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2014

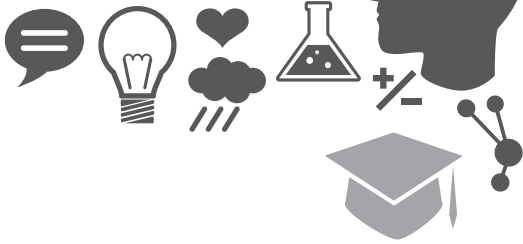
23–26 May

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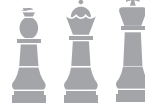
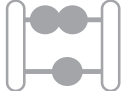


## ROBERT MARZANO

Sunday 25 May

### Building High Reliability Schools - The Next Step in School Reform

*Session 1*



**ROBERT MARZANO**

Dr Robert Marzano is co-founder and CEO of Marzano Research Laboratory in Englewood, Colorado. A leading researcher in education, he is a speaker, trainer and author of more than 30 books and 150 articles on topics such as instruction, assessment, writing and implementing standards, cognition, effective leadership and school intervention. His practical translations of the most current research and theory into classroom strategies are internationally known and widely practised by both teachers and administrators.

Dr Marzano's vision for education is simple: the vast majority of schools can be highly effective in promoting student learning. To show how, he has created the High Reliability Schools™ (HRS) framework. This framework, based on 40 years of educational research, defines five progressive levels of performance that a school must master to become high reliability: a school where all students learn the content and skills they need for success in university, careers and beyond.

The Marzano High Reliability Schools framework does not add a new initiative to school efforts. Many schools are already implementing a wide range of effective initiatives, and many educators are already practising research-based strategies. The HRS model explicitly supports improvement initiatives such as professional learning communities; The Art & Science of Teaching framework; teacher performance and development plans; curriculum implementation; vocabulary instruction; critical thinking and reasoning skills; formative assessment; standards-based marking and reporting systems; and student mastery systems.

Dr Robert Marzano, Dr Janelle Wills, Gavin Grift, Jan Hoegh and Dr Phil Warrick will be introducing the High Reliability Schools framework. Robert Marzano will provide an introductory keynote, followed by concurrent workshop sessions by each of the presenters throughout the conference. In each session, presenters will address leading indicators and samples of practice for the Marzano High Reliability Schools framework. Participants will be asked to do some self-assessment of their own situation in regard to these level, and they will be introduced to the concept of leading and lagging indicators a school might use to measure their progress within a designated level.

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Hawker Brownlow Education  
P.O. Box 580, Moorabbin, Victoria 3189, Australia  
Phone: (03) 8558 2444 Fax: (03) 8558 2400  
Toll Free Ph: 1800 334 603 Fax: 1800 150 445  
Website: [www.hbe.com.au](http://www.hbe.com.au)  
Email: [orders@hbe.com.au](mailto:orders@hbe.com.au)

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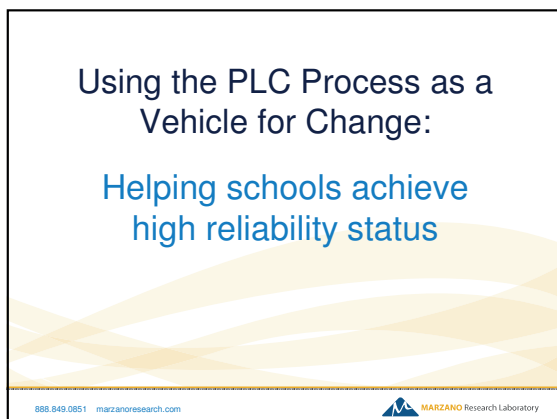
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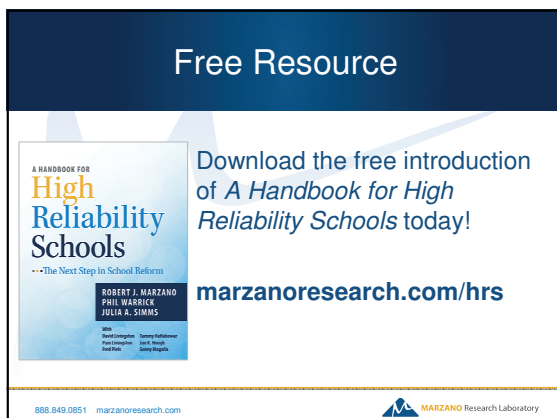
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## High Reliability Organizations

- Organizations that take **proactive** steps to prevent failure and ensure success.
- Examples of high reliability organizations:
  - Air traffic control towers
  - Nuclear power plants
  - Electrical power grid operators

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## A Hierarchy of Factors

The factors can be arranged into a series of five hierarchical levels:

Level 5	Competency-Based Education
Level 4	Standards-Referenced Reporting
Level 3	Guaranteed and Viable Curriculum
Level 2	Effective Teaching in Every Classroom
Level 1	Safe and Collaborative Culture

The levels allow a school to focus on sets of related factors.

