

# The Standards-Based Teaching/Learning Cycle

A guide for Colorado educators on how to put Standards-Based Education into practice at the district, school and classroom level.

*The Colorado Coalition for Standards-Based Education™*



# The Standards-Based Teaching/Learning Cycle

*A Guide to Standards-Based Practices for Districts and Schools in Colorado*

## Foreword

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With the passage of H.B. 93-1313 in 1993, Colorado schools began the era of standards-based education. As the law stated, it was passed “to institute a system to define and measure academic quality in education and thus...help the public schools of Colorado...achieve such quality and to expand the life opportunities and options of the students of this state.” Since 1993 Colorado school districts have been working to achieve that vision. While much has been accomplished during this time, challenges still face educators in Colorado and throughout the nation in educating every child to high standards.

In the last four years, numerous district and school reviews were conducted as part of the state’s *Comprehensive Assessment of District Improvement (CADI)* and *School Support Team (SST)* review process. In essentially all of these reviews, the comprehensive implementation of standards-based educational practices stood out as a significant need at both the school and district level. In a survey by the Colorado Education Association in 2006, this same issue was identified as a top concern of teachers.

In 2006, a group of the state’s educators from a number of organizations and districts, including various representatives of the Colorado Department of Education (CDE), Colorado Association of School Executives (CASE), Colorado Education Association (CEA), Adams State College, The Tointon Institute for Educational Change, Front Range BOCES, and members of CDE SST and CADI teams came together to address this concern. The concerns identified in the CDE SST and CADI reviews and the CEA survey were confirmed by this ad hoc committee. With that understanding, this group set out to create a common vision of standards-based education and to develop descriptions, tools and materials to help districts and schools more effectively implement standards-based practices.

After collaborating for nearly a year, the ad hoc committee commissioned a document that would clearly and simply articulate what it means to be standards based in practice. Following a review of best practices through research, literature, respected authorities, the work of other state departments of education, as well as the best thinking of this committee, a document was produced to address this need.

*The Standards-Based Teaching/Learning Cycle* was created to identify and describe those practices that have been found to be essential in providing a comprehensive standards-based educa-

tion and thus help achieve the vision of H.B. 93-1313. This publication was produced under a grant from the Federal Programs and School Support Unit of the Colorado Department of Education and is intended to be the first in a series of tools to guide school districts toward greater understanding and effective implementation of standards-based practices.

## Preface

While this guide is designed to provide a comprehensive description of standards-based educational practices, *there is still more* to both the art and the science of educating students so they can acquire the necessary skills, attitudes and behaviors to be productive and fulfilled citizens of the 21st century. This document does not purport to describe all the conditions or practices to reach that goal.

In every district there is a need for clear, well-informed and visionary leadership along with creative and motivated teachers and support staff. Schools and classrooms must generate the conditions to create highly motivated students, develop productive teacher/student relationships and engage students in learning for meaningful purposes. There must be supportive, systemic conditions that ensure ongoing, high-quality professional development, well-designed teacher and administrator evaluations systems, methods to engage families and community, creative and strategic allocation of resources and clear goals and actions plans. While *The Standards-Based Teaching/Learning Cycle* provides a description of critical elements that are fundamental to ensuring students learn standards, without ensuring the rest of these conditions, the vision of educating all students to high levels will be a continuing challenge for districts and schools.

The Colorado Coalition for Standards-Based Education™ includes representatives from the following organizations:

Colorado Association of School Executives

Colorado Department of Education

Colorado Education Association

FLS (Focused Leadership Solutions)

The Tointon Institute for Educational Change

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# Introduction

## Where have we been?

During the last several decades, educational researchers have been identifying *teaching methodologies* that when effectively delivered, demonstrated positive effects on student learning. However, not until the standards movement of the early 1990s have educators been able to focus those teaching methodologies on common content standards that all students should learn. This movement shifted the focus from simply *teaching*, to strategically teaching standards that all students should *learn*.

In Colorado, the passage of H.B. 93-1313 in 1993 required all school districts to adopt content standards that “meet or exceed” the Colorado Model Content Standards adopted by the State Board of Education. As districts adopted content standards, it became evident that teaching strategies needed to be deliberately directed toward ensuring students learned those standards, or as commonly stated, educational practices should be standards-based.

Colorado educators have been working toward implementing standards-based practices since standards were adopted in 1993. However, while evidence suggests that much has been accomplished thus far, there are still challenges facing districts and schools in implementing the comprehensive set of practices that it takes to be truly standards-based.

*The Standards Based Teaching/Learning Cycle* identifies and describes those practices that have been consistently found in research, literature and successful schools to be essential in providing a comprehensive standards-based education and ensuring that all students are afforded the best possible opportunities to learn and achieve at high levels.

## What does it mean to be standards based in practice?

Standards-based education in Colorado is defined as an ongoing teaching/learning cycle that ensures all students learn and can demonstrate proficiency in their district’s adopted content standards and associated benchmark concepts and skills. This teaching/learning cycle frequently measures student achievement through a variety of formats and assessments and ensures multiple opportunities for students to learn until they reach a proficient or advanced level of performance. *Regardless of content, course, level, identified outcomes or revisions in standards, this teaching/learning cycle remains constant.*

Comprehensive standards-based practices involve more than knowing state and district standards, posting standards or objectives in a classroom, referencing standards through lessons or units or “covering” a curriculum that has been aligned with standards. Rather, it means consistently teaching standards to ensure students actually learn every benchmark concept and skill

identified as essential by their school district and can demonstrate that learning in a variety of ways at a proficient level.

Being standards based means that every teacher, in every classroom, every day, through this continuous teaching/learning cycle, ensures students learn the district's standards and benchmarks to proficiency. Throughout every district, this takes focus, hard work, persistence, and strategic use of time and resources.

## Where do we go from here?

In its simplest terms, a standards-based teaching/learning cycle continually answers four critical questions:

- 1. What do students need to know, understand and be able to do?**
- 2. How will we teach effectively to ensure students learn?**
- 3. How will we know that students have learned?**
- 4. What do we do when students don't learn or reach proficiency before expectation?**

Within these four critical questions, 30 elements of standards-based practice are consistently identified in research and literature and are evident in high-performing classrooms.

*The Standards Based Teaching/ Learning Cycle* outlines the elements of practice as they relate to these four critical questions. Each of the four chapters outlines one critical question, beginning with a list of the elements of practice. Following pages present detail for each element of practice including *Guiding Questions* to help educators evaluate their current level of implementation and determine what still needs to be done for each practice. At the end of each chapter, a diagram helps clarify how the elements of practice fit within the continuous cycle of teaching and learning.

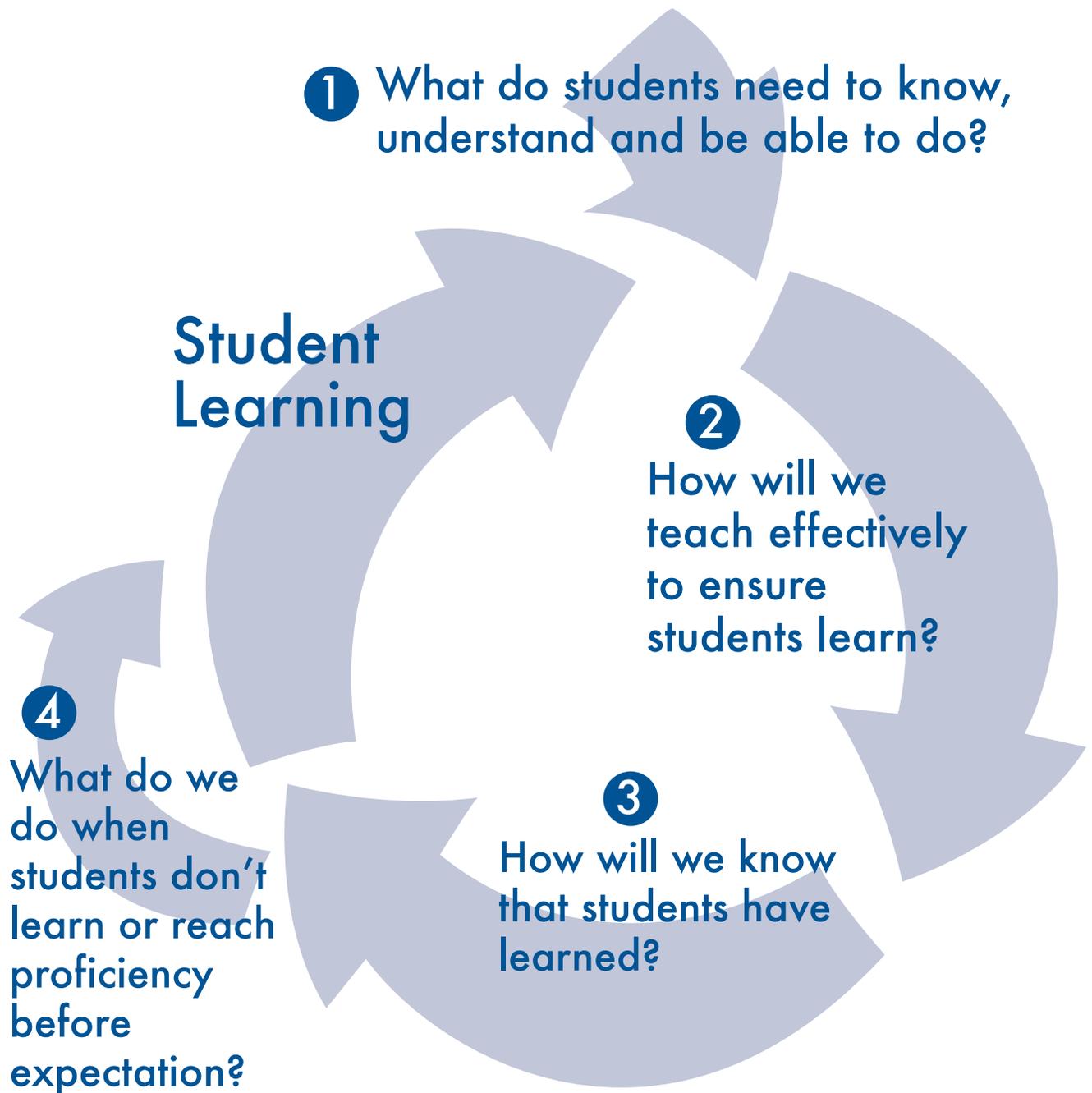
It is now evident that district and school leaders need to ensure there is a consensus within their district and schools regarding how these elements of practice are understood and implemented. As stated earlier, to become truly standards based takes system-wide focus, hard work, persistence and continuous reflection. If every educator fully commits to engage in a continuous standards-based teaching and learning cycle, high student achievement does occur.

