Establishing and Communicating Clear Learning Targets (Goals)

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Four Systems Of Human Thought

Thought System	Description
Knowledge System	
Cognitive System	
Metacognitive System	
Self-System	

Providing Clear Learning Goals and Scales

"In the last decade of the 20th century, the picture of what constitutes an effective school became much clearer. Among elements such as a well-articulated curriculum and a safe and orderly environment, the one factor that surfaced as the single most influential component of an effective school is the individual teachers within that school."

Marzano, R. J. (2007). The Art and Science of Teaching. p. 1

What the Research Says about Learning Goals…

Learning targets convey to students the **destination for the lesson** – what to learn, how deeply to learn it, and exactly how to demonstrate their new learning. In our estimation (Moss & Brookhart, 2009) and that of others (Seidle, Rimmele, & Prenzel, 2005; Stiggins, Arter, Chappuis, & Chappuis 2009), the intention for the lesson is one of the most important things students should learn. **Without a precise description of where they are headed, too many students are "flying blind**."

Moss, Brookhart, Long (2011). Knowing Your Learning Target. Educational Leadership. 68 (6). Pp. 66-69

The starting place for all effective instruction is designing and communicating clear learning goals.

Marzano (2009)

Our collective goal is that the largest possible percentage of our students get there. To reach that goal we must define for ourselves and for them where "there" is. **Any energy you invest in becoming clear about your targets will pay dividends…**

Stiggins (1994)

If teachers aren't sure of instructional goals, their instructional activities will not be focused, and unfocused instructional activities do not engender student learning.

Marzano (2009)

Communicating Learning Goals (Targets)

What is the difference between Learning Goals (Targets) and Activities?

What does it mean to communicate Learning Goals (Targets)?

Communicate learning goals (targets) when you begin a unit:

Organize learning goals into a scale

- Advanced = 4.0 More complex learning goal
  - Above and beyond the target goal
- Proficient = 3.0 target learning goal
  - At the level identified in the standards
- Progressing = 2.0 simple learning goal
  - Foundational knowledge needed to reach level 3

	Atmospheric Processes and Water Cycle Scale
4	Infer relationships regarding atmospheric processes and the water cycle.
3	An explanation of: • How the water cycle processes impact climate changes • The effects of temperature and pressure in different layers of Earth's atmosphere
2	• Recognize and recall basic terms such as: climatic patterns, atmospheric layers, stratosphere, troposphere. • Recognize or recall isolated details such as: • Precipitation is one of the processes of the water cycle. • The troposphere is one of the lowest portions of the Earth's atmosphere.

Telling Time Proficiency Scale

Score 4.0 – more complex Demonstrations of learning that go above and beyond what was explicitly taught The student will:
Score 3.0 – the learning goal or expectation The student will:
Score 2.0 – the simpler stuff Foundational knowledge, simpler procedures, isolated details, vocabulary The student will:
Score 1.0 With help, the student can perform Score 2.0 and 3.0 expectations
Score 0.0 Even with help, the student cannot perform expectations

Standards for English Language Arts		
Strand: Reading		
Main Ideas and Details (RI.K.2, KI.K.8)		
Kindergarten		
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:**	**Example Activities**
	3.5 In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	**The student will:** • identify the main topic and key details of a grade level appropriate informational text (RI.K.2) • identify the reasons an author gives to support points in a grade level appropriate text (RI.K.8) **The student exhibits no major errors or omissions.**	
	2.5 No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	

Score 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student will:**
	• recognize or recalls specific vocabulary, such as:
	  o informational text, beginning, middle, ending, detail, retell
	• perform basic processes, such as:
	  o retell familiar stories, including key details (RL.K.2)
	  o recognize the main topic of a text
	
	However, the student exhibits major errors or omissions regarding the more complex ideas and processes.	

