I have seen the need for teams of teachers to revisit their initial CFA drafts in order to evaluate their assessment questions for quality. In doing so, they are able to then revise and improve those assessments. Because the inferences educators make about student learning can only be as good as the evidence they collect, the *source* of that evidence—the assessments themselves—must be of high quality.

Even if you have never attended an assessment design course or workshop, by following the new, step-by-step CFA 2.0 process you will be able to successfully create a quality assessment. Those who are already experienced in designing CFAs will find that this updated process will take your CFAs to an even higher level of effectiveness.

## INTRODUCTION TO COMMON FORMATIVE ASSESSMENTS 2.0

Common formative assessments are aligned pre- and post-assessments *for* learning that are collaboratively designed by a grade- or course-level team of educators to assess student understanding of the particular learning intentions and success criteria currently in focus within a curricular unit of study.

CFAs afford grade- and course-level teacher teams a clear lens through which to see their instructional impact on student learning. The assessment questions directly match the levels of cognitive rigor within the unit learning intentions (derived from academic content standards or provincial learning outcomes). Accompanying success criteria describe explicitly what students are to demonstrate in their assessment responses to show they have achieved the learning intentions. Knowing what they are to learn and how their understanding will be evaluated, students are empowered to take a more active role in their own learning.

**Learning progressions** are the smaller, sequenced “building blocks” of instruction necessary for students to understand the larger unit learning intentions. Shorter formative assessments—*quick progress checks*—occur throughout the unit after learning progressions. These quick checks of student understanding provide immediate feedback that educators use to adjust instruction and that students use to self-regulate their learning strategies. Learning progressions and corresponding quick progress checks are new steps added to the original CFA process.

## KEY BENEFITS OF CFAS

- The CFA 2.0 process is not limited to assessment design only. Rather, it is a *system* of intentionally aligned components (standards, instruction, and assessments) that all work together to improve student learning.
- Grade- and course-level teams of educators collaborate to intentionally align their pre- and post-CFAs and write their assessment questions to match the same level of rigor as in the unit’s learning intentions (derived from state, provincial, or Common Core standards).
- CFAs include a blend of assessment formats: selected response, constructed response (short and extended), and Essential Questions requiring students’ Big Idea responses. This multiple-format assessment makes learning more visible because it affords students more than one way to “show all they know.”
- Teacher teams use the resulting student responses as diagnostic feedback to correctly interpret student understanding and differentiate instruction. Students use the same valuable feedback to monitor and adjust their individual learning strategies.
- Educators often write their CFA questions to reflect the formats of state, provincial, and national assessments so students have ongoing opportunities to demonstrate what they are learning in the ways they will be expected to respond on standardized achievement tests.

- CFA questions are evaluated for quality and revised as needed using established criteria. This ensures that the inferences educators make from the assessment results are accurate.
- Educators find great value in collaboratively scoring the CFAs, discussing the results, and planning ways to achieve improvements in student learning on the next common formative assessment they administer.
- Common *formative* assessments can do what large-scale *summative* assessments, by design, cannot—provide classroom educators with timely, credible evidence of their impact on student learning and achievement. Focusing energy and time on the analysis of small-scale, school-based assessments to improve instruction is sure to help educators meet the diverse learning needs of all students.

## WHAT'S NEW IN THE NEW EDITION?

The original CFA process remains essentially the same, although it has been enhanced to include important aspects absent from the original. Here is a preview of the key points of emphasis in the CFA 2.0 process, organized by category:

### Standards and Learning Outcomes

- Applies to all standards (state and Common Core), all learning outcomes (province specific), all grades, all content areas; educators need only insert the unit-specific learning intentions for their grade level or course into the structure provided.
- Targets the specific learning intentions and student success criteria for a multi-week unit of study that are derived from the **Priority Standards**, “unwrapped” concepts, skills, levels of cognitive rigor, **Big Ideas**, and **Essential Questions**.

### Intentional Alignment

- Shows how to match assessment questions to the predetermined levels of cognitive rigor, using the revised Bloom’s Taxonomy and Webb’s Depth of Knowledge matrices.
- Describes how to partner quick progress checks with learning progressions (the incremental building blocks of the larger unit learning intentions).

- Underscores the importance of teacher teams closely aligning their pre-assessments with their post-assessments for each unit of study.

### **Large-Scale External Assessments**

- Emphasizes the need for educators to know how their students will be assessed on standardized achievement tests and then to design their CFAs to reflect the formats, vocabulary, and rigor of those external exams. In this way, students will become familiar with how they will be expected to show what they have learned prior to taking those high-stakes tests.
- Provides links to online examples of questions from the Smarter Balanced Assessment Consortium (SBAC) and Partnership for Assessment of Readiness for College and Careers (PARCC) assessments.

### **Diagnostic Use of Data**

- Allows for timely analysis of formative assessment data to accurately interpret student understanding and plan instructional “next steps” to meet student learning needs.
- Enables educators to continually modify and adjust instruction during the unit based on results from ongoing quick progress checks aligned to the post-CFA.
- Advocates the sharing of assessment results (pre-CFA, quick progress checks, and post-CFA) with students.

### **Success Criteria**

- Informs students at the beginning of the unit of the success criteria they will need to demonstrate by the end of the unit.
- Provides students with detailed scoring guide success criteria to guide their responses when they complete constructed-response assessment questions.

### **Assessment Quality**

- Presents specific criteria to ensure that the assessment questions are of high quality. These criteria include validity, reliability, freedom from bias, alignment, format, vocabulary, and thinking skill rigor.
- Explains and illustrates how to use assessment quality guidelines to critique and revise assessment questions.

## Recent Research Support

- Includes important formative assessment research support published after the original 2006 edition of *Common Formative Assessments* (e.g., John Hattie, *Visible Learning* and *Visible Learning for Teachers*; Dylan Wiliam, *Embedded Formative Assessment*; W. James Popham, *Transformative Assessment*; and others).

## The Role of Leaders

- Updates information for leaders on how to implement and sustain common formative assessments and create a culture of improvement within a school and school system.

Each chapter opens with the specific learning intentions for that chapter and, beginning in Chapter 3, a diagram showing the ten sequential steps of the CFA 2.0 process, with the current step highlighted. It then describes the rationale for that step, explains how to complete it effectively, and provides accompanying examples to illustrate it. Each chapter concludes with specific success criteria related to the content of the chapter that readers can use for individual reflection and/or team discussion.

## THE IMPORTANT ROLE OF LEADERS

School and district leaders who understand the significant potential that common formative assessments have for improving both the quality of instruction and the subsequent learning of all students play a vital role in implementing this process in their schools. For the CFA 2.0 process to truly take root within the culture of a school or district, leaders need to “champion” the process. They can do this by (1) making a commitment to fully understand the CFA 2.0 process through their own professional learning and then by (2) ensuring that the practice is systematically well implemented in each grade level and/or course.