## **Being Standards-Based In Practice *Requires Commitment:***

-  **Standards-based education is the ongoing teaching/learning cycle that ensures all students learn and can demonstrate proficiency in their district’s adopted content standards and associated benchmark concepts and skills.**
-  **Comprehensive standards-based practices involve more than knowing state and district standards, posting standards or objectives in a classroom, referencing standards through lessons or units or “covering” a curriculum that has been aligned with standards.**
-  **Regardless of content, course, level, identified outcomes or revisions in standards, this teaching/learning cycle remains constant.**
-  **Being standards based means that every teacher, in every classroom, every day, through a continuous teaching/learning cycle, ensures students learn the district’s standards and benchmarks to proficiency. This takes focus, hard work, persistence, and strategic use of time and resources.**



# Continuous Cycle of Student Learning

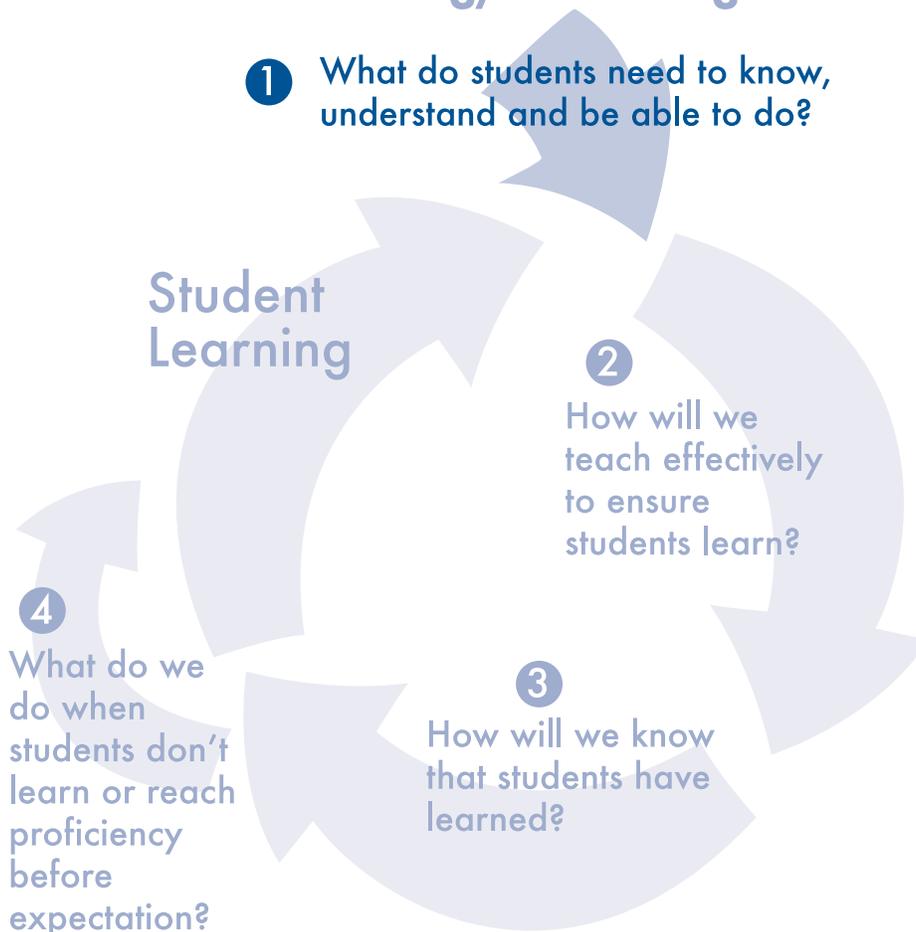




# Chapter 1

## 1 What do students need to know, understand and be able to do?

### Continuous Cycle of Teaching/Learning





# Chapter 1

## What do students need to know, understand and be able to do?

- A** Standards in all academic disciplines or content areas, along with benchmark information, concepts and skills, are identified and adopted at the district level.
- B** Essential benchmark information, concepts and skills expected for all students are identified and described. (These may also be called essential learnings, learning targets, power standards, objectives or grade-level expectations.)
- C** Essential benchmarks are articulated and aligned within and among grade levels and across the district to ensure there are no gaps or unnecessary overlaps in those expected learnings.
- D** Adopted curricula provide a scope and a sequence of essential benchmarks (sometimes called curriculum objectives or targets) that engage students in learning standards in all content areas.
- E** Curriculum guides (frameworks), maps, pacing guides and other curricular tools are produced at the district level to assist teachers to plan effective instruction that focuses on essential benchmark knowledge, concepts and skills.
- F** Descriptions of proficiency are created to describe the types and levels of performance expected for all essential benchmarks in all content areas and grade levels.
- G** Examples of proficient student work are created and distributed to teachers to provide models of learning and performance expectations for all essential benchmarks.
- H** Adopted or purchased instructional programs and materials are intentionally articulated and aligned with standards-based curricula.
- I** Standards and benchmarks are communicated effectively to students and parents. Students understand and can describe proficient performance for those concepts and skills.

*Note: The term benchmark is used throughout this document to refer to information/knowledge, concepts and skills. It may be noted simply as benchmark or be described variably as benchmark knowledge, concepts and skills.*

# Description of Practices

## 1. What do students need to know, understand and be able to do?

Until districts and schools identify specifically and clearly what students should know, understand and be able to do, they cannot ensure that students are learning. A standards-based district is crystal clear about which standards and benchmark knowledge, concepts and skills all students should learn. In order to address this question, districts and schools need to ensure these practices are in place:

### **A Standards in all academic disciplines or content areas, along with benchmark information, concepts and skills, are identified and adopted at the district level.**

The first step in being standards based is for school districts to formally adopt standards for learning in all content areas. Those content standards must “meet or exceed” state standards. In Colorado, all school districts have adopted standards that generally mirror Colorado’s Model Content Standards.

Colorado’s standards were modeled after the national standards that were designed by various professional disciplines or organizations. Content standards at the national, state and even local level are usually quite general in nature, with benchmark information, concepts and skills more clearly identifying the knowledge, understanding or skills expected at every grade level.

#### **Guiding Questions:**

- > Has the district identified and adopted content standards and benchmark concepts and skills in all content areas for every grade level?
- > How has the district communicated its adopted standards and benchmark concepts and skills to staff? To parents and students?
- > How does the district ensure all teachers know and understand the standards and benchmark concepts and skills for their grade level or content area? How does this occur at the school level?

### **B Essential benchmark information, concepts and skills expected for all students are identified and described. (These may also be called essential learnings, learning targets, power standards, objectives or grade-level expectations.)**

Beyond adopting standards and benchmarks, districts must identify those concepts and skills they consider essential for every student to learn and demonstrate at a proficient level. Marzano, Kendall, & Gaddy (1999), in their review of national and state standards, suggest that if districts and schools truly taught all the standards and benchmarks adopted in their state, it could take 20 years or more to teach those to proficiency.

Consequently, it is critical that school districts determine which benchmarks are essential for all students to learn at a

#### **Guiding Questions:**

- > Are essential concepts and skills identified for all grades and content areas?
- > What criteria are used to identify essential concepts and skills?
- > How does the district ensure administrators and teachers know which benchmark concepts and skills are essential for their grade or content area?

proficient level at designated points in time. Identifying essential benchmarks allows educators to ensure that all students are afforded adequate and equitable opportunities to learn, what Marzano (2003) describes as *guaranteed and viable*. Without a district identifying what knowledge, concepts or skills are essential, teachers find themselves either struggling to “cover” all the adopted standards and benchmarks or making personal decisions about what is most important for students to learn.

> How do schools effectively communicate to students and parents the benchmarks the district has identified as essential for every student to learn?

Such prospects, by definition, deprive students of a guaranteed and viable curriculum and leave teachers in the untenable situation of being unable to teach critical benchmarks to proficient levels.