	1.5 Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
Score 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**	
	0.5 With help, a partial understanding of the 2.0 content but not the 3.0 content	
Score 0.0	**Even with help, no understanding or skill demonstrated.**	

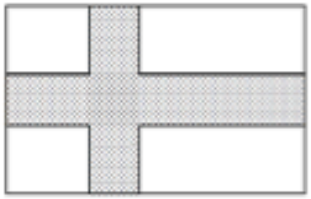
READING			
Questioning, Inference, and Interpretation			
Grade 2			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • ask and answer such questions as Who?, What?, Where?, When?, Why?, and How? to demonstrate understanding of key details in a grade-appropriate text (RL.2.1; RI.2.1)		**Sample Activities:** The student will read a text and answer *who what where, when, why*, and *how* questions that are presented on index cards. After the questions are answered, the student will pair with another student and compare responses.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • answer, ask, detail, question, text **The student will perform basic processes, such as:** • answer teacher-provided questions such as Who?, What?, Where?, When?, Why?, and How? to demonstrate understanding of key details in a grade-appropriate text		**Sample Activities:** The student will use a *5 Ws and H* graphic organizer to record information about a specified text.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

Common Core State Standards for Mathematics		
Domain: Number and Operations – Fractions		
Decimal Concepts (4.NF.6, 4.NF.7)		
Grade 4		
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:**	**Example Activities**
	3.5 In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	**The student will:** • compare and justify the comparison of two decimals to hundredths (4.NF.7) **The student exhibits no major errors or omissions.**	
	2.5 No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.	
Score 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student will:** • recognize or recall specific vocabulary, such as: o tenths, hundredths, whole number, decimal notation • perform basic processes, such as: o use decimal notation for fractions with denominators 10 or 100 (4.NF.6) **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	
	1.5 Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content.	
Score 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**	
	0.5 With help, a partial understanding of the 2.0 content, but not the 3.0 content.	
Score 0.0	**Even with help, no understanding or skill demonstrated.**	

Motor Skills & Movement Patterns: *Foot dribble, pass and receive a ball with a partner while jogging.*		
Grade 6		
Level 4.0	**In addition to Level 3.0, in-depth inferences and applications that go beyond what was taught.**	
	Level 3.5	In addition to Level 3.0 performance, in-depth inferences and applications with partial success.
Level 3.0	**While engaged in tasks involving dribbling, passing and receiving a soccer ball, the student:** • dribbles, with his/her foot, with control while moving at a slow consistent jog • sends a receivable lead pass to a partner so it can be received outside the 15' passing lane without a break in the receiver's stride on at least three of four passes within a 120' distance • moves forward and outside the passing lane to meet the ball while receiving at least three of four receivable passes within a 120' distance **The student exhibits no major errors or omissions.**	
	Level 2.5	No major errors or omissions regarding the simpler details and process and partial knowledge of the more complex ideas and processes.

Level 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student:**
	• recognizes or recalls specific terminology such as:
	  ○ dribble, lead pass, passing lane
	• performs basic processes such as:
	  ○ dribbling with his/her foot, with control while walking
	  ○ sending a receivable lead pass outside the passing lane to a partner so it can be received without a break in the receiver's stride on two of four passes
	  ○ moving forward to receive at least two of four receivable passes
	However, the student exhibits major errors or omissions regarding the more complex ideas and processes.	

	Level 1.5	Partial knowledge of the simpler details and processes but major errors or omissions regarding the more complex ideas and procedures.
Level 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**	
	Level 0.5	With help, a partial understanding of some of the simpler details and processes but not the more complex ideas and processes.
Level 0.0	**Even with help, no understanding or skill demonstrated or violates safety procedures.**	

GEOMETRY			
Area			
Grade 7			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • use the formulas for the area and circumference of a circle to solve problems (7.G.4) • solve real-world and mathematical problems involving the area of two and three-dimensional shapes composed of triangles, quadrilaterals, polygons, cubes, and right prisms (7.G.6)		**Sample Activities:** A circle has an area of 32 square kilometers. What is the circumference of the circle? The diagram below shows the flag of Finland, which consists of a blue cross, whose width is a uniform 9 inches, against a solid white background. The flag measures 2 feet 9 inches by 4 feet 6 inches. The blue cross occupies what fractional part of the whole flag? 
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • area, calculate, circle, circumference, cube, formula, mathematical, polygon, quadrilateral, real-world, right prism, scale drawing, shape, three-dimensional, triangle, two-dimensional **The student will perform basic processes, such as:** • recognize or recall the formulas for the area and circumference of a circle • recognize or recall the formulas for the area of two and three-dimensional figures • calculate area using scale drawings (7.G.1)		**Sample Activities:** identify or produce definitions to given terms. Helen has an 80:1 scale drawing of the floor plan of her house. On the floor plan, the dimensions of her rectangular living room are 167 inches by 219 inches. What is the area of her real living room in square feet?