One essential support that leaders can provide educators is to deliberately look for creative ways to rearrange daily teaching schedules to promote more opportunities for grade- and course-level teams to plan together. By freeing participating teachers to meet in grade-level and course/department teams, administrators provide teachers with both the support and structure critical to effectively plan and implement these important standards, instruction, and assessment practices.

Effective administrators know that for any educational practice to yield lasting changes, classroom teachers must invest in and take ownership of the entire process. Educators must be “at the table” in the research, design, implementation, and monitoring of progress on all-important changes that will impact curriculum, instruction, and assessment. When instituting a key change in professional practice, such as the implementation of CFAs, educators and leaders must continually work together to make that change work.

## **TOWARD A STUDENT-CENTERED ASSESSMENT PROCESS**

Before students can be fully at the center of the assessment process, educators need to have the core components of that process firmly in place within the day-to-day practices of their individual classrooms. They can then begin shifting ownership of that process into the hands of the students. As teacher teams continue to increase students’ involvement in the effective use of formative assessments, students can truly take charge of their own efforts to reach and exceed personal learning goals. The step-by-step CFA 2.0 process builds the important foundation that can ultimately lead to greater student involvement and ownership.

## **LET’S GET STARTED!**

*Common Formative Assessments 2.0* will provide busy educators and leaders with a practical, how-to guide filled with information, examples, and action steps to assist all K–12 grade- and course-level teams in making this completely re-envisioned process their own. My sincere hope is that this new expanded edition will prove to be a doable road map that you and your colleagues can follow to build your own “highway to aligned assessments,” one that makes CFAs an indispensable part of your important work of helping all students succeed.

# 1

## A Highway to Aligned Assessments

### In This Chapter You Will Learn:

- The standards and assessment components of a quality CFA.
- How formative progress checks, data analysis, and instruction intersect.
- How you can construct, in progressive steps, the CFA 2.0 “highway” of aligned assessments.

### DESTINATION: MAXIMUM IMPACT

Sometimes we begin a journey in education without being completely clear as to why we are doing so. The primary goal of this book is to help educators maximize their positive impact on student learning. The pages that follow will focus on describing and illustrating a powerful means for achieving that goal—effectively designed common formative assessments, often referred to simply as CFAs. Why CFAs? If assessment results enable teacher teams to make valid and reliable inferences regarding their students’ current learning status, they will then be able to adjust instruction accordingly and see for themselves the positive impact of those instructional adjustments.

So how do you increase the likelihood that educators will be able to accurately infer what students know and can do with regard to the learning intentions in current focus? By ensuring that each assessment question meets all of the established criteria for quality (presented in Chapter 9). If

the assessment does *not* meet all of these criteria, educators will be unable to interpret student understanding confidently.

Our conclusions about what students know and can do are only as good as the evidence we collect, and that evidence is only as good as its source—the assessments themselves. If the assessment questions are faulty, then the inferences are bound to be incorrect. Working through the CFA 2.0 process together, teacher teams create the caliber of assessments that make valid and reliable inferences possible.

To reach the desired destination of maximum impact on student learning, we need to concentrate on building and traversing a “highway” that can take us there. But first, we want to see what that highway is going to look like when finished.

## SEEING THE ENTIRE HIGHWAY

Do you consider yourself a “big picture” person? Do you like to see the whole before looking at the individual parts? In my many years of leading educators and leaders through the initial design of a common formative assessment, the answer to that two-part question for the vast majority of participants is *yes*. It’s about making connections first, and seeing how all of the parts fit together to form one meaningful whole, before investing time, thought, and energy into any one part or step.

Busy educators and leaders rightly want to know up front, “What is this all about, and where are we headed?” Because the CFA 2.0 process contains many moving parts, it is helpful to first see a blueprint of where all those parts fit into the completed design and how those parts must intentionally work together to produce the desired outcome—a quality set of aligned assessments specific to a unit of study.

To illustrate the construction of the CFA highway, the following sections will introduce each sequence of steps in progressive installments, building by chapter’s end to a big-picture view of the completed highway.

## CFA 2.0 DESIGN FUNDAMENTALS

Let’s start with the basics, each of which will be fully described in later chapters. The CFA 2.0 *design fundamentals* focus on explicit standards and related assessments for an individual **unit of study**. A unit of study is a “series of specific lessons, learning experiences, and related assessments based on designated Priority Standards and related supporting standards for an (instructional) focus that may last anywhere from two to six weeks”



(Ainsworth, 2010, p. 324). The duration of a unit of study depends on the number and rigor of the targeted standards for that unit and the length of time educators estimate it will require for students to learn them.

The fundamental standards components within a unit of study are these:

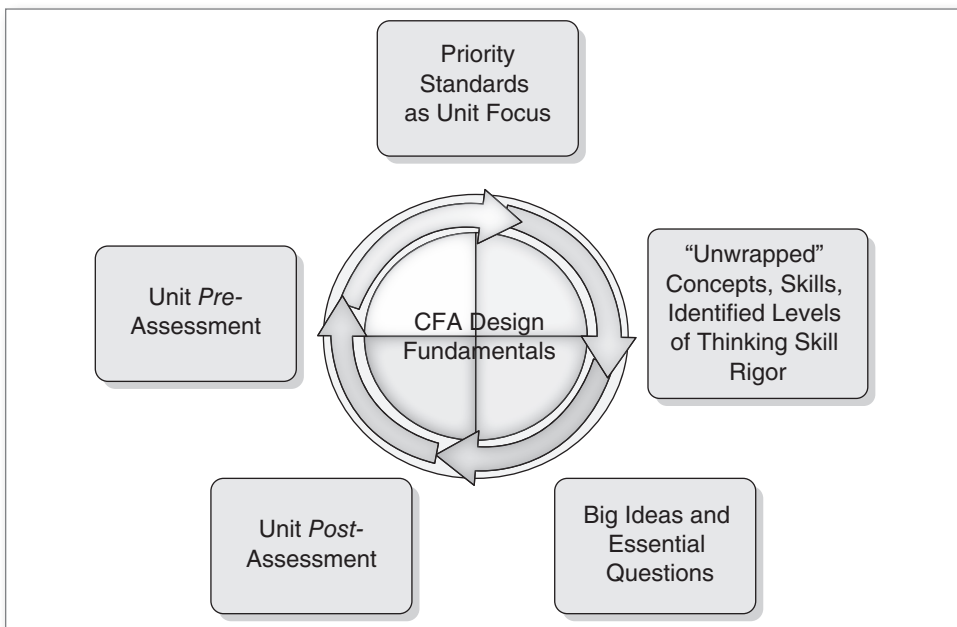
- Priority Standards (grade- or course-specific state, provincial, and Common Core standards to emphasize the most)
- “Unwrapped” Priority Standards concepts, skills, and identified levels of cognitive rigor
- Big Ideas and Essential Questions

The two main assessment components within the unit of study are these:

- Unit post-assessment
- Unit pre-assessment

Figure 1.1 shows a visual representation of these standards and assessment components, arranged in a clockwise direction (starting at the top with Priority Standards) to indicate the design sequence.