**C Essential benchmarks are articulated (aligned) within and among grade levels and across the district to ensure there are no gaps or unnecessary overlaps in those expected learnings.**

As districts design and adopt curricula and curricular tools, it is important that essential benchmarks are clearly articulated within and among grade levels. This means that these benchmarks must be organized and aligned to eliminate gaps or unnecessary overlaps within content areas or grade levels, between grade levels, or when numerous course levels are offered in one content area. This alignment supports designing and delivering curricula in a *meaningful sequence* to provide a scaffold of learning opportunities for students. It also helps students incrementally or developmentally acquire essential concepts and skills and build on prior learning.

**Guiding Questions:**

- > How has the district eliminated gaps or overlaps in the scope and sequence of benchmark concepts and skills in district curricula?
- > Do district curricula build a scaffold of increasingly difficult levels and complexity of essential concepts and skills?

**D Adopted curricula provide a scope and sequence of essential benchmarks (sometimes called curriculum objectives or targets) that engage students in learning standards in all content areas.**

Beyond adopted standards and benchmarks, districts must have curricula, usually developed by grade level or content area, that identify and describe both the *scope* and the *sequence* of what essential concepts and skills students should learn throughout a school year or within other designated time periods. Curriculum guides, documents or frameworks should be readily available to every teacher and be designed so that teachers are clear about the roadmap of concepts and skills they should teach and students should learn.

**Guiding Questions:**

- > How has the district aligned curricula with adopted standards and benchmarks in all content areas?
- > How does the district ensure curriculum documents are available to all teachers?

**E Curriculum guides (frameworks), maps, pacing guides or other curricular tools are produced at the district level to assist teachers to plan effective instruction that focuses on essential benchmark information, concepts and skills.**

Curriculum documents often include curriculum maps with such tools as pacing guides (timeframes in which benchmark concepts and skills or objectives should be taught or learned), examples of lessons and references to instructional materials, tools and assessments. These guides may also provide instructional strategies to support teaching the essential benchmarks. These tools aid teachers in planning and organization as they design standards-based lessons and are critical to ensure teachers deliver a curriculum consistently, equitably and comprehensively. These documents need to be clearly written, succinct and user friendly so teachers can deliver the curriculum effectively and efficiently and ensure all students have adequate and equitable opportunities to learn.

**Guiding Questions:**

- > How does the district ensure all teachers have access to curriculum maps, pacing guides or other tools designed to assist teachers in delivering curricula?
- > How are teachers utilizing curricular documents to guide their planning and teaching? How do we know?
- > How would teachers describe the usability of curriculum documents?
- > How and when does the district evaluate curricula and supporting programs or materials?

**F Descriptions of proficiency are created to describe the types and levels of performance expected for all essential benchmark concepts and skills in all content areas and grade levels.**

As curricula describe the scope and sequence of essential benchmarks, proficiency levels must also be described for those benchmark concepts and skills. This means that teachers must know what proficient performance looks or sounds like for all the essential benchmarks they are responsible to teach. This is accomplished by providing descriptions (proficiency descriptors), scoring guides or rubrics for essential benchmarks. Identifying and describing proficient levels of performance supports educators in maintaining high expectations for students and provides students with clarity regarding what they are expected to learn at a proficient level. Marzano and Haystead (2007) suggest that standards documents be “reconstituted” to clearly describe performance expectations so that standards and benchmarks can be more useful in providing clear learning targets and measuring student performance.

**Guiding Questions:**

- > How are proficiency levels for essential concepts and skills described for all grades and content areas?
- > How do teachers, administrators, students and parents know what proficient performance looks like in their assigned grade or content area?

**G** Examples of proficient student work are created and distributed to teachers to provide models of learning and performance expectations for all essential benchmark concepts and skills.

In order to ensure that students are taught to proficient levels of performance, teachers and students must be able to see examples of proficient performance for every grade level in each content area. This can be in the form of samples of proficient work (exemplars) or through scoring guides and rubrics that describe at what level a student must perform to be considered proficient. These examples provide teachers and students clear targets for learning and performance.

**Guiding Questions:**

- > Do schools have performance measures or rubrics to describe, in measurable terms, what is expected in proficient performance? How are those measures being used in classrooms?
- > How do schools ensure staff, students and parents know what proficient work looks like?
- > How do teachers access examples of proficient student work or scoring guides and rubrics?

**H** Adopted or purchased instructional programs and materials are intentionally articulated and aligned with standards-based curricula.

Districts often purchase or adopt published programs, textbooks or instructional materials to support teaching the district's curricula. It is critical that such programs or materials are intentionally aligned with the district's standards-based curricula. While districts endeavor to adopt materials that are most closely aligned with their standards and benchmark concepts and skills, teachers cannot solely rely on commercial programs or texts to ensure the district's standards and benchmarks are taught and learned at a proficient level. Consequently, it is important that teachers understand how district standards and benchmarks are integrated within adopted programs, texts or materials and ensure that essential benchmarks are taught to proficiency. This means that teachers must have sufficient clarity and understanding of adopted programs, texts and materials to purposefully teach all essential benchmarks for their content area or grade level.

**Guiding Questions:**

- > How can the district ensure teachers understand the differences and purposes of curricula and adopted programs, texts or instructional materials?
- > How do district policies and procedures ensure alignment of textbooks, programs and materials with curricula and standards?
- > How do teachers effectively use both adopted curricula and adopted materials or programs when designing standards-based lessons and units?

**I Standards and benchmarks are communicated effectively to students and parents. Students understand and can describe proficient performance for those concepts and skills.**

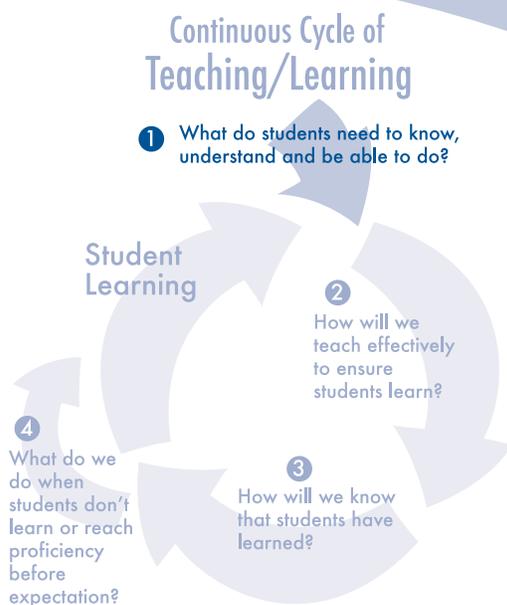
Students and parents should know and understand what students are expected to learn and how they should be able to demonstrate that learning. To be fully engaged in learning, students need to be able to understand the purpose and rationale for what they are learning and make connections to prior learning, daily life, higher education, the adult world and career. It is also important for students to know how they are expected to demonstrate their learning and reach proficiency. As stated earlier, this means that students must have descriptions and examples of proficient performance for the benchmark concepts and skills they are expected to learn.

**Guiding Questions:**

- > *How do schools ensure students and parents know and understand what students are expected to learn?*
- > *How can the school ensure students know what proficient work looks like in essential concepts and skills?*
- > *What opportunities are provided for students to make connections of their learning to prior learning, higher education and careers?*

# 1 What do students need to know, understand and be able to do?

- A. Standards & benchmarks adopted
- B. Essential benchmarks identified and described
- C. Essential benchmarks articulated and aligned
- D. Curricula provide a scope and sequence
- E. Curriculum guides assist teachers
- F. Descriptions of proficiency
- G. Examples of proficient student work
- H. Program/materials aligned with standards & benchmarks
- I. Standards & benchmarks communicated to students and parents





# Notes...



## Chapter 2

# 2 How will we teach effectively to ensure students learn?

### Continuous Cycle of Teaching/Learning

1 What do students need to know, understand and be able to do?

Student Learning

2 How will we teach effectively to ensure students learn?

4 What do we do when students don't learn or reach proficiency before expectation?

3 How will we know that students have learned?



## Chapter 2

### How will we teach effectively to ensure students learn?

- A** Curricula (aligned with standards and benchmarks) are consistently and equitably taught to proficiency.
- B** Research-based instructional methods are implemented to engage students in learning by providing them with strategies to learn benchmark information, concepts and skills, receive timely feedback about their performance and have adequate opportunities to learn and perform at proficient levels.
- C** Teachers engage in ongoing, intense collaborative work to develop units, lessons and instructional strategies focused on the district's essential benchmarks.
- D** Lessons and units are developed using a backwards design process, i.e., beginning with the end (learning objective or target) in mind along with a defined method or assessment for students to demonstrate what they have learned.
- E** Instruction is continually informed by assessment of student learning through the use of multiple formative assessments (assessments for learning).
- F** Instruction supports equity with multiple opportunities to learn through individualization and differentiation.
- G** Ongoing training, coaching, monitoring and feedback regarding instructional practices are provided to teachers to ensure effectiveness in teaching standards and benchmarks.

# Description of Practices

## 2. How will we teach effectively to ensure students learn?

Effective instruction is what causes students to learn. In standards-based districts and schools, research-based instructional methods and strategies are used to deliver standards-aligned curricula and ensure students have adequate and equitable opportunities to learn. In order to address this question, districts and schools need to ensure the following practices are in place:

### **A** Curricula (aligned with standards and benchmarks) are consistently taught to proficiency.

Districts and schools need clear policies and procedures as well as accountability to ensure adopted standards and benchmark concepts and skills are taught to proficient levels. While there is flexibility for teachers to design creative and engaging instructional strategies and assessments for their classrooms, a district's adopted standards and essential benchmarks must be consistently addressed by all faculty. With such policies and expectations, a guaranteed and viable curriculum is more likely ensured.