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## Becoming a High Reliability School

Where do we start?

What do we do?

How do we measure progress?

How do we celebrate success?

Overview of the HRS model

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## Where do we start?

### Leading Indicators

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## What are Leading Indicators?

- “Important conditions that are known to be associated with improvement” –Foley et al., n.d., p. 2
- Provide direction about areas which may need work

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## Surveys are used to measure initial perceptions of leading indicators

Example: Survey for one Level 1 leading indicator

(1) Strongly disagree	(2) Disagree	(3) Neither disagree nor agree	(4) Agree	(5) Strongly agree	(6) N/A or Don't Know
1.1 The faculty and staff perceive the school environment as safe and orderly.	Our school is a safe place.				
	1	2	3	4	5
	Our school is an orderly place.				
	1	2	3	4	5
	Our school has clear and specific rules and procedures in place.				
	1	2	3	4	5
I know the emergency management procedures for our school.	1	2	3	4	5
	I know how to implement the emergency management procedures for our school.				
My students and I practice implementing emergency management procedures for specific incidents.	1	2	3	4	5
	Our school's emergency management procedures are updated on a regular basis.				
	1	2	3	4	5

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## Leading Indicator Survey Data

- If perceptions are high for a leading indicator, it may not need to be addressed.
- If perceptions are low for a leading indicator:
  - It may not be an area of focus for the school.
  - It may need to be addressed.

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## What do we work on?

### Critical Commitments

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## What are Critical Commitments?

- Specific activities or initiatives that help a school work towards achieving a particular level
- Essential to achieving high reliability status

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## Critical Commitments at Every Level

Level 5	Get rid of time requirements to move through levels of knowledge and adjust the reporting systems accordingly
Level 4	Develop proficiency scales for the essential content Report status and growth on the report card using proficiency scales
Level 3	Continually monitor the viability of the curriculum Create a comprehensive vocabulary program Use direct instruction for knowledge application and metacognitive skills
Level 2	Create an evaluation system whose primary purpose is teacher development
Level 1	Implement the professional learning communities (PLC) process

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## How do we measure progress?

### Lagging Indicators

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## What are Lagging Indicators?

- Provide concrete evidence that a school has achieved a specific level of performance
- Quantified by a criterion score

*Note: Where leading indicators show what a school should work on to achieve high reliability status, lagging indicators are the evidence a school gives to validate its achievement of an HRS level.*

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## Creating Lagging Indicators

- Begin with a leading indicator
- Determine whether it is to be used as the basis of a lagging indicator
- Design a lagging indicator to articulate goals
- Use a criterion score to ensure specificity and measurability

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## Example Indicators

Leading Indicator	Used as basis for a lagging indicator?	Lagging Indicator(s)	Criterion Score or Concrete Product
1.1 The faculty and staff perceive the school environment as safe and orderly.	Yes	Reduced incidents in which students' safety is compromised.	Two or fewer incidents per month
		Reduced incidents in which rules and procedures are not followed.	Four or fewer incidents per month

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## Designing Criterion Scores

1. **Percentage score**
  - \_\_\_ % of responses/data will be \_\_\_\_\_.
2. **Cut-off score**
  - No responses/data will fall below \_\_\_\_\_.
3. **Growth scores**
  - Responses/data will be \_\_\_ % higher than original responses/data.)
4. **Concrete product**
  - A document/report stating/showing \_\_\_\_\_ exists.

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## How do we celebrate success?

### Quick Data

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## What are Quick Data?

- Continuous monitoring using easily collected data
- Examples:
  - FOD walks
  - Dieting



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## Quick Conversations

- Responses are coded as excellent, adequate, or unsatisfactory
- Notes capture anecdotal data

Person Responding	Question	Response Code	Notes
Teacher	Question 1: How safe has our school been lately?	Adequate	Feels safe. Haven't encountered any major rule infractions in the past three weeks. Recalled one minor infraction in same period.
Student			
Administrator	Question 2: To what extent have teachers had roles in making important decisions regarding the school?	Unsatisfactory	Feels unheard. Indicated that it has been months since a school leader asked for her opinion.
Parent			
Other: _____			

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## Quick Observations

	Recent incidents that indicate the school is a safe place	Recent incidents that indicate the school is an unsafe place	Recent incidents that indicate the school is an orderly place	Recent incidents that indicate the school is not an orderly place
Monday	Student turned in \$20 found in hallway		Students reacted according to safety plan when fire alarm went off	Runes from science lab set off fire alarm
Tuesday	Student club members created posters for school hallways encouraging kindness and compassion			Shreds of paper and glitter left in hallway after students worked on a project there
Wednesday	Administrators present in all main hallways during passing periods	Two students shouting at each other after school while waiting for buses; teachers helped resolve	Checked out a cart of tablets; tablets were cleaned after last use and neatly arranged; no accessories missing	
Thursday	Students made comments on social media sites about how much they enjoy specific classes		Cafeteria very clean after lunch period; all trash thrown away and tables cleaned	
Friday		Slippery floors this morning because of rain; almost fell	Students picked up trash blown onto athletic field by storm	