**Figure 1.1** Building the Foundation: Fundamental Design Steps



Grade- and course-level teams of educators meet together to “unwrap” selected Priority Standards for a unit of study. Next they create a graphic organizer that includes the “unwrapped” concepts, skills, and levels of cognitive rigor. Then they write Big Ideas and Essential Questions. When these elements are complete, they design the post-CFA followed by an aligned pre-CFA, so they will have an apples-to-apples comparison of student learning from the beginning to the end of the unit.

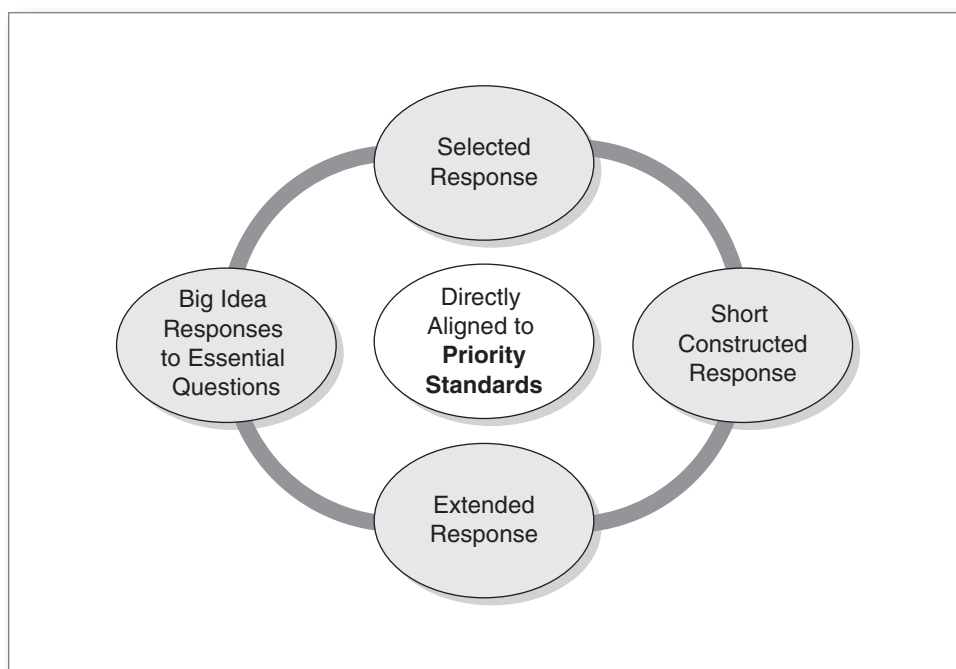
The post-CFA is a multiple-format assessment directly aligned to the “unwrapped” Priority Standards as shown in Figure 1.2. Note that authentic performance tasks are not part of the on-demand CFA due to the time it takes students to complete them. However, they play a key role in preparing students for success on the post-CFA. Authentic Classroom performance tasks are defined and summarized in Chapter 3.

## CFA 2.0—DESIGN FUNDAMENTALS *PLUS*

The CFA 2.0 process incorporates new standards elements into this basic design framework. These new elements are

- Unit learning intentions—the specific learning outcomes students are to achieve by the end of the unit

**Figure 1.2** A Four-Part Assessment Aligned to Priority Standards



- Student success criteria—performance descriptors that spell out how students will show they have achieved the learning intentions

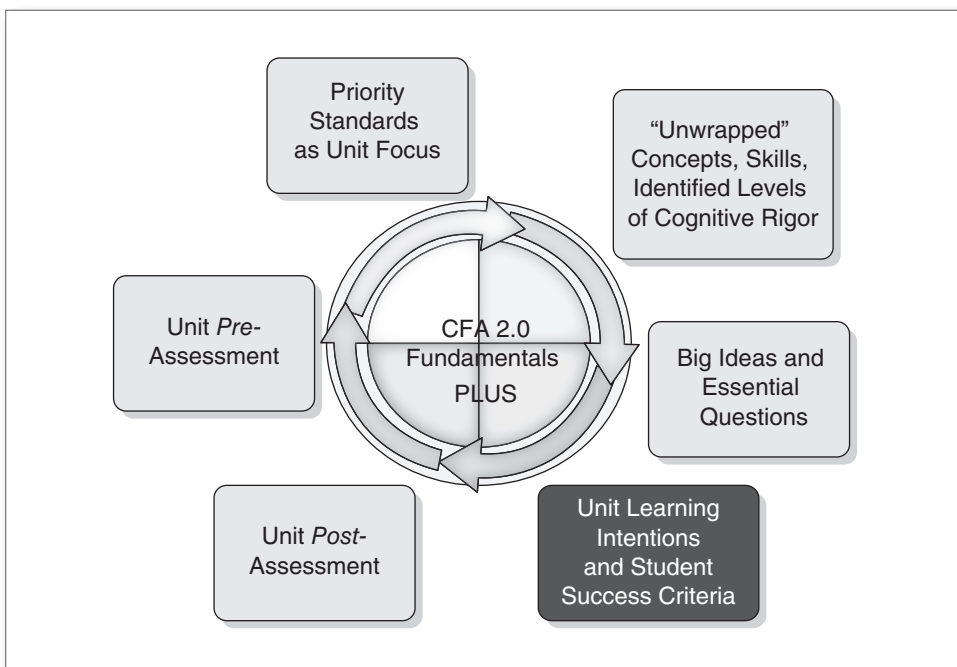
In the CFA 2.0 process, teacher teams combine their “unwrapped” Priority Standards, targeted vocabulary, Big Ideas, and Essential Questions into unit learning intentions and student success criteria (described and illustrated in Chapter 6). They complete this new step immediately after determining their Essential Questions and *before* designing their post-CFA, as shown in Figure 1.3.