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Middle School
Learning Goal Scale

Grade/Content: 7th Grade – Civics and Government

Learning Goal:
Students will evaluate the roles, rights and responsibilities of United States citizens, and determine methods of active participation in society, government, and the political system.

SCORE 4.0	**Students will:** • Generate an action plan for increasing active participation in society, government or the political system. **No major errors regarding the score 4.0 content**
SCORE 3.0	**Students will:** • Analyze the impact of dutiful citizenship on society and correlate the findings to non-participatory citizenship. • Evaluate the adverse affects of persons not exhibiting dutiful citizenship on society. **No major errors regarding the score 3.0 content**
SCORE 2.0	**Students will:** • Define and understand the following: roles, rights, responsibilities, citizenship, society, government, political systems, laws, taxes, jury, voting, volunteering, perspectives, influence, and election • Understand the purpose of the Bill of Rights and Constitution • Understand that citizens have certain rights and obligations • Identify the current political parties in America • Understand that people have varying perspectives on governmental issues **No major errors regarding the score 2.0 content**
SCORE 1.0	**With help, partial success at score 2.0 content and score 3.0 content**
SCORE 0.0	**Even with help, no success**

Strand: Properties & Principles or Matter & Energy			
Topic: Objects, and the materials they are made of, have properties that can be used to describe & classify them			
Grade: 8			
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.**		**Sample Tasks** • Experiment on a pure substance (not previously done in class) to determine its physical and chemical properties.
	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	**The student:** • describes the physical and chemical properties of pure substances (elements or compounds) **The student exhibits no major errors or omissions.**		• Classify pure substances (elements and compounds: copper wire, aluminum wire, iron, charcoal, magnesium, water, salt, sugar, sodium bicarbonate, galena, quartz, magnetite, pyrite) based on their physical and chemicals properties (e.g. magnetic attraction, conductivity, melting point & boiling point, reactivity) and describe your results.
	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
Score 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student:** • lists the characteristics of physical and chemical properties of pure substances. (Physical Property e.g. magnetic attraction, conductivity, melting and boiling point, phases of matter, density, ductile, malleable (Chemical Property e.g. reactivity with water (rusting) and air (combustibility) **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**		• List 5 characteristics for physical properties and 2 characteristics for chemical properties of pure substances.
	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
Score 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**		
	0.5	With help, a partial understanding of the 2.0 content but not the 3.0 content	
Score 0.0	**Even with help, no understanding or skill demonstrated.**		

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Common Core State Standards for English Language Arts			
Strand: Reading			
Main Ideas and Details (RI.9-10.2)			
Grade 9-10			
re 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:**		**Example Activities**
			The student will condense an appropriate informational text by summarizing the most important information and then identify additional information that would add to his/her knowledge of the topic.
	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
re 3.0	**The student will:** • provide an objective summary of a grade level appropriate text (RI.9-10.2) **The student exhibits no major errors or omissions.**		The student will identify the main idea of an appropriate informational text and select the most important details to explain the main idea. The student will use this information to compose a written summary.
	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
re 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student will:** • recognize or recall specific vocabulary, such as: o summary, paraphrase, main idea, supporting details • perform basic processes, such as: o determine main idea and details of grade level appropriate text **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**		The student will write a main idea statement for an appropriate informational text and list supporting details related to the main idea.
	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
: 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**		
	0.5	With help, a partial understanding of the 2.0 content but not the 3.0 content	
: 0.0	**Even with help, no understanding or skill demonstrated.**		

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Rockwall ISD		
Grade or Subject: 8th Math		
Standard: Numerical Representations and Relationships		
Date: 7/17/2014		
Level 4	**The student will:** Explain in writing the reasoning and processes the student used to order or compare real numbers.	**Sample Instructional Activities**
	Can do all of level 3 and part of level 4.	
Level 3	**The student will:** Order a set of real numbers arising from mathematical and real-world context.	
2.5	Can do all of level 2 and part of level 3.	
Level 2	**The student will:** • **Recognize or recall specific vocabulary**: real numbers, rational, irrational, scientific notation, ascending, descending, square root, convert, value of pi • **Perform basic processes, such as**: convert decimals, fractions, and percent, order least to greatest and vice versa, how to identify values on a number line,	