#### **Guiding Questions:**

- > What policies and accountability systems are in place to ensure all students are provided access to a guaranteed and viable curriculum through appropriate, research-based instruction?
- > How does the district communicate and monitor the expectation that all teachers teach the adopted standards and benchmarks identified in curricular documents?
- > What strategies are used by district and building leaders to monitor the implementation of district curricula?

### **B** Research-based instructional methods are implemented to engage students in learning by providing them with strategies to learn benchmark information, concepts and skills, receive timely feedback about their performance and have adequate opportunities to learn and perform at proficient levels.

Over the last 40 years, research has identified instructional methods and strategies that have demonstrated a positive effect on student learning. It is critical that districts and schools identify, train and implement those instructional strategies that provide students the best opportunity to learn and demonstrate proficiency in standards and benchmarks.

To meaningfully engage students in learning, students must know their learning objectives (targets), how they will be expected to perform at a proficient level and the purposes for their learning. Instruction should ensure that students know:

#### **Guiding Questions:**

- > What expectations or policies are in place that ensure classroom instruction is research based?
- > How is the district communicating and implementing those instructional practices that will have the highest impact on student learning?
- > How are teachers focusing instructional strategies specifically on essential benchmark concepts and skills?

- What concepts and skills they are learning and why they are important to learn
  - How they are progressing in their learning
  - What they still need to learn
  - What learning or performance opportunities are available
  - What and how they will need to demonstrate learning at the end of a lesson or unit
- > How is instruction, designed to engage students in learning, provide them with feedback on their learning and help them learn strategies to demonstrate their learning at a proficient level?
  - > How do teachers know when and how to re-teach a lesson for students to reach proficiency?

**C Teachers engage in ongoing, intense collaborative work to develop units, lessons and instructional strategies focused on students learning essential benchmarks.**

Purposeful collaboration by teams of grade-level or content teachers has been shown to enhance the quality of instructional practices. Teachers should be provided with adequate training to understand collaborative practices. Additionally, teachers need structures and tools such as dedicated time, model agendas and protocols to plan units, lessons and teaching strategies. Such collaboration helps ensure a consistent focus on essential benchmarks and provides an equal opportunity for all students to learn the same content.

**Guiding Questions:**

- > How are teachers supported in learning and utilizing effective collaborative practices?
- > How are teachers regularly collaborating to plan instruction?
- > How do teachers monitor progress and ensure that students reach proficiency through regular reflection regarding effectiveness of instructional strategies?

**D Lessons and units are developed using a backwards design process, i.e., beginning with the end (learning objective or target) in mind along with a defined method or assessment for students to demonstrate their learning.**

Instruction needs to be purposefully designed for students to learn essential concepts and skills. Consequently, before planning lessons, teachers must be clear on the concept or skill they expect students to learn and what proficiency looks or sounds like. Then, teachers should have a plan for students to demonstrate what they have learned through some type of assignment or assessment. With those outcomes identified, instruction can then be effectively and purposefully planned and delivered.

**Guiding Questions:**

- > When planning, are teachers identifying the concept or skill students are expected to learn before they plan a unit or lesson?
- > How are teachers planning lessons to include a method for students to perform or demonstrate their learning?
- > How do students know, at the beginning of a lesson or unit, what they need to know or be able to do proficiently at the end of the lesson or unit?

**E** Instruction is continually informed by assessment of student learning through the use of multiple formative assessments (assessments for learning).

Teaching to standards means that learning is continually monitored through a variety of measurements and assessments.

Instructional strategies should be designed or modified according to the information (data) provided by those assessments. By continually evaluating information about what or how students are learning, the focus, intensity, efficiency and effectiveness of instruction is enhanced. Additionally, objective evidence that students are progressing and learning helps teachers know instruction is yielding the intended learning results.

**Guiding Questions:**

- > How are teachers using their formative assessments to inform their planning, teaching or re-teaching?
- > How can the analysis of student work inform instruction?
- > How are teachers supported in effectively assessing learning and using that data to guide their teaching?

**F** Instruction supports equity with multiple opportunities to learn through individualization/differentiation.

In order for students to have access to all curricula and adequate opportunities to learn, instruction must be designed to provide multiple and varied opportunities for students to reach proficiency. Accepting that not all students come to school with the same background knowledge, learn in the same fashion, at the same pace or are equally motivated, to the degree possible, teachers must be able to adapt their instruction to individual needs of students. Once the classroom capacity to provide individualization and differentiation has been maximized, school-level or district-level interventions must be provided to give students maximal opportunity to learn at a proficient level.

**Guiding Questions:**

- > Do students have multiple opportunities to learn?
- > How do instructional strategies accommodate diverse learners and their needs within their classroom?
- > What is the evidence that teachers are providing students with multiple opportunities to learn and perform within their classroom, their grade level or department?

**G** Ongoing training, coaching, monitoring and feedback regarding instructional practices are provided to ensure effectiveness in teaching standards and benchmarks.

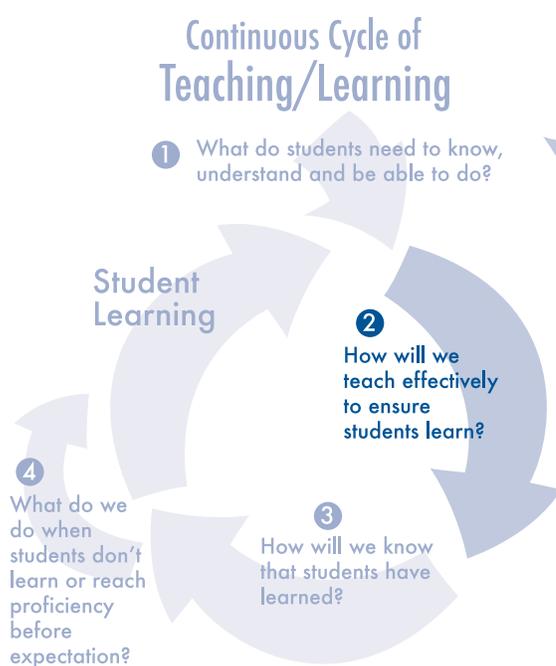
In order for teachers to provide the most effective instruction they must be afforded, through their district or school, multiple opportunities to increase their repertoire of skills in designing and delivering effective instruction to their students. Just as students may have varying needs and styles, teachers also need a variety of opportunities to enhance their skills as well as acquire new skills. Such opportunities should include ongoing training, modeling and coaching from school-level or content-area experts. Monitoring and feedback to teachers is critical to ensuring effectively delivered, research-based instruction occurs in every classroom.

**Guiding Questions:**

- > What types of ongoing professional growth opportunities are offered to teachers to ensure they have knowledge and skills to effectively teach their students?
- > How are teachers receiving timely feedback and coaching regarding instruction?
- > What is the evidence that feedback and coaching for teachers is improving instructional effectiveness and student achievement?

## 2 How will we teach effectively to ensure students learn?

- A. Curricula taught to proficiency
- B. Research-based instructional methods
- C. Teachers collaborate to plan
- D. Planning with a backwards design process
- E. Instruction informed by formative assessments
- F. Individualization and differentiation for students
- G. Training, coaching, monitoring and feedback





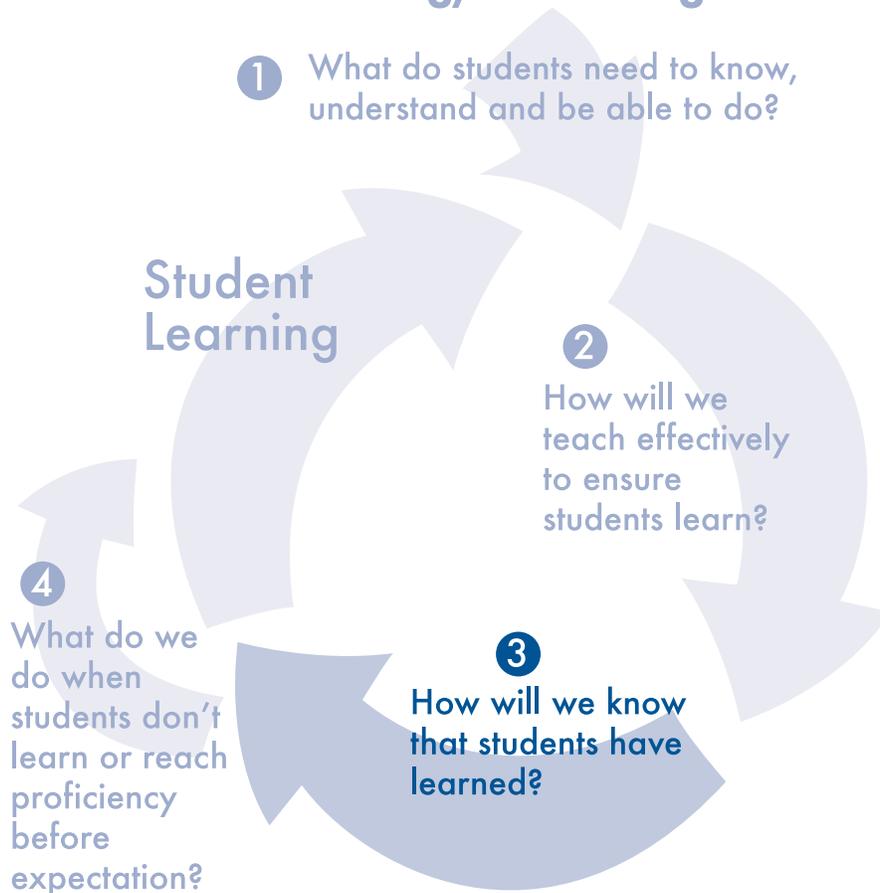
# Notes...