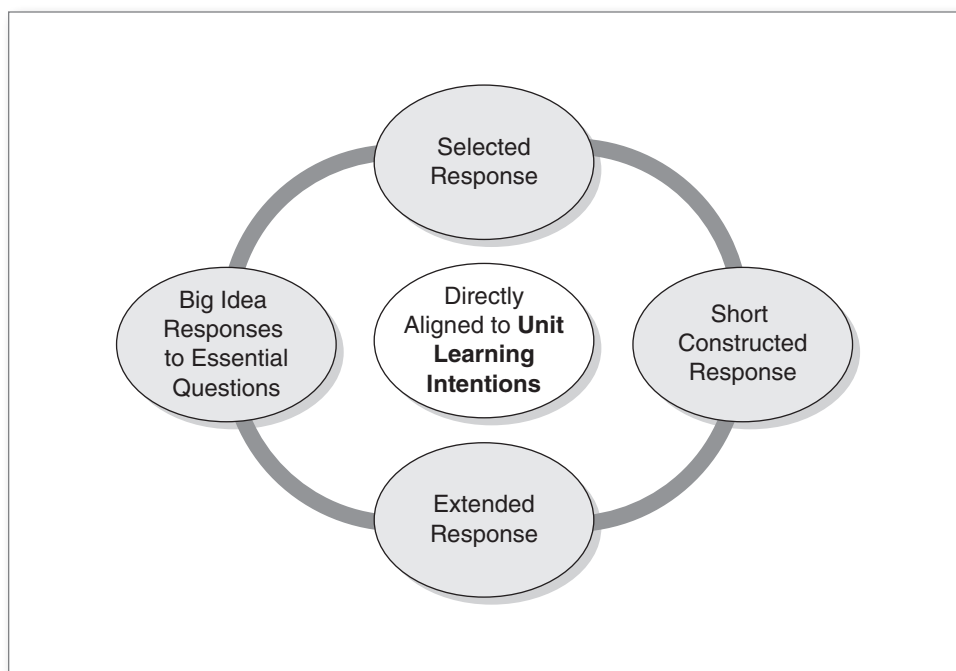
The post-CFA remains a multiple-format assessment but is now directly aligned to the comprehensive list of unit learning intentions and student success criteria, as shown in Figure 1.4.

## ANALYZING THE ASSESSMENT RESULTS

After the teachers administer the pre-CFA, they meet to analyze the results, set goals for student improvement, and identify instructional strategies to assist them in achieving these goals. They touch base with one another periodically during the unit to evaluate the effectiveness of their targeted instructional strategies. They meet again as a team at the end of the unit to repeat the data analysis process using the post-CFA results.

**Figure 1.3** Strengthening the Foundation: Design Fundamentals *Plus*



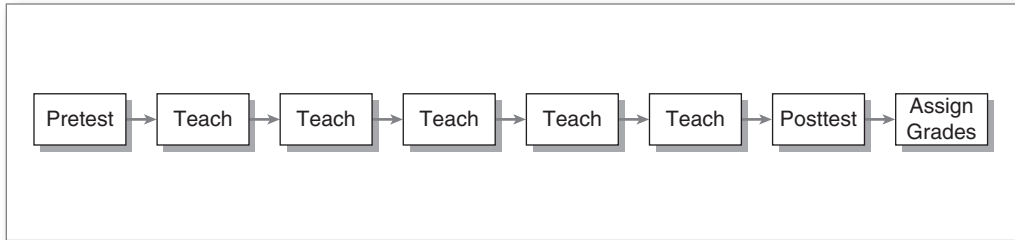
**Figure 1.4** From Priority Standards To Unit Learning Intentions

This type of collaboration takes place in what are now widely known as professional learning communities or PLCs. These can include the entire faculty in the broadest sense and/or the smaller, grade- and course-level teacher teams. In the common formative assessment context, educators are part of grade- or course-level professional learning *teams* that design and implement CFAs and then conduct the follow-up analysis of student results.

## CHANGING THE TRADITIONAL INSTRUCTION-ASSESSMENT CYCLE

The collaborative work by teams of educators meeting to create a CFA and process the student results is a significant departure from the way things were done in the not-too-distant past.

As shown in Figure 1.5, teachers would pretest (but not always). Then they would teach-teach-teach-teach-teach. At the end of several weeks of instruction, they would posttest, assign grades, and repeat the same process with the next instructional unit or body of academic content. Often there was little, if any, real analysis of student work done with either the formative (pretest) or summative (posttest) results, particularly if the tests had not been deliberately aligned, one to the other.

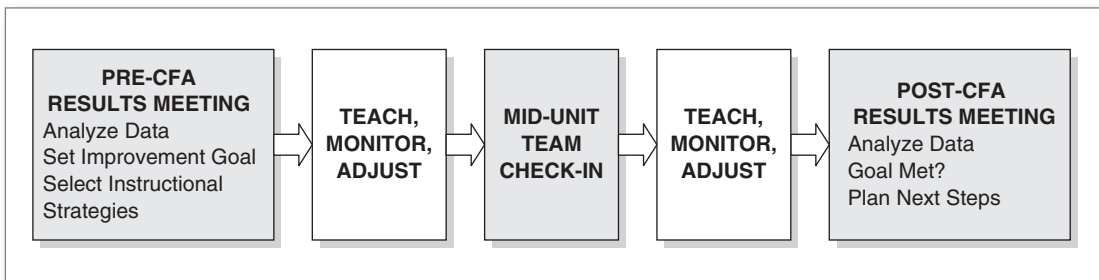
**Figure 1.5** The Traditional Instruction-Assessment Model

Source: Ainsworth & Viegut (2006).

When PLCs began forming with the express purpose of collaboratively looking at student work and planning subsequent instruction, *data analysis* was introduced into the instruction-assessment model, as shown in Figure 1.6.

The emphasis now became more about using the pre- and post-assessment data to determine with more accuracy what students knew going into the unit, analyzing the data to set an improvement goal for all students, selecting instructional strategies to achieve it, and then determining what students had learned by the end of the unit.

At this time, creating *common* formative assessments as a team was still a new professional practice for most educators, so analyzing student assessment data to interpret student learning during PLC meetings was usually limited to the pre- and post-CFA results only. The infrequency of meetings was not necessarily because educators didn't feel they were useful. Teams were simply having trouble finding ways to schedule common planning time. However, enterprising teams with the support of their administrators began scheduling a short meeting around the middle of the unit to determine if their targeted instructional strategies were having the kind of impact they expected, or if those strategies needed to be adjusted or replaced altogether.