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## Easy-to-Collect Quantitative Data

Examples:

Level 1	Level 2	Level 3	Level 4	Level 5
<ul style="list-style-type: none"> <li>•Rule violations</li> <li>•Detentions</li> <li>•Tardies</li> <li>•Attendance data</li> <li>•Expulsions</li> <li>•Bullying incidents</li> <li>•Truancies</li> </ul>	<ul style="list-style-type: none"> <li>•Teacher scores on observation protocols</li> <li>•Instructional rounds data</li> <li>•Walk-through data</li> <li>•Teacher PD requests</li> </ul>	<ul style="list-style-type: none"> <li>•Curriculum alignment documents</li> <li>•Student IEPs and ILPs</li> <li>•Formative assessment data</li> </ul>	<ul style="list-style-type: none"> <li>•Student and class progress tracking sheets</li> <li>•Summative assessment data</li> <li>•Student self-assessment reports</li> </ul>	<ul style="list-style-type: none"> <li>•Scheduling documents</li> <li>•Reports of college credits earned</li> <li>•Student mastery reports</li> <li>•Student growth reports</li> </ul>

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### Reporting Quick Data

- Quick conversation data can be reported using bar graphs (as below)

Excellent					
Adequate					
Unsatisfactory					

Excellent					
Adequate					
Unsatisfactory					

- Quick observation data can be reported in a narrative
- Easy-to-collect quantitative data can be reported using graphs or charts

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### The HRS Model

#### An Overview of Each Level

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### Moving Through the Levels

Level 5	Competency-Based Education
Level 4	Standards-Referenced Reporting
Level 3	Guaranteed and Viable Curriculum
Level 2	Effective Teaching in Every Classroom
Level 1	Safe and Collaborative Culture

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## Leading Indicators for Level 1

Safe and Collaborative Culture

- 1.1 The faculty and staff perceive the school environment as safe and orderly.
- 1.2 Students, parents, and the community perceive the school environment as safe and orderly.
- 1.3 Teachers have formal roles in the decision-making process regarding school initiatives.
- 1.4 Teacher teams and collaborative groups regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.
- 1.5 Teachers and staff have formal ways to provide input regarding the optimal functioning of the school.
- 1.6 Students, parents, and the community have formal ways to provide input regarding the optimal functioning of the school.
- 1.7 The success of the whole school, as well as individuals within the school, is appropriately acknowledged.
- 1.8 The fiscal, operational, and technological resources of the school are managed in a way that directly supports teachers.

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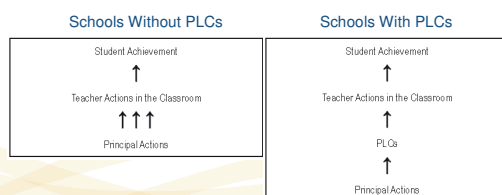
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## Level 1 Critical Commitment

Safe and Collaborative Culture

### Professional Learning Communities (PLC) Process



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## Leading Indicators for Level 2

Effective Teaching in Every Classroom

- 2.1 The school leader communicates a clear vision as to how instruction should be addressed in the school.
- 2.2 Support is provided to teachers to continually enhance their pedagogical skills through reflection and professional growth plans.
- 2.3 Predominant instructional practices throughout the school are known and monitored.
- 2.4 Teachers are provided with clear, ongoing evaluations of their pedagogical strengths and weaknesses that are based on multiple sources of data and are consistent with student achievement data.
- 2.5 Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.
- 2.6 Teachers have opportunities to observe and discuss effective teaching.

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## Level 2 Critical Commitment

Effective Teaching in Every Classroom

An evaluation system whose primary purpose is teacher development

Informal survey of teachers:

The purpose of teacher evaluation should be...	Results
5. Completely development	2%
4. Both, but development is more important	76%
3. Development and measurement are equally important	20%
2. Both, but measurement is more important	2%
1. Completely measurement	0%

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## Evaluation or Development?

- For development, 41 elements are needed
- For evaluation, only 15 elements (in red below) are needed