# Chapter 3

## 3 How will we know that students have learned?

### Continuous Cycle of Teaching/Learning





## Chapter 3

### How will we know that students have learned?

- A** Assessments to measure proficient student performance are tightly aligned with standards and benchmarks, curricula and instruction.
- B** All educators understand the multiple purposes of assessment, particularly the difference between summative assessment (assessment of learning) and formative assessment (assessment for learning).
- C** A variety of methods and strategies are available and used to continuously measure student learning.
- D** Common assessments are developed and administered for similar courses or grade levels.
- E** Common scoring guides or rubrics are used to consistently and reliably measure proficient performance on essential benchmarks.
- F** Students receive guidance and feedback in order to develop understanding of their own performance on assessments, monitor their own progress and identify individual goals for learning.
- G** Districts and schools use reporting systems that identify student proficiency levels in essential benchmarks and the progress students are making in reaching proficiency over time.
- H** Districts and schools continually collect and analyze student learning results in multiple fashions (with skill or content “snapshots;” in student sub-groups; longitudinally; against comparable districts and state-level performance, etc.)
- I** Multiple sources of assessment data are used to guide district, school, grade-level, department and individual classroom decisions.

# Description of Practices

## 3. How will we know that students have learned?

In order to ensure students learn the essential information, concepts and skills identified in district curricula, districts and schools must regularly monitor student learning through a variety of assessment strategies. In order to address this question, districts and schools need to ensure these practices are in place:

### **A** Assessments to measure proficient student performance are tightly aligned with standards and benchmarks, curricula and instruction.

In a standards-based framework, both formative and summative assessments should be tightly aligned with essential benchmarks to ensure they validly measure those same concepts and skills. This implies that assessments are designed based on the unique elements of the concept or skill students are being asked to demonstrate.

Assessments should also be aligned with instructional strategies that provide students with meaningful ways to demonstrate proficiency. This suggests the performance expectations of assessments should be understood by teachers and clearly explained to students as part of instruction.

#### **Guiding Questions:**

- > How does the district ensure summative and formative assessments are tightly aligned to the essential benchmarks identified in every curriculum?
- > How are teachers providing opportunities during instruction to practice proficient performance through formative assessments before summative assessments occur?
- > How do schools ensure performance expectations in assessments are clearly explained to students as part of instruction?

### **B** All educators understand the multiple purposes of assessment, particularly the difference between summative assessment (assessment of learning) and formative assessment (assessment for learning).

Assessments in a standards-based framework can be classified in two ways—summative assessment (assessment *of* learning) and formative assessment (assessment *for* learning). This might be best explained by Ainsworth and Viegut (2006) when they make this distinction: “If the *results* from an assessment can be used to monitor and adjust instruction in order to improve learning for *current* students, an assessment is formative, i.e., it is used to help students learn. If not, the assessment is summative, i.e., it provides summary information about what students have learned.” Both types of assessments are important and

#### **Guiding Questions:**

- > How does the district ensure all educators understand the different purposes of student assessments?
- > What types of formative assessments do schools and teachers employ to monitor and adjust instructional practices?
- > How are districts ensuring teachers are utilizing formative and summative assessments for their intended purposes?

provide different opportunities to measure and understand student learning. Appropriate use of assessments *for* learning should lead to positive results in a school or district's assessments *of* learning.

### **C** A variety of methods are used to assess student learning.

If teachers are fully engaged in the continuous standards-based teaching/learning cycle, a variety of methods will be used to measure and assess student learning. Along with understanding the difference between formative and summative assessments, teachers must employ multiple strategies to assess student learning. Similar to differentiated instruction, differentiated assessments provide more opportunities for students to demonstrate their learning. This also gives teachers a more complete picture of the effectiveness of instruction.

Just as teachers use a variety of formative assessments to measure student learning and inform classroom instruction, summative assessments provide districts and schools opportunities to broadly measure student progress, assess systemic practices and adjust district plans and actions.

Examples of formative assessments include:

- Classroom monitoring of student work
- Short performances to “check for understanding”
- Observations of student performance
- Small true/false, fill-in-the-blank or multiple-choice type tests
- Short written responses
- Classroom lesson or unit assignments
- End-of-class quizzes

Examples of summative assessments include:

- School or district benchmark assessments
- End-of-unit assessments
- Student products or projects
- End-of-course common assessments
- School or district-wide commercial content-area assessments
- High-stakes assessments such as CSAP, ACT or SAT

#### **Guiding Questions:**

- > How are teachers assessing student learning using a variety of formats and performances?
- > How are formative assessments helping to monitor and adjust instruction?
- > How are summative assessments informing grade-level, department, school or district planning?
- > What type of monitoring and accountability practices are in place to ensure appropriate assessments are being used in classrooms?

Some summative assessments may also be disaggregated and used for formative purposes if results are used to monitor and adjust curriculum or instructional practices.

**D Common assessments are developed and administered for similar courses or grade levels.**

Common assessments, as defined in the glossary, are assessments typically created by a team of teachers responsible for the same grade level or course. Common assessments allow teachers to collaborate regarding essential benchmarks and thus create a clear focus for teachers to ensure all students, regardless of their teacher, are provided with instruction in a common core curriculum. This consistency helps a school or district ensure there is fidelity to curriculum delivery and equity in student learning opportunities across the school or district.

Data from common formative or summative assessments can help guide collaborative planning of instruction, identify students who may need additional time or support to learn, provide information to make adjustments to a curriculum and identify improvement goals.

**Guiding Questions:**

- > How are teachers collaborating to create common formative or summative assessments to measure essential course or grade-level concepts and skills?
- > How is data from common assessments used to inform curricular or instructional decisions?

**E Common scoring guides or rubrics are used to consistently and reliably measure proficient performance on benchmarks.**

Scoring guides or rubrics describe student performance on standards-based learning tasks by providing various types of descriptions or rating systems to differentiate levels of performance. These descriptions allow students to understand what type of proficient work is desired and receive feedback about their performance based on that description. Scoring guides can be used to assess a variety of concepts and skills. They can be developed and used at the classroom, grade level, department, school and even district level.

**Guiding Questions:**

- > How are scoring guides or rubrics used to assess student performance in essential concepts and skills?
- > How are results of rubric-rated student performance used to guide instruction?
- > How are scoring guides or rubrics used to inform students about their performance on standards and benchmark concepts and skills?
- > How do schools ensure scoring guides are developmentally appropriate and can be easily understood by students so they know what they must do to demonstrate proficiency?

**F** Students receive guidance and feedback to develop understanding of their own performance on assessments in order to monitor their own progress and to identify individual goals for learning.

In a standards-based framework, students become partners in their own learning. If assessments are to provide the greatest value in the teaching/learning cycle, students must receive ongoing guidance and feedback regarding the current level, as well as the progress of their learning. Such feedback allows students to understand their own levels of performance, identify what they need to learn and set clear targets for what they should learn next. When students have knowledge of their learning results, engagement in learning and motivation to improve can be enhanced.

**Guiding Questions:**

- > How and when are students being provided information about their learning?
- > What types of opportunities are provided to students to regularly review their assessment results?
- > How can schools ensure assessment results are explained in student-friendly language?
- > How are schools teaching students to set their own learning goals?
- > How do students know what they must do to achieve their learning goals?

**G** Districts and schools use reporting systems that identify student proficiency levels in essential concepts and skills and the progress students are making in reaching proficiency over time.

If student learning is regularly assessed through a variety of methods using consistent and reliable scoring or ratings of performance, it is only logical that the same information derived from those assessments should be used to report student performance to those students, their parents and to various stakeholders. In standards-based schools, grades are replaced with, or augmented by, achievement reports that indicate levels of performance on essential benchmarks. Such reporting systems can provide more validity and reliability in communicating student progress and attainment of proficiency in those concepts and skills.

**Guiding Questions:**

- > How is student achievement in essential concepts and skills currently being reported?
- > How can student achievement reports provide valid and reliable information on student learning of standards and benchmarks?
- > How might current reporting systems be augmented to indicate student performance levels in essential benchmarks concepts and skills?

**H** Districts and schools continually collect and analyze student learning results in multiple fashions (with skill or content “snapshots;” in student sub-groups; longitudinally; against comparable districts and state-level performance; etc.)

Just as student performance in standards and benchmarks is the core focus of standards-based schools, other measurements at the district level are important to evaluate effectiveness of educational practices. This means that data from both

**Guiding Questions:**

- > What types of data systems are in place to efficiently manage, disaggregate and report data from formative and summative assessments?

formative and summative assessments should be collected and analyzed for grade levels, content areas, student sub-groups, individual schools and at the district level. Assessment data should provide information about current achievement and the progress students are making over time. This information is critical for accountability purposes, but more importantly, to inform numerous decisions, from effectiveness of curricula and instruction, to deployment of staff and resources.

> How can various stakeholders access student achievement data?