**Figure 1.6** The Collaborative Data Analysis Process

Throughout the unit, teachers were on their own to teach and check for student understanding, as represented by the “teach, monitor, adjust” steps shown in Figure 1.6. During a lesson, they would ask students for a “thumbs up, thumbs down” response as a quick way to check for understanding. Occasionally they might insert a quiz (“pop” or prepared) that they later graded. Older students would turn in “exit slips” at the end of class that teachers read through to informally assess student understanding. Teachers regularly collected homework and daily class work that they checked and/or graded. They would utilize these and other means to determine which students were doing fine and which ones were struggling. Individual professional judgment, experience, and gut instincts were usually the determining factors as to whether or not students were meeting the standards and understanding essential concepts and skills.

## PRE-PLAN YOUR “CHECKS FOR UNDERSTANDING”

All teachers—including myself—have used these perfectly legitimate formative assessment methods to gather evidence of student learning and make inference-based instructional decisions. They are a regular part of the ordinary routine of daily classroom instruction.

However, the problem with this smorgasbord approach to formative assessment is that very often those checks for understanding are not deliberately planned. This can lead to incorrect conclusions about what students know and do not know. When teachers rely mainly on their moment-to-moment assumptions to gauge student understanding, sometimes those assumptions are right and sometimes they are wrong.

With regard to team-created CFAs, a loosely structured approach to administering informal checks for understanding during the unit of study can often lead to widely varying student results on the post-CFA. Students in classrooms who receive the benefit of *pre-planned* checks for understanding, followed by instructional adjustments to close their learning gaps, will be much better prepared for the end-of-unit assessment than those students in classrooms who do not receive this benefit.

## QUICK PROGRESS CHECKS TO ASSESS UNIT LEARNING PROGRESSIONS

In the CFA 2.0 process, pre-planned formative assessments that take place during the unit are called *quick progress checks*. These are immediate, non-graded assessments that are intentionally aligned to the end-of-unit

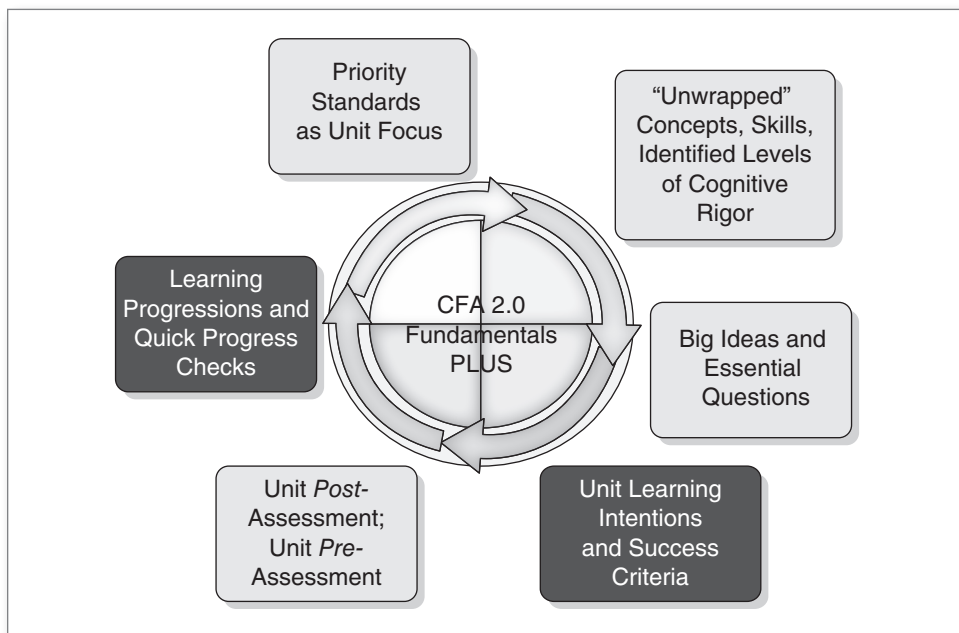
post-assessment and serve as stepping-stones to student success on the post-CFA. Their purpose is to provide in-the-moment feedback so educators can make timely adjustments in their instruction and students can adjust their learning strategies. Quick progress checks do not happen randomly; they are intentionally planned to coincide with the unit *learning progressions*.

Learning progressions are the sequential building blocks of instruction necessary for students to understand the larger learning intentions of the unit. They provide the instructional pathway students need to traverse in order to arrive at the learning destination. It may be helpful to think of learning progressions as the daily “chunks” of instruction that incrementally build student understanding over time toward a more complex learning outcome.

The use of predetermined learning progressions and quick progress checks are relatively new practices for most educators, so for now just think of them as the specific instructional steps students need to take from the starting point to the ending point during a unit of study, with assessment checkpoints along the way.

Figure 1.7 shows the important additions of learning progressions and quick progress checks to the CFA 2.0 design fundamentals. The teacher team plans their learning progressions and quick progress checks *after* they

**Figure 1.7** New Design Steps to Improve the Highway



design their post-CFA and pre-CFA. This enables them to “work backwards” to create the instruction-assessment pathway leading to the end-of-unit assessment.

The learning progressions necessary for students to understand a learning intention can be numbered to indicate their instructional sequence. Figure 1.8 shows the sequenced building blocks of learning progressions (labeled LP 1, LP 2, LP 3, LP 4) leading to a unit learning intention. The arrows indicate where the corresponding quick progress checks of student understanding occur. These take place immediately after one or more lessons related to a specific learning progression. Note that the number of learning progressions within a unit of study is not limited to four, a number used here for illustration only.

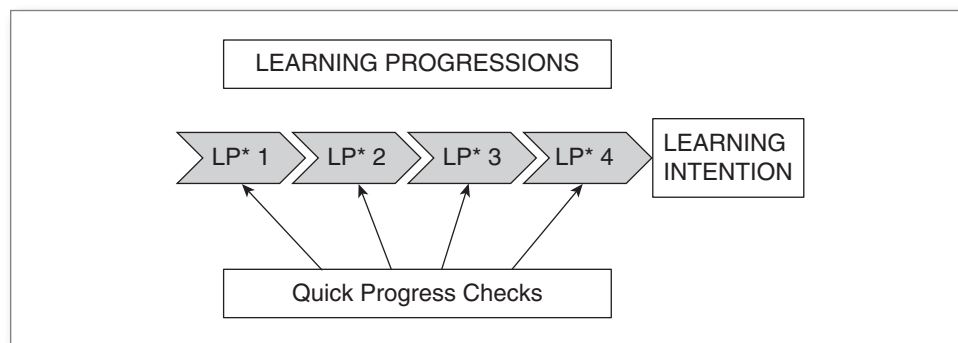
Quick progress checks are essential to knowing where students currently are relative to the unit learning intentions. Individual teachers often create these from day to day or week to week, depending on where they are instructionally within the unit so that the progress checks match their own pace of instruction.