<b>I. Routine Elements</b> A. Communicating Learning Goals: Teaching Student Progress, and Celebrating Success 1. Providing clear learning goals and scales to measure those goals 2. Tracking student progress 3. Celebrating success B. Establishing and Maintaining Classroom Rules and Procedures 4. Establishing classroom routines 5. Organizing the physical layout of the classroom for learning C. Content Elements 6. Helping students interact with their knowledge 7. Identifying critical information 8. Organizing students to interact with new learning 9. Providing new content 10. Connecting content into "digestible bites" 11. Group processing of new information 12. Recording and representing knowledge 13. Reflecting on learning D. Helping students practice and deepen their understanding of their knowledge 14. Reinforcing content 15. Organizing students to practice and deepen knowledge	<b>II. Strategic Elements</b> 16. Using homework 17. Examining similarities and differences 18. Ensuring access to reasoning 19. Practicing skills, strategies, and processes 20. Filtering knowledge E. Helping Students Develop and Test Hypotheses about their Knowledge 21. Organizing students for cognitively complex tasks 22. Engaging students in cognitively complex tasks involving hypothesis generating and testing 23. Providing resources and guidance F. Engaging Students 24. Testing and entering when students are not prepared 25. Using academic games 26. Managing responses while doing something 27. Using physical movement 28. Maintaining a ready pace 29. Demonstrating intensity and enthusiasm 30. Using timely questioning 31. Providing opportunities for students to talk about their work 32. Presenting unusual or intriguing information	<b>III. Assessment Elements</b> 33. Recognizing and acknowledging differences of level of achievement to Rules and Procedures 34. Describing "bite-sized" 35. Applying consequences 36. Acknowledging differences to rules and procedures H. Establishing and Maintaining Effective Relationships with Students 37. Understanding students' interests and background 38. Understanding that indicate affection for students 39. Displaying objectivity and control I. Communicating High Expectations for all Students 40. Demanding high expectations for all students 41. Holding students to high expectations 42. Holding students to high expectations 43. Holding students to high expectations 44. Holding students to high expectations 45. Holding students to high expectations
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- (1) Providing clear learning goals and scales
- (2) Tracking student progress
- (3) Celebrating success
- (4) Establishing classroom rules and procedures
- (6) Identifying critical information



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- (8) Previewing new content
- (9) Chunking content into “digestible bites”
- (11) Elaborating on new information
- (12) Recording and representing knowledge
- (14) Reviewing content



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- (17) Examining similarities and differences
- (18) Examining errors in reasoning
- (19) Practicing skills, strategies, & processes
- (24) Noticing and reacting when students are not engaged
- (26) Managing response rates



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### Critical Aspect

Effective Teaching in Every Classroom

- A developmental scale that allows teachers to track and guide their skill development

Innovating (4)	Applying (3)	Developing (2)	Beginning (1)	Not Using (0)
The teacher adapts or creates a new version of the strategy or behavior for unique student needs and situations.	The teacher uses the strategy or behavior and monitors the extent to which it affects student outcomes.	The teacher uses the strategy or behavior but does so in a somewhat mechanistic way.	The teacher uses the strategy or behavior incorrectly or with parts missing.	The teacher should use the strategy or behavior but does not.

From Marzano, 2012a, p. 37.

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Innovating 4	Applying 3	Developing 2	Beginning 1	Not Using 0
New strategies are created to meet needs of specific students or class as a whole.	Strategy is used and monitored to see if it has desired effect.	Strategy is used but in a mechanistic way.	Strategy is used but pieces are missing.	Strategy is called for, but not used.

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Innovating 4	Applying 3	Developing 2	Beginning 1	Not Using 0
New strategies are created to meet needs of specific students or class as a whole.	Strategy is used <b>and monitored to see if it has desired effect.</b>	Strategy is used but in a mechanistic way.	Strategy is used but pieces are missing.	Strategy is called for, but not used.

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Leading Indicators for Level 3	
Guaranteed and Viable Curriculum	
3.1	The school curriculum and accompanying assessments adhere to state and district standards.
3.2	The school curriculum is focused enough that it can be adequately addressed in the time available to teachers.
3.3	All students have the opportunity to learn the critical content of the curriculum.
3.4	Clear and measureable goals are established and focused on critical needs regarding improving overall student achievement at the school level.
3.5	Data are analyzed, interpreted, and used to regularly monitor progress toward school achievement goals.
3.6	Appropriate school- and classroom-level programs and practices are in place to help students meet individual achievement goals when data indicate interventions are needed.

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### Level 3 Critical Commitment

Guaranteed and Viable Curriculum

#### Guaranteed and viable curriculum (GVC)

- *Guaranteed*: the content that should be addressed at each grade level in each subject area is clearly defined
- *Viable*: the content can be adequately addressed in the instructional time available

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### Critical Aspects

Guaranteed and Viable Curriculum

- Continually monitoring the viability of the curriculum
- A comprehensive vocabulary program
- Direct instruction in knowledge application and metacognitive skills

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### Leading Indicators for Level 4

Standards-Referenced Reporting

- 4.1 Clear and measureable goals are established and focused on critical needs regarding improving achievement of individual students within the school.
- 4.2 Data are analyzed, interpreted, and used to regularly monitor progress toward achievement goals for individual students.