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Topic: Variety/Contrast			
Score 4.0	**In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.**		**Sample Tasks**
	3.5	In addition to score 3.0 performance, in-depth inferences and applications with partial success.	
Score 3.0	**The student:** • demonstrates and articulates effective use of contrast/variety in a work of art *(e.g., observe/execute high and low contrast using the elements of art)* **The student exhibits no major errors or omissions.**		
	2.5	No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content	
Score 2.0	**There are no major errors or omissions regarding the simpler details and processes as the student:** • recognizes or recalls specific terminology such as: o contrast, difference, variety, opposites • performs basic processes, such as: o creating a work of art that demonstrates contrast using the elements of art o identifying examples of contrast in works of art **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**		
	1.5	Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content	
Score 1.0	**With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.**		
	0.5	With help, a partial understanding of the 2.0 content but not the 3.0 content	
Score 0.0	**Even with help, no understanding or skill demonstrated.**		

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Proficiency Scale Review Checklist

Content Area _____

Grade Level and Standard(s) _____

Criteria	Yes	No	Comments
Specificity The language of each level on the scale is clear and specific.			
Progression Verbs are present and these verbs and corresponding context represent a progression of complexity.			
Comprehensiveness The proficiency scale is doable. It has enough depth, yet not so much to warrant an additional scale. Each level on the scale includes one to three related learner expectations.			
Measurability Each expectation is observable and quantifiable.			
Format Each expectation is written with the verb first to provide focus on what the student should know or be able to do.			
Vocabulary Key vocabulary has been identified at the score 2.0 level.			
Alignment Aligned vertically with previous and/or subsequent grade levels/courses.			

Classroom Assessments

Type	Description	Notes
Obtrusive	Obtrusive assessments interrupt the normal flow of activity in the classroom. Instruction does not occur during obtrusive assessments. Instead, instruction stops while students "take the assessment" (hence the term *obtrusive*).	
Unobtrusive	Unobtrusive assessments do not interrupt the flow of activity in the classroom. In fact, students might not even be aware that they are being assessed during an unobtrusive assessment. These types of assessments are often used with Procedural knowledge but can also be used to assess Declarative knowledge.	
Student-Generated	Student-generated assessments are probably the most underutilized form of classroom assessment. As the name implies, a defining feature of student-generated assessments is that the students generate ideas about the manner in which they will demonstrate their current status on a given topic. Teachers might consider choice boards to offer ideas to get students involved in this type of assessment.	

Uses of Assessment Data:	
Instructional Feedback	
Formative Scores	
Summative Scores	

Exercise 2.1

Learning Goals vs. Activities and Assignments

Following are statements from different subject areas. Some are more clearly learning goals; others are more clearly activities or assignments. After each statement, identify whether it is better classified as a learning goal or an activity or assignment.

1. Students will be able to recognize the protagonist, theme, and voice of a piece of literature.

   _____

2. Students will produce a book report on a book of their choice, including a table of contents, with proper pagination and format throughout.

   _____

3. Given a set of coordinates, students will be able to graph the slope of a line.

   _____

4. Students will compare and describe the slopes of two lines.

   _____

5. Students will understand the differences and similarities between metamorphic, igneous, and sedimentary rock.

   _____

6. Students will understand how the Borgia family influenced the Renaissance.

   _____

7. Students will be able to explain how the problems created by the French and Indian War contributed to causes of the American Revolution.

   _____

8. Students will produce a play dramatizing the problems created by the French and Indian War and how they contributed to causes of the American Revolution.

   _____

9. Students will understand that matter is made up of atoms and that atoms, in turn, are made up of subatomic particles.

   _____

10. Students will write a paper describing the relationships among atoms and subatomic particles.

    _____

Exercise 2.1

Obtrusive, Unobtrusive, and Student-Generated Assessments

After reading each of the following classroom assessment scenarios, determine whether it is best classified as an example of obtrusive, unobtrusive, or student-generated assessment.