However, as educators have become more experienced in creating CFAs and meeting regularly to process student feedback together, they are making it a priority to collaboratively plan and create their quick progress checks *in advance*. Teachers find that doing this step together ensures greater consistency of assessment experiences for all students—even if team members use those quick progress checks at slightly different times during the unit of study than their team colleagues do.

## TEACH-ASSESS-INTERPRET-ADJUST

When a unit of study is underway, effective instruction naturally precedes assessment. Well-designed quick progress checks—based on the particular

**Figure 1.8** How Learning Progressions and Quick Progress Checks Work Together



\*Learning Progression.



learning progressions in focus—enable educators to accurately *interpret* student understanding and determine instructional next steps. Adjustments to instruction can then take place immediately.

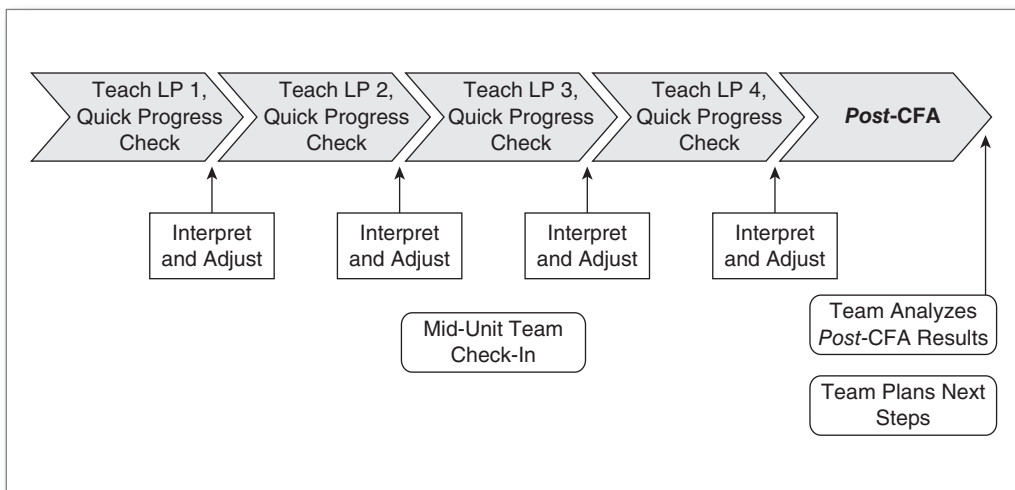
As represented in Figure 1.9, *teach-assess-interpret-adjust* is the quartet of inseparable practices that, keeping with the highway metaphor, transport students down the main road to the post-CFA destination.

Using predetermined, collaboratively planned, quick progress checks to adjust instruction demonstrates a dramatic shift in professional practice. This type of approach moves educators away from the traditional instruction-assessment cycle in which teaching continues on as originally planned from the beginning of the unit to the end with little or no modification. Inserting assessment-driven, inference-based instructional corrections into the cycle may well prove to be the “missing link” to improving student learning.

## STUDENT USE OF CFA FEEDBACK

So far in this sequential progression of the CFA 2.0 design blueprint, the emphasis has been on what teachers do. Understandably, teachers need to carry out these design steps first. Yet where does *student use of CFA feedback* come in? When feedback is shared with students, they can be shown how to use it to self-regulate their learning. When teachers are ready to shift the process to include their students, the use of pre-CFA, post-CFA, and quick progress checks expands to include student participation, as indicated within the Student Involvement steps on pages 18–20 (in bold).

**Figure 1.9** The Quartet of Instruction and Assessment Practices



**Teacher Actions:**

- 1. Educators begin by analyzing the pre-CFA results to correctly identify student learning strengths and areas of need. Because the unit pre-assessment is intentionally aligned to the post-assessment and the targeted learning intentions for the unit, educators can analyze the pre-CFA results to interpret student learning strengths and areas of need and adjust instruction earlier and more decisively.
- 2. Team members then set improvement goals for all students in the grade or course based on specific pre-assessment results and desired post-assessment gains. After that they select specific instructional strategies to help students achieve these goals.

**Student Involvement:**

- 3. The bar graph shows how students can set specific targets for their learning. For example, Matthew records his pre-assessment results by shading in the corresponding number of items he responded to correctly—two. He then sets a personal goal to score at least eight items correctly on the post-assessment and shades in the corresponding number in the “goal” column. When Matthew receives his post-assessment results at the end of the unit, he shades in his *actual* number of correct answers in the post-CFA results column.

Note: The number 10 in the graph is used for simplicity of illustration only. It is not a recommendation of how many assessment questions to include on either the pre- or post-CFA. The purpose of the graph is to enable students to record their pre-CFA results, set an achievement goal for their post-CFA, record their actual post-CFA results, and see visible evidence of their improvement in learning.

Pre-/Post-Assessment Results			
10			
9			
8			
7			
6			
5			
4			
3			
2			
1			
Matthew	Pre-CFA Score	Goal Post-CFA Score	Actual Post-CFA Score

4. With teacher guidance, students create a personal SMART goal (Specific-Measurable-Ambitious-Relevant-Timely) with regard to the learning intentions and success criteria for the unit. This goal indicates the quantifiable achievement they want to demonstrate on the end-of-unit post-CFA.

**Student's SMART Goal for Unit**

"My learning goal for this unit on adding and subtracting fractions with unlike denominators is to achieve a score of 80 percent or higher on the post-CFA. I only got two problems right on the pre-CFA, so I have a lot of learning to do in this unit."

**Teacher Actions:**

5. After instruction of each predetermined learning progression, the teachers administer a quick progress check based on that progression.

**Student Involvement:**

6. Students receive feedback results from the quick progress check and ask clarifying questions to understand what changes or adjustments in their learning approach they need to make in order to close their understanding gaps.
7. Students receive new instruction and guidance from the teacher and apply the information received to continue and/or revise their learning strategies.

Comment: When teachers use the feedback from quick progress checks to inform next-steps instruction, students are able to correct any misconceptions *while* they are learning. Teachers don't have to wait until the end-of-unit assessment or even the middle of the unit to see the impact their instruction is having or to discover that students didn't learn as much as expected.

8. At the midpoint of the unit, students complete a short self-reflection to determine whether they think they are on track to achieve the unit learning intentions and success criteria as measured by the post-CFA. Students also clarify what they think they need next in terms

**of instructional support from the teacher(s). They review their self-reflection responses with their teacher.**

### **Teacher Actions:**

9. Steps 5–7 repeat throughout the remainder of the unit.
10. At the end of the unit, the teachers administer and score the post-CFA and evaluate the results.