**I Multiple sources of assessment data are used to guide district, school and classroom decisions.**

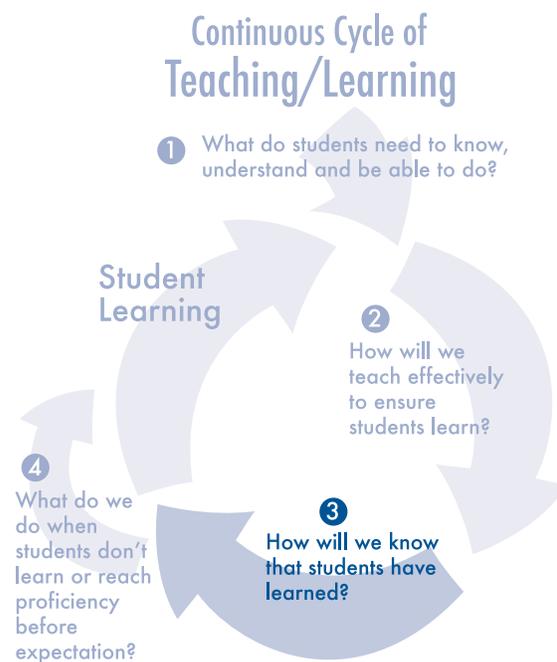
When student performance data is collected, purposefully disaggregated, analyzed and reported, standards-based districts and schools continuously use that data to guide their work. This means that systems are in place to analyze current performance at the school and district level, support effective practices and guide decisions to improve practices throughout the system. Standards-based districts and schools have structures, policies and processes in place to ensure they are *data and information rich* and continually use multiple sources of performance data to guide planning and decisions.

**Guiding Questions:**

- > How can analysis of student performance data be used to understand the current reality of a district or school?
- > How are multiple sources of achievement data used to guide system-wide decisions such as curriculum revisions, deployment of staff and resources, designing professional development, etc.

# 3 How will we know that students have learned?

- A. Assessments aligned to standards
- B. Summative and formative assessments understood and used
- C. Continuous measurement of learning
- D. Common assessments utilized
- E. Common scoring guides measure learning
- F. Guidance and feedback to students
- G. Standards-based reporting systems
- H. Continuous analysis of learning data
- I. Data guides decisions





# Notes...



# Chapter 4



## 4 What do we do when students don't learn or reach proficiency before expectation?

### Continuous Cycle of Teaching/Learning

1 What do students need to know, understand and be able to do?

Student Learning

2 How will we teach effectively to ensure students learn?

3 How will we know that students have learned?

4 What do we do when students don't learn or reach proficiency before expectation?



## Chapter 4

### What do we do when students don't learn or reach proficiency before expectation?

- A** Districts and schools ensure that students who do not learn through first instruction in their classroom have multiple opportunities to learn, both in the classroom and beyond the classroom.
- B** Grade-level or content-area instructional interventions beyond the classroom are provided for students performing below proficiency as well as acceleration and enrichment opportunities are made available for students performing above proficiency.
- C** Intervention models, programs or strategies are research based.
- D** Schools have a defined, school-wide system of interventions (sometimes called a pyramid of interventions).
- E** School-level teams support teachers in designing individual interventions for students.

# Description of Practices

## 4. What do we do when students don't learn or reach proficiency before expectation?

In standards-based districts and schools, students are provided multiple opportunities to learn, both in the classroom and beyond the classroom, through interventions, supplemental programs or other support systems. Such supplemental learning opportunities are provided both to students who are not reaching proficiency and/or who are performing above proficiency. In order to address this question, districts and schools need to ensure these practices are in place:

**A** Districts and schools ensure that students who do not learn through first instruction in their classroom have multiple opportunities to learn, both in the classroom and beyond the classroom.

In standards-based districts and schools, students are provided more than one opportunity to learn and perform at proficient levels. This means that teachers continually provide learning scaffolds for students to build on previous learning to reach proficiency. This also means that individualization and differentiation strategies are provided to students based on their learning characteristics, needs and current levels of performance. Strategies might include changes in the learning setting, amount of time provided to learn or complete tasks, changes in instructional strategies or adaptations in the ways students can respond.

**Guiding Questions:**

- > How are teachers ensuring they provide adequate opportunities for students to learn all essential concepts and skills for their course or grade-level?
- > How are teachers designing instruction to build learning scaffolds for students to reach proficiency?
- > How are teachers supported with ongoing training, resources and coaching to develop individualization/differentiation strategies?

**B** Grade-level or content-area instructional interventions beyond the classroom are provided for students performing below proficiency as well as acceleration and enrichment opportunities are made available for students performing above proficiency.

In standards-based schools, when the capacity of the classroom to provide individualization or differentiated instruction is maximized, students are provided with interventions to supplement their classroom instruction. Such interventions are also provided to students who may be performing above proficiency. Intervention systems should significantly reduce the need for remedial instruction or classes. DuFour (2004) suggests that interventions must be systematic (school wide), timely (to provide quick responses) and directive (rather than optional).

**Guiding Questions:**

- > Are interventions available to all students?
- > Are students receiving the most effective and appropriate intervention at the earliest possible time once they are identified?
- > Are interventions optional or required for students?

**C** Intervention models, programs or strategies are research based.

Interventions provided to students must be research based and provide intensive, targeted and accelerated opportunities for students to learn. Interventions should be designed and delivered only when they are based in proven instructional pedagogy and found, through research, to be effective with identified students.

**Guiding Questions:**

- > What criteria are used when designing or implementing interventions for students?
- > How is the effectiveness of intervention strategies or programs assessed or monitored?

**D** Schools have a defined, systematic, school-wide system of interventions (sometimes called a pyramid of interventions).

In standards-based schools, interventions are always part of a larger school plan and implemented as part of a rigorous, continuous teaching/learning cycle. This means that interventions are strategically designed to meet and support various levels or intensity of student needs. In order to provide such systematic interventions, schools must carefully allocate time, material and personnel resources. Effective standards-based schools often develop a framework or schema of services available to every student (sometimes called a pyramid of interventions).

**Guiding Questions:**

- > What framework or schema is used to design intervention systems in the school or district?
- > How can all students access appropriate interventions?
- > How are students afforded opportunities to learn through multiple interventions before they are identified for placement in special education?
- > How is the effectiveness of interventions measured and monitored?

**E** School-level teams support teachers in designing individual interventions for students.

In order to address the needs of individual students who are not learning at proficient levels, standards-based schools have structures and teams available to help teachers design classroom interventions or match students with appropriate school-wide interventions. Such teams are available to problem solve with teachers as well as to support the design of classroom or school-wide interventions.

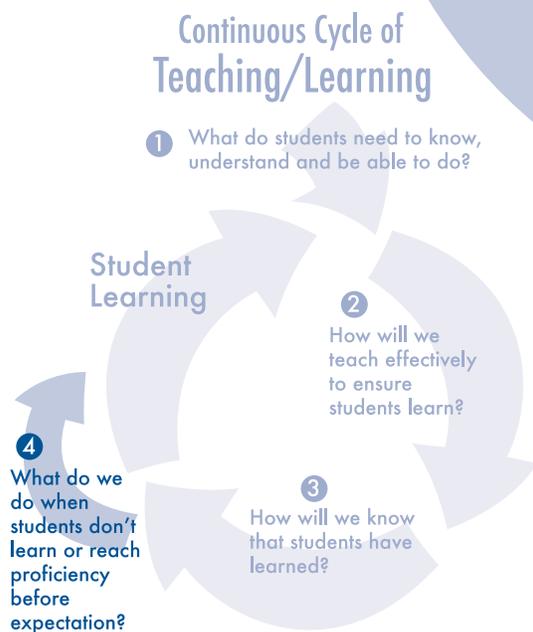
**Guiding Questions:**

- > How can teachers obtain collaborative support in designing and sustaining interventions for students?
- > What structures are in place to provide support to teachers in designing or accessing interventions for students?



# 4 What do we do when students don't learn or reach proficiency before expectation?

- A. Multiple opportunities to learn
- B. Instructional interventions
- C. Research-based interventions
- D. School-wide systems of interventions
- E. School-level teams support teachers





# Notes...



# Glossary of Terms

**Section A—Terms directly associated with standards, benchmarks, objectives and skills that describe what students should know, understand and be able to do:**

1. **Standard:** Commonly defined as a rule or model for which other things like it are compared; used as a basis of judgment.
2. **Content standard:** Defined in Colorado as “the broad knowledge and skills that all students should be acquiring in Colorado schools relative to a particular academic area” (H.B. 93-1313), Colorado Student Assessment Program [CSAP] Assessment Frameworks).

Standards in Colorado address the general knowledge and skills students should acquire over the course of their educational career. These standards are identified for 13 academic content areas.

3. **Colorado Model Content Standards:** Standards for learning in 13 academic content areas for kindergarten through grade 12 adopted by the Colorado State Board of Education. These standards are closely aligned with standards identified by the national organizations representing those academic disciplines.

The Colorado legislature required school districts to adopt standards that “meet or exceed the Colorado Model Content Standards” and “to institute a system to define and measure academic quality in education and thus...help public schools of Colorado to achieve such quality and to expand the life opportunities and options of the students of this state.”

Examples of Colorado content standards are:

- a. Students read to locate, select and make use of relevant information from a variety of media, reference and technological sources.
  - b. Students write and speak for a variety of purposes and audiences.
  - c. Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasons used in solving these problems.
4. **Benchmark or benchmark knowledge, concept or skill:** Defined in Colorado’s Assessment Frameworks as a “tactical description of the knowledge and skills students should acquire within each grade level range (i.e., K–4, 5–9 or 9–12).” A benchmark usually identifies an element of a standard and describes more distinct, usually developmental, components of the general subject area identified by the standard.