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## Level 4 Critical Commitment

Standards-Referenced Reporting

Clearly communicate what students know  
and how much they have learned at school

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## Critical Aspect

Standards-Referenced Reporting

- Develop proficiency scales for the essential content

### Generic proficiency scale

Score 4.0	More complex content
Score 3.0	Target learning goal
Score 2.0	Simpler 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

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## Creating Proficiency Scales

- Select a single element from a broader standard (e.g., a CCSS) or learning goal
- Create element-specific learning goals at different levels of difficulty
  - Target learning goal (score 3.0 content)
  - Simpler learning goal (score 2.0 content)
  - Complex learning goal (score 4.0 content)
- Insert the learning goals into the proficiency scale
  - Note that score 1.0 and 0.0 descriptors do not change

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## Example Proficiency Scale

### Create specific learning goals

#### • Learning Goals for Interpreting Remainders:

- Target: The student will solve division word problems in which remainders must be interpreted.
- Simpler: The student will recognize or recall specific vocabulary such as *dividend*, *divisor*, and *remainder* and will identify remainders when solving division number problems (non-word problems).
- Complex: The student will investigate how remainders are expressed (for example, with fractions or decimal notation) or otherwise dealt with (for example, dropping, rounding, or sharing) in the real world.

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## Example Proficiency Scale

### Insert learning goals into the proficiency scale

Table 3.3: Proficiency Scale for Interpreting Remainders

Score 4.0	The student will investigate how remainders are expressed (for example, with fractions or decimal notation) or otherwise dealt with (for example, dropping, rounding, or sharing) in the real world.
Score 3.5	In addition to score 3.0 performance, partial success at score 4.0 content
Score 3.0	The student will: <ul style="list-style-type: none"> <li>• Solve division word problems in which remainders must be interpreted</li> </ul>
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: <ul style="list-style-type: none"> <li>• Dividend, divisor, remainder</li> </ul>
Score 1.5	The student will perform basic processes, such as: <ul style="list-style-type: none"> <li>• Identify remainders when solving division number problems (non-word problems)</li> </ul>
Score 1.0	Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content
Score 0.5	With help, partial success at score 2.0 content and score 3.0 content
Score 0.0	Even with help, no success

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### Topic Grade 8: Atmospheric Processes and Water Cycle

4	
3	<p><b>An understanding of:</b></p> <ul style="list-style-type: none"> <li>• How the water cycle processes (condensation, precipitation, surface run-off, percolation, evaporation) impact climate changes</li> <li>• The effects of temperature and pressure in different layers of Earth's atmosphere</li> </ul>




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**Topic Grade 8: Atmospheric Processes and Water Cycle**

4	
3	<b>An understanding of:</b> <ul style="list-style-type: none"><li>• How the water cycle processes (condensation, precipitation, surface run-off, percolation, evaporation) impact climate changes</li><li>• The effects of temperature and pressure in different layers of Earth's atmosphere</li></ul>
2	<ul style="list-style-type: none"><li>• Recognize and recall basic terms: climatic patterns, atmospheric layers, stratosphere, troposphere.</li><li>• Recognize or recall isolated details such as:<ul style="list-style-type: none"><li>• Precipitation is one of the processes of the water cycle.</li><li>• The troposphere is one of the lowest portions of the Earth's atmosphere.</li></ul></li></ul>



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**Topic Grade 8: Atmospheric Processes and Water Cycle**

4	Infer relationships regarding atmospheric processes and the water cycle.
3	<b>An understanding of:</b> <ul style="list-style-type: none"><li>• How the water cycle processes (condensation, precipitation, surface run-off, percolation, evaporation) impact climate changes</li><li>• The effects of temperature and pressure in different layers of Earth's atmosphere</li></ul>
2	<ul style="list-style-type: none"><li>• Recognize and recall basic terms such as: climatic patterns, atmospheric layers, stratosphere, troposphere.</li><li>• Recognize or recall isolated details such as:<ul style="list-style-type: none"><li>• Precipitation is one of the processes of the water cycle.</li><li>• The troposphere is one of the lowest portions of the Earth's atmosphere.</li></ul></li></ul>



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**Daily targets**

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**Topic Grade 8: Atmospheric Processes and Water Cycle**

4	Infer relationships regarding atmospheric processes and the water cycle.
3	<b>An understanding of:</b> <ul style="list-style-type: none"> <li>How the water cycle processes (condensation, precipitation, surface run-off, percolation, evaporation) impact climate changes</li> <li>The effects of temperature and pressure in different layers of Earth's atmosphere</li> </ul>
2	<ul style="list-style-type: none"> <li>Recognize and recall basic terms such as: climatic patterns, atmospheric layers, stratosphere, troposphere.</li> <li>Recognize or recall isolated details such as: <ul style="list-style-type: none"> <li>Precipitation is one of the processes of the water cycle.</li> <li>The troposphere is one of the lowest portions of the Earth's atmosphere.</li> </ul> </li> </ul>



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Key Learning - Understand the concepts of Intermolecular Forces						
Learning Targets →	Draw molecular structures	Determine bond Polarity	Type of intermolecular force present in a compound	Determine polarity of a molecule	Determine the shape of a molecule	Determine how IMF affects boiling & melting points
Advanced						
Proficient						
Progressing						