Comment: The post-CFA is a cumulative assessment representing all of the unit learning intentions and student success criteria in focus over a period of several weeks. Because all of the quick progress checks are intentionally aligned to the post-CFA, students have been receiving incremental feedback and adjusting their learning strategies throughout the unit. Thus they are far more prepared to achieve success on the post-CFA because they have been practicing for success all along the way. This enables the teachers' instructional impact and degree of effectiveness to be reliably measured by a body of valid assessment evidence they have gathered during the entire unit of study.

### **Student Involvement:**

11. **Students receive their post-assessment results along with their returned pre- and post-assessment results graph and personal SMART goal that they completed at the start of the unit. They shade in their post-assessment results column to correspond with the number of questions they answered correctly and determine if they did or did not reach their learning goal.**
12. **Finally, students complete the post-unit self-reflection, noting where they did well, what strategies they feel are working best for them, where they need to go next in their learning, and what plan they have to improve while they are on the "Bridge" (described in the next section).**

Comment: Involving students in self-reflection encourages them to "think about their thinking." This metacognitive strategy ranks 14th on the list of practices that influence student learning, producing an overall effect size of 0.69 (Hattie, 2012, p. 251). This research finding certainly makes self-reflection a practice worth incorporating on a regular basis.

### Student's End-of-Unit Self-Reflection

"My learning goal for this unit was to achieve a score of 80 percent or higher on the post-CFA. I scored 80 percent on the post-CFA, so I did reach my learning goal!"

"I think I did really well on learning how to add and subtract fractions with unlike denominators. It was hard for me to understand at first, but using the manipulatives helped me to make sense of how two or three different denominators can all be changed to equivalent forms. It took me longer to learn that the values of the numerators have to change too.

"I still am kinda slow at converting the numerators correctly whenever there are three fractions I'm adding together. And then to change the large improper fraction to a mixed number is tricky, especially when the fraction part of the mixed number has to be reduced to lowest terms.

"When I'm on the Bridge, I need to practice what I just wrote about so it's easier for me to convert multiple fractions with unlike denominators to like denominators and then correctly complete the rest of the steps."

Now, if only this thoughtful and systematic approach could guarantee that every student would demonstrate competency on every post-CFA in every unit of study throughout the entire school year! So what about those students who do not meet their learning goal and still need further instruction specific to their learning needs, along with a chance to try again for assessment success? The answer to this can be found on the Bridge.

## THE "BRIDGE" BETWEEN UNITS

When educators begin implementing a unit of study within their year-long curriculum, they often feel frustration and indecision if and when their students do *not* demonstrate proficiency on the post-CFA. Should they proceed to the next unit of study even though some of their students are not ready to do so? If they delay moving ahead in order to close the learning gaps in their students' understanding through reteaching and reassessing, how will they keep up with the curriculum's preset pacing schedule?

When educators keep moving ahead rather than slowing down to ensure that students master certain aspects of the curriculum, they often

do so out of concern they will be unable to complete all of the curricular units before the end of the school year. Any educator confronted with the mounting accountability pressures of today can certainly relate to this feeling of unease. The question lingers: “Will my students have covered enough of the standards in time to be academically prepared for the cognitive demands of the large-scale annual assessments?” Often what happens in response to such uncertainty is a sacrifice of student learning in favor of keeping on pace.

These issues present very real pressures educators continually face when student learning does not happen “right on time.” One powerful way to ensure that needed remediation and reassessment can take place for students who need it is to deliberately schedule the inclusion of a **Bridge** between each of the units of study. This Bridge, also known by many educators and leaders as the “buffer” (Ainsworth, 2010, p. 30), can last anywhere from two to five class periods within a week of school. The Bridge provides educators with scheduled breathing room *between* units of study. Its purpose is to give teachers and students additional time to regroup in order to close student learning gaps. During this time, those students who need additional instruction (reteaching, remediation) receive it in a different way than it was initially taught during the unit. They then have the opportunity to be reassessed and show improvement (i.e., achieve the success criteria).

The Bridge also serves those students who demonstrate proficiency or better on the post-CFA. During this time, they have an opportunity to extend their knowledge and further refine their skills by taking part in enrichment learning, engaging in activities that enlarge their understanding of the unit’s learning intentions.

One main reason educators have validated and endorsed the idea of scheduling this Bridge between units is its usefulness to *all* students. Often educators understandably devote the bulk of their efforts to assisting struggling learners, but it is at the expense of giving sufficient time and attention to advanced students. The purpose of the Bridge is to help educators equalize that distribution of time and attention. It is just as much about meeting the learning needs of high-performing students as it is about assisting those students who sometimes just need a do-over to succeed. Chapter 11 describes how to effectively plan for the Bridge.

## THE COMPLETE HIGHWAY

To recap, the successive construction stages of our CFA 2.0 highway began with the *fundamental standards* and *assessment components* (Figures 1.1–1.4).

Next we included the initial *data analysis* components (Figures 1.5–1.6). Then we added in the *learning progressions* and *quick progress checks* (Figures 1.7–1.8), followed by the *teach-assess-interpret-adjust* quartet of practices (Figure 1.9).

The entire CFA 2.0 process—with arrows indicating the construction sequence—culminates in a completed highway to intentionally aligned standards, instruction, assessments, and data analysis, as shown in Figure 1.10. Appearing on both sides of the figure is the Bridge between units that occurs between all curricular units of study throughout the school year. The dark boxes in the figure represent the “highway improvements” made to the original CFA process. These improvements are now essential segments of the CFA 2.0 highway.