1. Mona is very close to receiving an A on the content that has been covered in her art class this quarter. She approaches the teacher and proposes that she provide a sketch to show she has mastered the techniques presented during the quarter.
2. After teaching the concept of a thesis statement, discussing examples of successful thesis statements, and providing the students with opportunities for practice, Mr. Grace gives his students a topic and asks them to write a corresponding thesis statement. He scores the effectiveness of the thesis statements using a rubric and records the scores for each student.
3. After teaching a unit on editing and revising, Ms. Minturn asks her students to pull out a hard copy of an essay they composed earlier in the year. She breaks the class into pairs and asks them to read and suggest edits and revisions on their partners' essays. She collects the revisions and grades each student according to a rubric on the effectiveness of his or her editing.
4. Mr. Davis is teaching a unit on shading. He takes his class to an outside garden, and while the students are creating compositions focusing on the shadows and colors they see, he walks around and observes their progress. Without interrupting, he records an assessment score for each student in his gradebook.
5. Ms. Lewis has been working with her students on a cooperative learning goal. While she is monitoring recess, she notices four of them working together to complete a double-dutch jump rope game. Because all four students have to cooperate to reach their goal, Ms. Lewis decides these students have fulfilled the requirement for score 3.0 on the rubric she has designed for cooperative skills.

Scale Worksheet

Score 4.0 – more complex Demonstrations of learning that go above and beyond what was explicitly taught **The student will:**
Score 3.0 – the learning goal or expectation **The student will:**
Score 2.0 – the simpler stuff Foundational knowledge, simpler procedures, isolated details, vocabulary **The student will:**
Score 1.0 With help, the student can perform Score 2.0 and 3.0 expectations

Common Assessment Development	
Step 1: Identify the learning goal (prioritized standard) to be assessed.	
Step 2: Create a proficiency scale.	
Step 3: Determine the number and type of assessment items for each level of the scale.	
Step 4: Write the assessment items.	
Step 5: Review items for elements of bias.	
Step 6: Administer the common assessment, score it, and discuss the results.	
Step 7: Revise the assessment as necessary.	

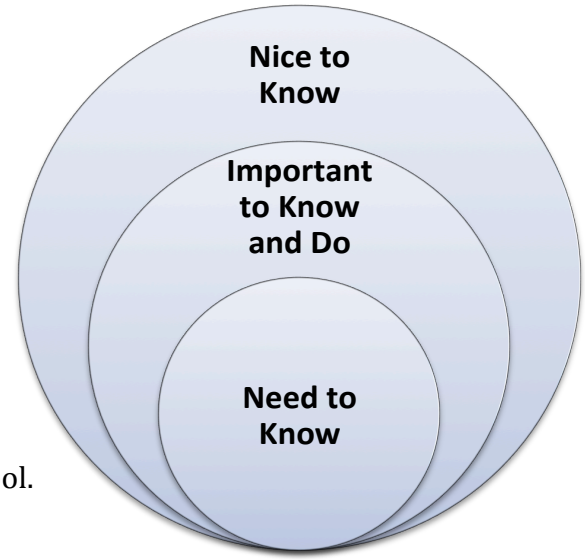
So, Now What?

Follow these next steps for getting clear about what students should know and be able to do:

- First, identify priority learning goals within the curriculum.
- Then, develop a proficiency scale for each priority learning goal.
- Be sure to work collaboratively!

What Is a Guaranteed and Viable Curriculum?

- A viable curriculum is a well-articulated set of knowledge and skills that every child should learn in grades K–12. Viable also means it can be taught for understanding in the time available.
- A guaranteed curriculum means it is taught in every classroom in every school.



A guaranteed and viable curriculum is comprised of three main elements. (Adapted from McTighe and Wiggins, *Understanding by Design*, 2005)

What Are Criteria for Priority?

- **Endurance:** Will this provide knowledge and skills that are valuable beyond a single test date?
- **Leverage:** Will this provide knowledge and skills that are valuable within multiple disciplines?
- **Readiness for next level of learning:** Will this provide students with tools for success at the next level or grade?
- **Teacher judgment:** Is this skill or knowledge critical for all students to know or be able to do?
- **Assessment connection:** Will this skill or knowledge be assessed on an instrument used for instructional decision-making?

Notes