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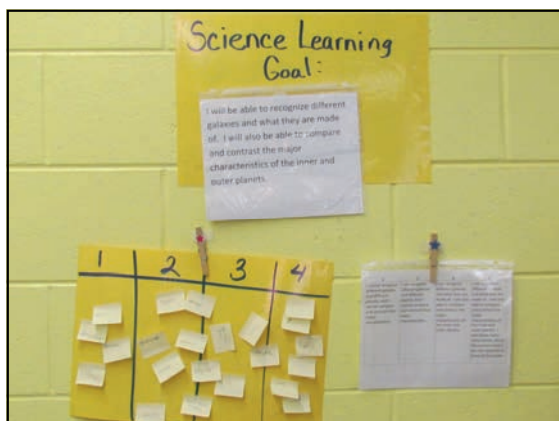
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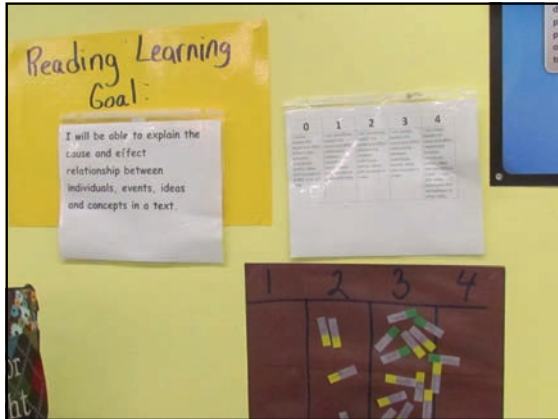
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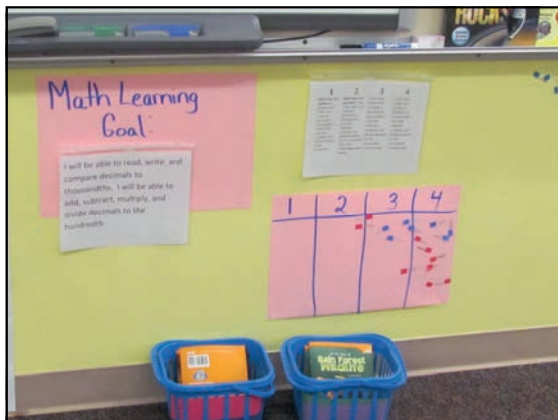
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# Critical Aspect

Standards-Referenced Reporting

- Report status and growth on the report card using proficiency scales

	Basic Skills	Oral Skills	Writing Skills	Reading Skills
Language Arts	2.00	2.00	2.00	2.00
Mathematics	2.00	2.00	2.00	2.00
Science	2.00	2.00	2.00	2.00

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## Leading Indicators for Level 5

Competency-Based Education

- 5.1 Students move on to the next level of the curriculum for any subject area only after they have demonstrated competence at the previous level.
- 5.2 The school schedule is designed to accommodate students moving at a pace appropriate to their background and needs.
- 5.3 Students who have demonstrated competency levels greater than those articulated in the system are afforded immediate opportunities to begin work on advanced content and/or career paths of interest.

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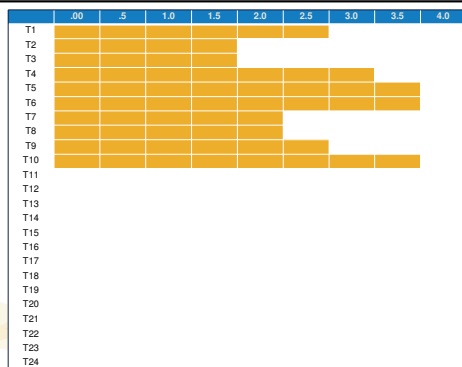
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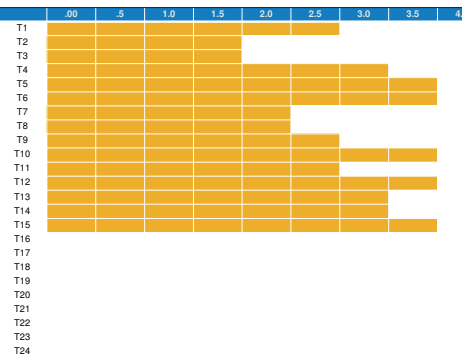
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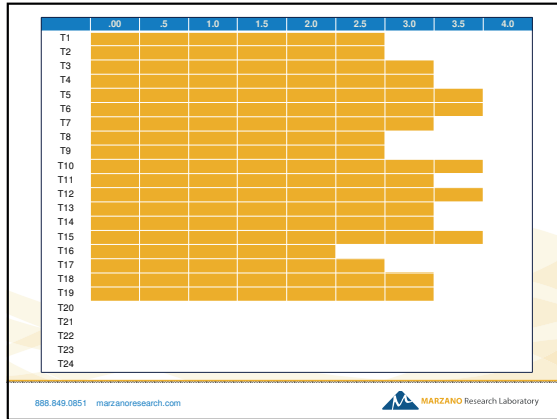
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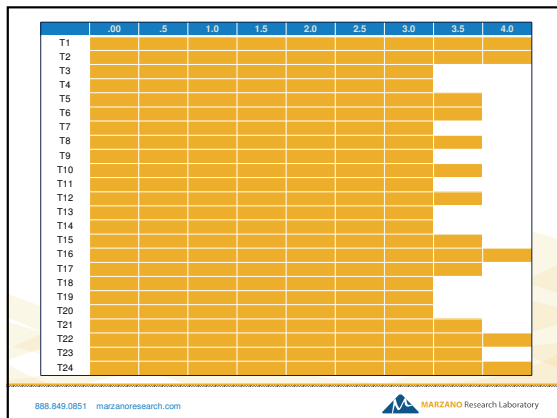
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**Level 5 Critical Commitment**  
Competency-Based Education