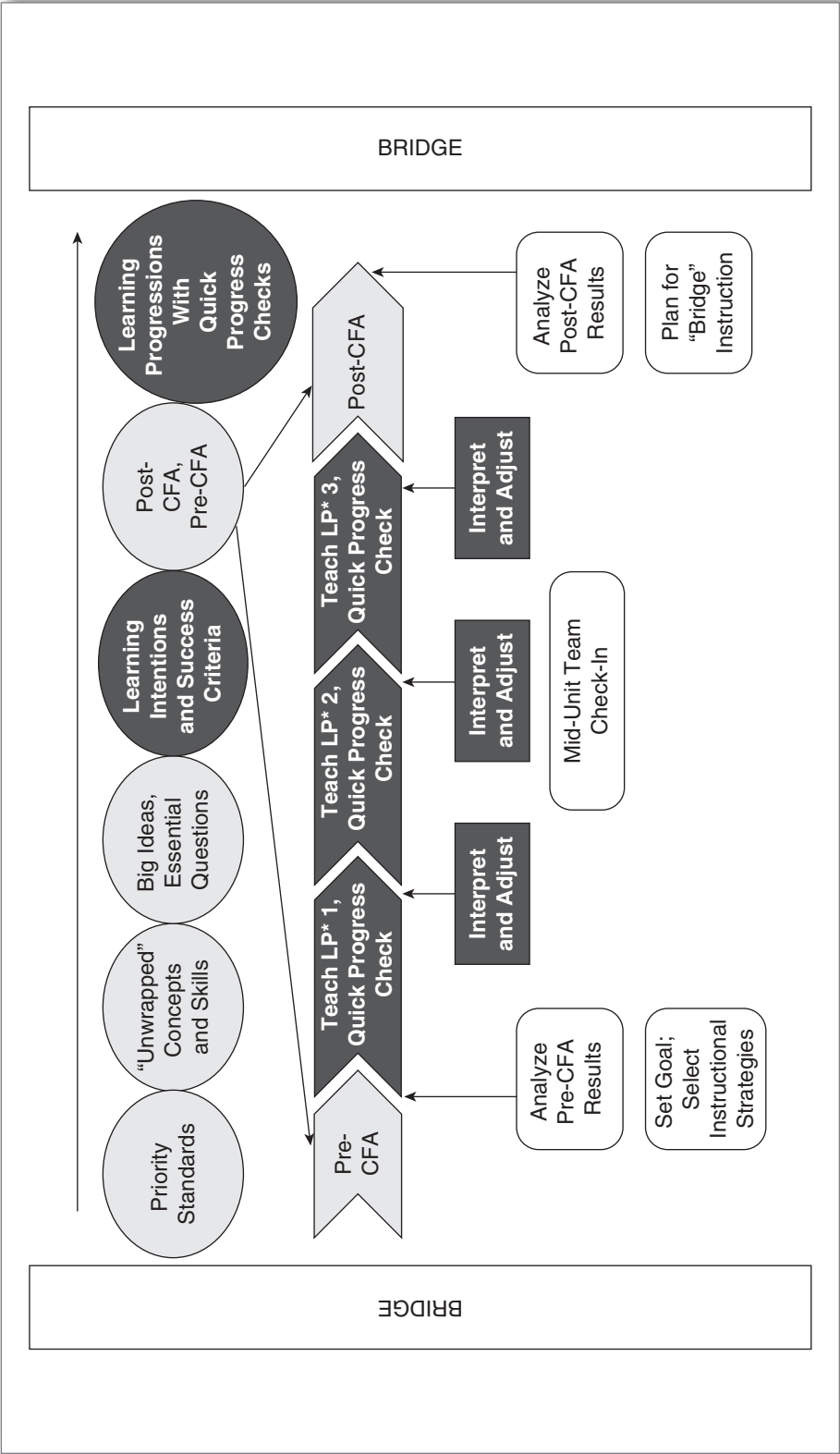
## BEYOND THE HIGHWAY

For obvious reasons, educators cannot control the composition of assessments they did not create—particularly the external, high-stakes accountability tests that states, provinces, and national assessment consortia administer to millions of students each year. What educators *can* control, however, is the close alignment between assessments they themselves create for every unit of study: the post-CFA, the pre-CFA, and the quick progress checks that follow learning progressions. But must the aligned assessment highway end where the large-scale assessments begin? Can we build a connecting road between the two?

At the risk of mixing the metaphors, the challenge of being able to extend the highway into the realm of standardized achievement tests is like comparing apples to oranges. Whereas internally created CFAs are specifically designed to gauge student understanding of *unit-specific* Priority Standards, externally created standardized achievement tests can only *sample* all of the standards students are to learn within an entire school year. There are simply too many grade- and course-specific standards in tested content areas to make feasible a full inclusion of related questions. This fact underscores the need for Priority Standards—a carefully selected subset of the entire list of standards at each grade level (described and illustrated in Chapter 4) that includes those particular standards most likely to be assessed on standardized achievement tests.

Another challenge to this extension of alignment is the mismatch between internal assessments that are designed to reveal instructional impact on student learning, and external assessments that are designed to provide a summative report of student attainment of grade- or

**Figure 1.10** How Teacher Teams Intentionally Align Standards, Instruction, Assessment, and Data Analysis



\*Learning Progression.



course-level standards. This mismatch is well summed up by W. James Popham in Chapter 7 of his book, *Transformative Assessment* (2008):

Almost all of today's educational accountability tests are *instructionally insensitive*, incapable of detecting the difference between effective and ineffective instruction. . . . When an instructionally insensitive test is used as an accountability test, the bulk of learning benefits from classroom formative assessment simply won't show up in the test results. (p. 123)

However, Siobhan Leahy and Dylan Wiliam (as cited in Hattie, 2012) report high correlations between educators who regularly use formative assessments and improved student performance as measured on large-scale external assessments:

When formative assessment practices are integrated into the minute-to-minute and day-by-day classroom activities of teachers, substantial increases in student achievement—of the order of a 70 to 80 percent increase in the speed of learning—are possible, even when outcomes are measured with externally mandated standardized tests. (p. 128)

To connect internal and external assessments, educators should craft their CFA questions to align with the format, vocabulary, and rigor of standardized assessment questions. Doing so will help prepare their students to respond to external test questions that might otherwise appear in new or unfamiliar formats.

## CONSTRUCTING THE HIGHWAY IN SEGMENTS

The purpose of this chapter was to provide you with a panoramic vision of the completed CFA 2.0 highway (most educators like seeing the big picture first, remember?). However, if this full preview was a bit too much to take in all at once, don't worry. Each component of the completed highway will be covered in detail in subsequent chapters. Beginning in Chapter 3, you will see a flow chart of the ten-step CFA 2.0 design process. This same flow chart appears in each succeeding chapter with the current step (or steps) highlighted as a reminder of where it fits into the overall design process.

## SUCCESS CRITERIA

At the start of this chapter, three learning intentions set the stage for the content to follow. Those same learning intentions now reappear here as

*success criteria.* The content is the same, but the statements now begin with an action verb that asks you to demonstrate that you were successful in attaining those intentions.

**Success Criteria:**

- Describe the standards and assessment components of a quality CFA.
- Summarize the connections between quick progress checks, data analysis, and instruction.
- Explain how to construct, in progressive steps, the CFA highway of aligned assessments. (It is perfectly okay to treat this as an “open-book” question and refer back to the content of the chapter.)

To synthesize what you’ve learned from this chapter, take a few moments to write your responses to these success criteria. If you’d prefer an alternative (and faster) way of responding, evaluate your understanding of each of the success criteria on a scale of one to five, with five representing, “I totally get it and could teach it to others.” If you are reading this book as part of a professional study group, share your thoughts and ideas with colleagues.

When finished debriefing this chapter, you’re ready to see how your current assessment literacy fares within the context of the CFA 2.0 framework.