## Glossary of Terms

Benchmarks are generally written as *declarative knowledge*, i.e., information, knowledge or concepts that usually have component parts and *procedural knowledge*, i.e., skills, strategies and processes. A *benchmark concept* might be: “students understand the relationship of decimals to whole numbers.” A *benchmark skill* might be: “students can apply algebraic methods to solve a variety of real-world and mathematical problems.” Kendall and Marzano (1996).

Corresponding to the above three standard statements, examples of benchmark concepts or skills are provided below.

Fifth grade students will:

- a. Use organizational features of printed text such as prefaces, afterwords and appendices.
- b. Apply skills in analysis, synthesis, evaluation and explanation in their writing and speaking.
- c. Demonstrate meanings for integers, rational numbers, percents, exponents, square roots and pi ( $\pi$ ) using physical materials and technology in problem-solving situations.

5. **Objective, skill or assessment objective:** These commonly used terms identify more specific grade-level or course-learning outcomes aligned to standards and benchmarks. These are identified in Colorado’s Assessment Frameworks as *Assessment Objectives* and in the CSAP Item Maps as *Skills*. Objectives/skills:

- Are more specific than a benchmark concept or skill.
- Usually address shorter time frames for learning, i.e., at the end of a lesson, unit, semester or year.
- May include some descriptor of how a student might demonstrate a specific concept or skill.

Objectives or skills are often used synonymously with *course- or grade-level indicators*, *performance objectives* or *performance expectations*. Corresponding to the above three examples, examples of objectives or skills are provided below.

Fifth grade students will:

- a. Use concrete materials, demonstrate the equivalence of commonly used fractions, terminating decimals and percents (for example,  $7/10 = 0.7 = 70\%$ ).
- b. Use transitions to link ideas.
- c. Use organizational features of printed text to locate information (for example, page numbering, alphabetizing, glossaries, chapter headings, changes in print, table of contents, indexes, captions).

6. **Essential benchmark concepts and skills—sometimes called *essential learnings*, *essential outcomes* or *power standards*:** Critical knowledge or skills every student *is expected to acquire* at a proficient level as a result of each course, grade level or unit of instruction. Essential benchmarks are *identified at the district level* and are less in number than the total number of benchmarks identified under a standard for a grade level or course. Various criteria have been used to determine if benchmarks are essential. Such criteria might include:
  - Accountability, e.g., required by district, state or national assessments;
  - Endurance, e.g., useful or necessary beyond a period of time or a test;
  - Foundational, e.g., builds knowledge and skills for next level of learning;
  - Related to intended learning for future skills, e.g., 21st century skills;
  - Value in multiple disciplines, e.g., reading skills.
7. **Grade-level expectation:** Derived from the Colorado standards and helps define “what could be expected of students at each grade level as opposed to grade-level ranges such as K–4.” Grade-level expectation is used synonymously with objective, skill or assessment objective (see above). This term is found within Colorado’s CSAP Assessment Frameworks (see definition of Assessment Framework below).
8. **Curriculum objective:** The term commonly used to identify a very specific grade-level or course-learning outcome aligned to standards and benchmarks. Objectives are generally *identified at the district level* and usually communicated through district curriculum documents. They describe what students should know, understand or be able to do at the end of a course, unit, or even a lesson. Curriculum objectives usually are described with some type of expected performance or method to assess proficiency. Curriculum objectives or targets may sometimes be called *learning targets*, *learning outcomes*, *learning objectives*, *learning expectations* or *grade-level expectations*.
9. **Learning objective:** See curriculum objective.
10. **Learning target:** See curriculum objective.
11. **Learning expectations:** See curriculum objective.
12. **Performance description/descriptor:** Level or description of performance expected of a student within a given period of time such as at the end of a course, unit of study or lesson. A performance description usually describes how well students need to perform in various skills and knowledge to be considered proficient at their grade level. Performance descriptors in the Colorado Student Assessment Program (CSAP) are *Unsatisfactory*, *Partially Proficient*, *Proficient* or *Advanced*.

13. **Performance expectation:** See Performance description.
14. **Performance standard:** Level of performance that a student must reach to demonstrate they have met (learned) the content standards or benchmarks.

**Section B—Other terms associated with standards-based practices (listed in alphabetical order):**

1. **Advanced (level of performance):** Description of performance that exceeds proficient performance. An advanced level of performance is usually demonstrated by evidence of learning beyond or in addition to what is normally required for proficient performance in any standard, concept or skill and demonstrated at a higher or more complex cognitive level.
2. **Alignment:** Refers to consistency, organization or linkage of information, plans, actions and decisions. This often refers to the linkage between standards, of standards and curricula, instructional materials, instructional methods, assessments or data.
3. **Articulation/articulated:** The way things are joined or linked, similar to alignment. This most often refers to alignment of curricular objectives within and across grade levels and/or content areas.
4. **Articulation of curriculum:** The identification of what students should know and be able to do within grade levels or content areas, i.e., horizontal articulation and across grade levels or content areas, i.e., vertical articulation. In a well-articulated curriculum, there are no gaps or unnecessary overlaps in the learning targets within or among grade levels or content areas.
5. **Assessment:** An appraisal or evaluation. The process of quantifying, describing, gathering data or giving feedback about performance (Carr and Harris, 2001). In education, assessment is a process of measuring, evaluating or testing student competency in concepts or skills and determining the progress of a student toward meeting academic standards.
  - **Formative assessment—assessment for learning:** Assessments used to monitor or adjust instruction in order to improve learning for current students, i.e., to inform instructional decision making. Formative assessments can be pre-tests to determine current level of knowledge or skill before instruction, used to gauge progress during instruction, or used at the conclusion of a lesson or unit to determine the effectiveness of instruction. (Ainsworth & Viegut, 2006). These can be created by teachers, grade-levels, departments or other teams of teachers or specialists.

## Glossary of Terms

- **Summative assessment—assessment of learning:** Assessment that provides summary information about what students have learned. Summative assessments tend to be more formal and are usually given at the end of a grading period, course or annually to evaluate what students have learned at the conclusion of that time period or course.  
Both formative and summative assessments are important and provide different opportunities to measure and understand student learning.
  - **Alternative assessment:** “Alternative” to traditional, standardized, norm or criterion-referenced, paper-and-pencil testing. An alternative assessment might require students to answer an open-ended question, work out a solution to a problem, perform a demonstration of a skill or produce a project.
  - **Authentic assessment:** Broad evaluation procedure that includes a student’s demonstration of learned content with the integration of several concepts or skills into one assessment. The products and performances are designed to resemble those which occur in the “real world.”
  - **Performance assessment:** Assessment that requires students to construct a response, create a product or demonstrate their learning through various performance tasks generally evaluated using a scoring guide or rubric.
6. **Assessment Framework:** Description of the standards and benchmark concepts or skills that are assessed by content area and grade level on the Colorado Student Assessment Program (CSAP).
  7. **Collaboration:** Systematic process in which people work together, interdependently, to analyze and impact professional practice in order to improve individual and collective results (DuFour, Dufour, Eaker & Many, 2006).
  8. **Best practices:** Generally refer to research-based educational practices as well as those practices consistently identified by accepted authorities and authors and/or most often observed in successful, high-performing classrooms, schools and districts.
  9. **Coaching:** Training and guidance provided to enhance an individual’s or team’s knowledge, skill and performance. Coaching is provided to individuals or teams of educators to facilitate their continued development and effectiveness as professionals.
  10. **Common assessment:** Assessment typically created collaboratively by a team of teachers responsible for the same grade level or course (DuFour, Dufour, Eaker & Many, 2006). The typical purposes of developing and administering common assessments are (1) to collaboratively identify and plan instruction for those concepts or skills that are essential to a course or content area and (2) to compare and analyze results, reflect on effectiveness of instructional strategies and determine next steps for instruction.

## Glossary of Terms

11. **Criteria:** Standard on which a judgment or decision may be based.
12. **Criterion-referenced assessment:** Assessment used to determine if a student or group of students have met a specific standard, benchmark or intended learning outcome. (Ainsworth & Viegut, 2006)
13. **Curriculum (curricula pl.):** Organized plan or program of instruction or experiences that engages students in learning. A curriculum designs and communicates the *scope and sequence* of concepts and skills students should learn within a course or grade level.
  - **Guaranteed and viable curriculum:** A curriculum is guaranteed if it gives clear guidance to teachers regarding the content (standards and benchmark knowledge, concepts and skills) to be addressed in specific courses or at specific grade levels. It assumes that processes and personnel are in place to ensure there is monitoring of the curriculum and delivery, and individual teachers do not have the option to disregard or replace assigned content. A guaranteed curriculum ensures all students receive an effective education based on adopted curriculum standards and benchmarks regardless of who is teaching the class. A curriculum is viable when there is sufficient time, materials and instructional tools for teachers to teach the curriculum so students learn that content and perform at a proficient level (Marzano, 2003).
  - **Curriculum map:** Course of study usually linking learning objectives and targets with a designated time period through unit and/or lesson plans. A curriculum map has also been defined as a real-time collection of information about what is actually taught in classes at specific points during the school year (Jacobs, 2004).
  - **Curriculum framework or guide:** Organizational structure that assists in the development of a curriculum or the document itself that guides the delivery of a curriculum. Curriculum documents, guides or frameworks are often used synonymously.
14. **Data:** Most commonly defined as factual information, often in the form of facts and figures obtained through some type of observation, performance or survey. The most common types of data used in education are (a) student learning, e.g., results of assessments, teacher observations, student work; (b) demographics, e.g., enrollment, attendance, drop-out rate, ethnicity, race, gender, grade level and the behavioral characteristics of the student population (attendance, discipline, graduation rates, etc.); (c) school processes, e.g., descriptions of school programs and processes; and (d) perceptions, e.g., information collected about perceptions of learning environment, values and beliefs, attitudes or observations (Bernhardt, 1998).
15. **Differentiation (syn. individualization):** Instructional strategies that provide varied opportunities for students to learn based on their performance level, learning style or other individual characteristics or needs.