Eliminate time requirements to move  
through levels of knowledge

Amount of learning =  $\frac{\text{Time actually spent}}{\text{Time needed to learn}}$

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## Critical Aspect

Competency-Based Education

- Adjusting reporting systems accordingly

Level	Art	Career Literacy	Mathematics	Personal Social Skills	Language Arts	Science	Social Studies	Technology
Advanced 3								
Advanced 2								
Advanced 1								
10								
9								
8								
7								
6								
5								
4								
3								
2								
1								
0								
10								
9								
8								
7								
6								
5								
4								
3								
2								
1								
0								

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## Reporting System: Grade-Level Approach

Level	Art	Career Literacy	Mathematics	Personal Social Skills	Language Arts	Science	Social Studies	Technology
Grade 8								
Grade 7								
Grade 6								
Grade 5								
Grade 4								
Grade 3								
Grade 2								
Grade 1								
Grade K								

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## Reporting System: High School Approach

Subject Area	Course	Score	Subject Area	Course	Score
Mathematics	Calculus		Language Arts	Shakespeare	
	Geometry			Ancient Literature	13 of 22
	Algebra II	12 of 24		European Literature	3.0 (Proficient)
Science	Algebra I	3.0 (Proficient)		U.S. Literature	3.0 (Proficient)
	AP Environmental Science		Art	Orchestra	
	Physics			Performing Arts	9 of 21
	Chemistry	6 of 22		Painting	3.0 (Proficient)
Social Studies	Biology	3.0 (Proficient)	Technology	Orchestra	
	Economics			Digital Graphics and Animation	
	World History	11 of 21		Desktop Publishing	17 of 22
	U.S. History	4.0 (Advanced)		Computer Science	4.0 (Advanced)
	Geography	3.0 (Proficient)		Digital Graphics and Animation	

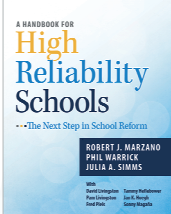
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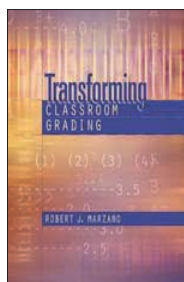
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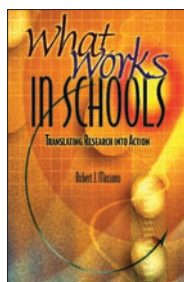


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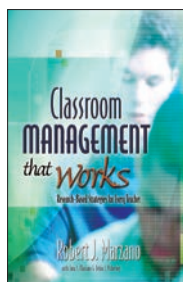
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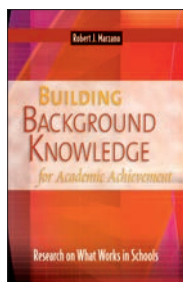
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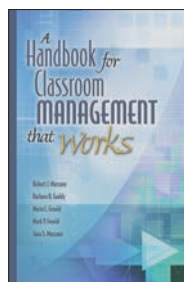
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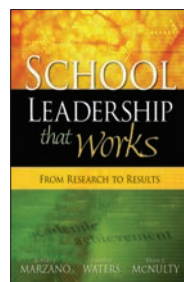
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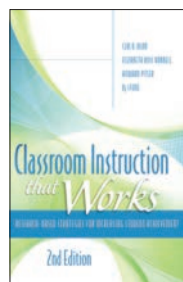
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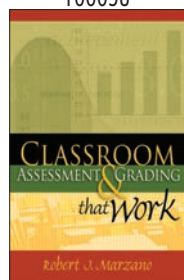
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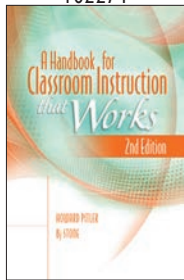
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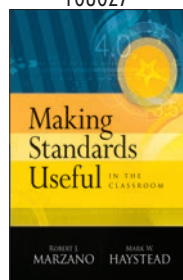
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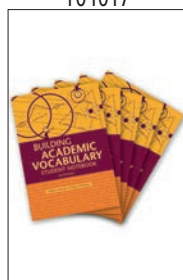
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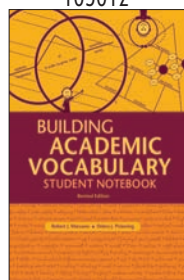
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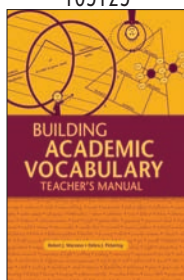
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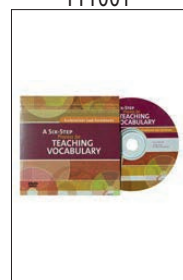
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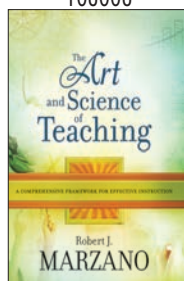
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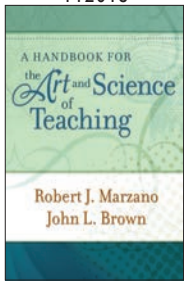
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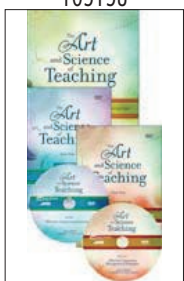
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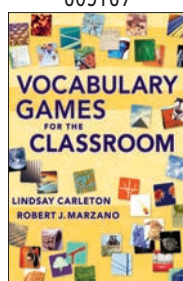
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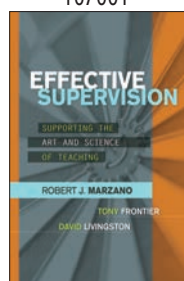
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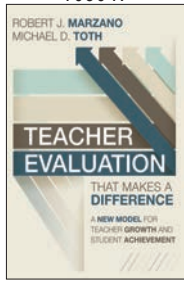
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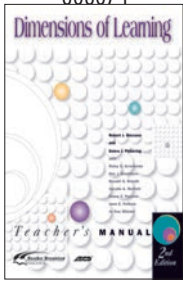
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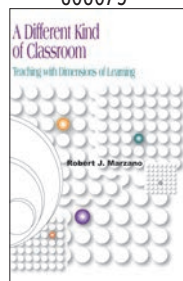
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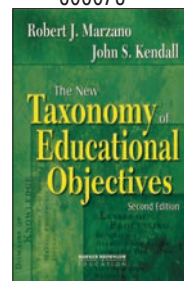
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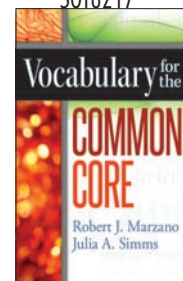
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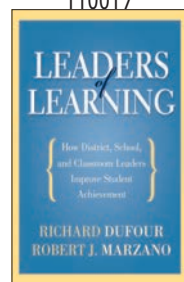
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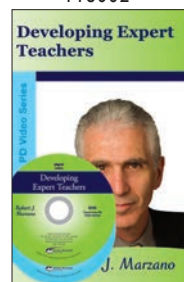
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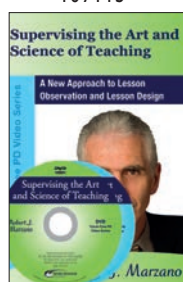
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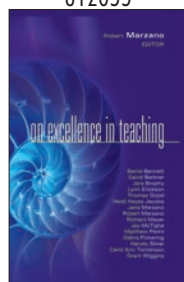
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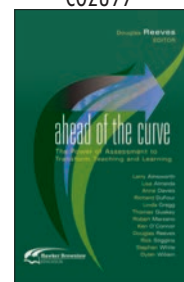
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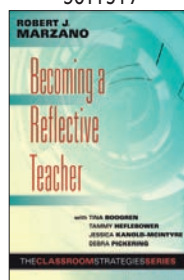
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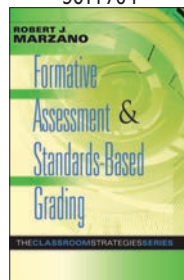
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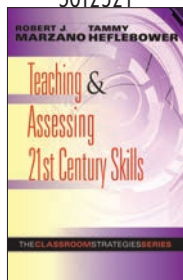
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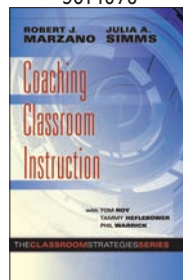
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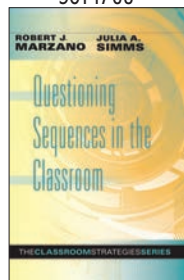
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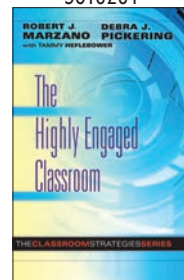
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