## Glossary of Terms

16. **Exemplar:** Example that illustrates the knowledge or performance characteristics of a concept or skill. Exemplars provide students with a model of an expected level of learning or a performance. The most common exemplars are samples of student work provided to students as an example of what they are expected to know or perform. Exemplars can also help teachers (and students themselves) to evaluate student work.
17. **First instruction (sometimes called first best instruction):** Instruction provided in the classroom as outlined in a class or course curriculum. It provides students with their first opportunity to learn standards and benchmark concepts and skills. All first instruction should be grounded in research-based methodology.
18. **Goals:** Generally defined as measurable milestones that can be used to assess progress in advancing toward a vision or desired state. Goals establish targets and timelines to answer the question, “What results do we seek and how will we know we are making progress?” (DuFour, Dufour, Eaker & Many, 2006)
19. **Individualization (syn. differentiation):** See differentiation.
20. **Instructional materials:** Any print or electronic media designed to provide resources or tools to support instructional delivery and assist students in learning. This includes textbooks and their ancillary materials, literature, models, “manipulatives” and other tangible resources or learning tools.
21. **Instruction or instructional practices:** Methodology or strategies used by teachers to engage students in the learning process.
22. **Intervention:** Instruction provided in response to students who are learning below proficient levels and are not acquiring essential knowledge and skills or in response to students who may be learning and performing above expectancy. Beyond additional instruction, interventions may also involve remediation of skills, reinforcement of knowledge or skills, acceleration in concepts or skills or other academic or behavioral supports for a student.
23. **Pacing guides:** Guide that identifies periods of time or timelines that benchmark concepts and skills should be taught and learned. Often pacing guides are included in curriculum guides or documents.
24. **Professional development (syn. staff development):** Processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve the learning of students. Well-designed professional development should be an intentional, meaningful, ongoing and systematic process for educators to enhance their practice.

## Glossary of Terms

25. **Proficient performance/proficiency:** Commonly defined as being skilled or able to do something very well. In education this represents the level of performance that is accepted as sufficient for meeting the requirements of a content standard or benchmark, usually at various points of time in a student’s career.
26. **Program:** Commonly defined as a plan of action for achieving something or a system of procedures or activities that has a specific purpose, e.g., to teach reading or to develop mathematical knowledge and skills. A program may be a unit of study, a series of classes or even a published set of materials to support teaching and learning. Programs are sometimes research based. However, some programs are designed, developed or produced based on professional literature, expertise or experience, but without scientific evidence of their usefulness or efficacy.
27. **Pyramid of interventions:** Term generically used to describe a model, range or variety of interventions available to students within a school or district. A pyramid of interventions is often designed within a hierarchy of interventions determined by the level of student need and/or intensity of intervention.
28. **Reflection:** Active thought process in which educators review past practices to better understand results and to improve future practice. Reflection implies that when current practices are observed and evaluated, effective practices are sustained and less effective practices are improved or modified.
29. **Research based:** Educational practices, methodology, strategies, programs or materials that have been systematically and scientifically studied and shown to have a correlation with, or positive effect, on learning and achievement. While educational practices are often identified and promoted in educational literature, such practices are not defined as research based unless they have been shown, through scientific study, to have a correlation with, or effect on, student learning.
30. **Rubric:** See scoring guide.
31. **Scope and sequence:** Range or extent and the order or progression of concepts and skills included in a curriculum.
32. **Scoring guide:** A scale that describes levels of knowledge or skill that can be demonstrated in some type of performance task. Scoring guides or rubrics utilize a clear set of criteria that describe the expected learning and quality needed to achieve a specific level of performance or grade. They describe levels of performance and usually assign some type of descriptor (e.g., no progress—fully accomplished) and/or a numerical rating (e.g., 1 – 5) to that performance. The term “scoring guide” is usually used synonymously with “rubric.”

## *Glossary of Terms*

33. **Strategy:** Plan or method used by both teachers and students to approach or complete a task.
34. **Systematic:** Specific efforts to organize related parts into a coherent whole in a methodical, deliberate and orderly way toward a particular aim.
35. **Unit (or instructional unit or unit of study):** Usually a collection of lessons that focus on one or a related group of standards and benchmark concepts or skills and provide a variety of instructional formats and learning opportunities for students. Using content standards and benchmarks as the basis for a unit of study provides focus for instructional planning and delivery and can help design relevant assessments at the end of a unit.



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In producing this document, in addition to the numerous references listed above, the web sites for all 50 states were accessed and reviewed regarding their policies and practices related to standards-based education. This review was conducted to assess the contents of this document for alignment with the practices of other states, to review their expectations and policies, and to identify and review the standards-based vocabulary used in various states.

# The Standards-Based Teaching/Learning Cycle

L A N D S C A P E

## 1 What do students need to know, understand and be able to do?

- A. Standards in all academic disciplines or content areas, along with benchmark information, concepts and skills, are identified and adopted at the district level.
- B. Essential benchmark information, concepts and skills expected for all students are identified and described. (These may also be called essential learnings, learning targets, power standards, objectives or grade-level expectations.)
- C. Essential benchmarks are articulated and aligned within and among grade levels and across the district to ensure there are no gaps or unnecessary overlaps in those expected learnings.
- D. Adopted curricula provide a scope and a sequence of essential benchmarks (sometimes called curriculum objectives or targets) that engage students in learning standards in all content areas.
- E. Curriculum guides (frameworks), maps, pacing guides and other curricular tools are produced at the district level to assist teachers to plan effective instruction that focuses on essential benchmark knowledge, concepts and skills.
- F. Descriptions of proficiency are created to describe the types and levels of performance expected for all essential benchmarks in all content areas and grade levels.
- G. Examples of proficient student work are created and distributed to teachers to provide models of learning and performance expectations for all essential benchmarks.
- H. Adopted or purchased instructional programs and materials are intentionally articulated and aligned with standards-based curricula.
- I. Standards and benchmarks are communicated effectively to students and parents. Students understand and can describe proficient performance for those concepts and skills.

## 2 How will we teach effectively to ensure students learn?

- A. Curricula (aligned with standards and benchmarks) are consistently and equitably taught to proficiency.
- B. Research-based instructional methods are implemented to engage students in learning by providing them with strategies to learn benchmark information, concepts and skills, receive timely feedback about their performance and have adequate opportunities to learn and perform at proficient levels.
- C. Teachers engage in ongoing, intense collaborative work to develop units, lessons and instructional strategies focused on the district's essential benchmarks.
- D. Lessons and units are developed using a backwards design process, i.e., beginning with the end (learning objective or target) in mind along with a defined method or assessment for students to demonstrate what they have learned.
- E. Instruction is continually informed by assessment of student learning through the use of multiple formative assessments (assessments for learning).
- F. Instruction supports equity with multiple opportunities to learn through individualization and differentiation.
- G. Ongoing training, coaching, monitoring and feedback regarding instructional practices are provided to teachers to ensure effectiveness in teaching standards and benchmarks.

### 3 How will we know that students have learned?

- A. Assessments to measure proficient student performance are tightly aligned with standards and benchmarks, curricula and instruction.
- B. All educators understand the multiple purposes of assessment, particularly the difference between summative assessment (assessment of learning) and formative assessment (assessment for learning).
- C. A variety of methods and strategies are available and used to continuously measure student learning.
- D. Common assessments are developed and administered for similar courses or grade levels.
- E. Common scoring guides or rubrics are used to consistently and reliably measure proficient performance on essential benchmarks.
- F. Students receive guidance and feedback in order to develop understanding of their own performance on assessments, monitor their own progress and identify individual goals for learning.
- G. Districts and schools use reporting systems that identify student proficiency levels in essential benchmarks and the progress students are making in reaching proficiency over time.
- H. Districts and schools continually collect and analyze student learning results in multiple fashions (with skill or content “snapshots;” in student sub-groups; longitudinally; against comparable districts and state-level performance, etc.)
- I. Multiple sources of assessment data are used to guide district, school, grade-level, department and individual classroom decisions.

### 4 What do we do when students don't learn or reach proficiency before expectation?

- A. Districts and schools ensure that students who do not learn through first instruction in their classroom have multiple opportunities to learn, both in the classroom and beyond the classroom.
- B. Grade-level or content-area instructional interventions beyond the classroom are provided for students performing below proficiency as well as acceleration and enrichment opportunities are made available for students performing above proficiency.
- C. Intervention models, programs or strategies are research based.
- D. Schools have a defined, school-wide system of interventions (sometimes called a pyramid of interventions).
- E. School-level teams support teachers in designing individual interventions for students.

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