

# Shelley MOORE PH.D.



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# Thinking back

- 1. What is standing out from last session?**
- 2. What are you hoping to get out of today?**

# Reducing Barriers



## Supporting Needs



# What are barriers?





Barriers

Ramp: UDL

# Universal Design for Learning: The Ramp for Learning

Provide multiple means of  
**Engagement**



Affective Networks  
The "WHY" of Learning

Provide multiple means of  
**Representation**



Recognition Networks  
The "WHAT" of Learning

Provide multiple means of  
**Action & Expression**



Strategic Networks  
The "HOW" of Learning

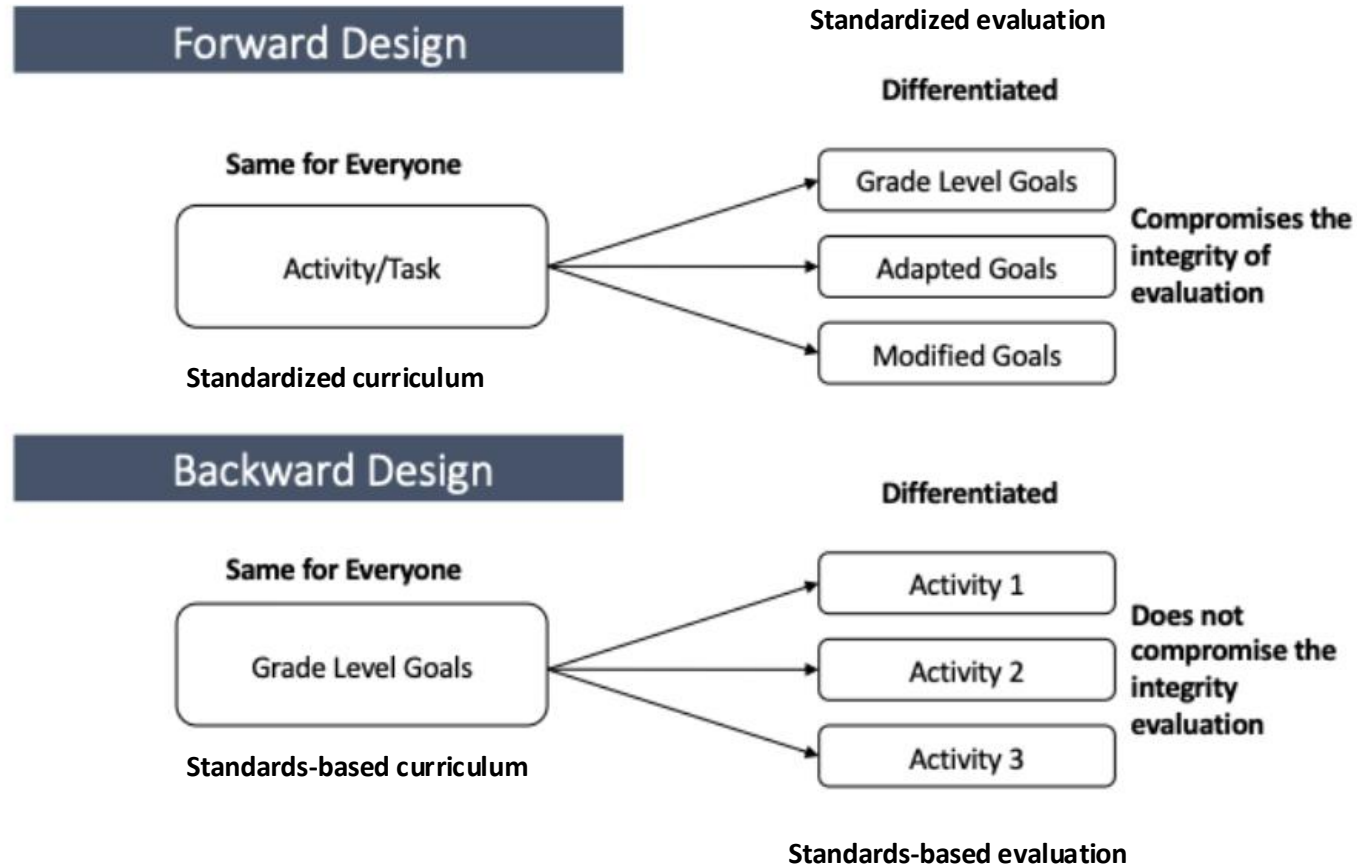




How I came to  
understand  
**BACKWARDS**  
**DESIGN**

# UBD: Determining the Learning Standard

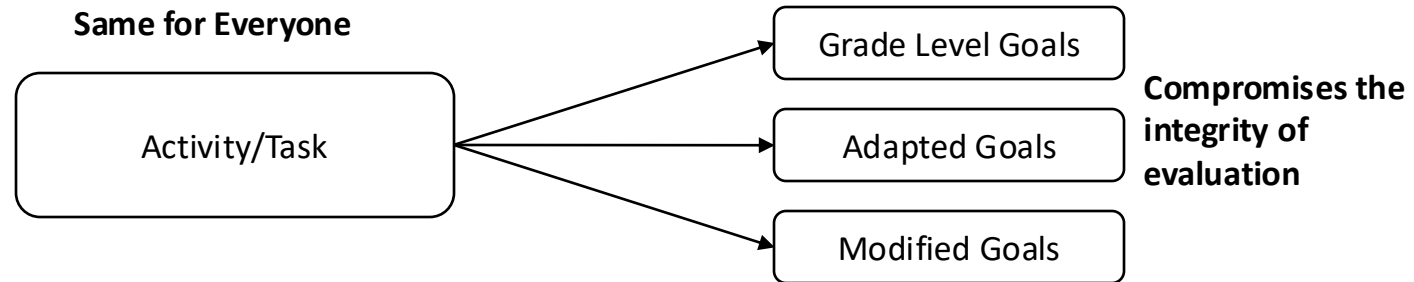
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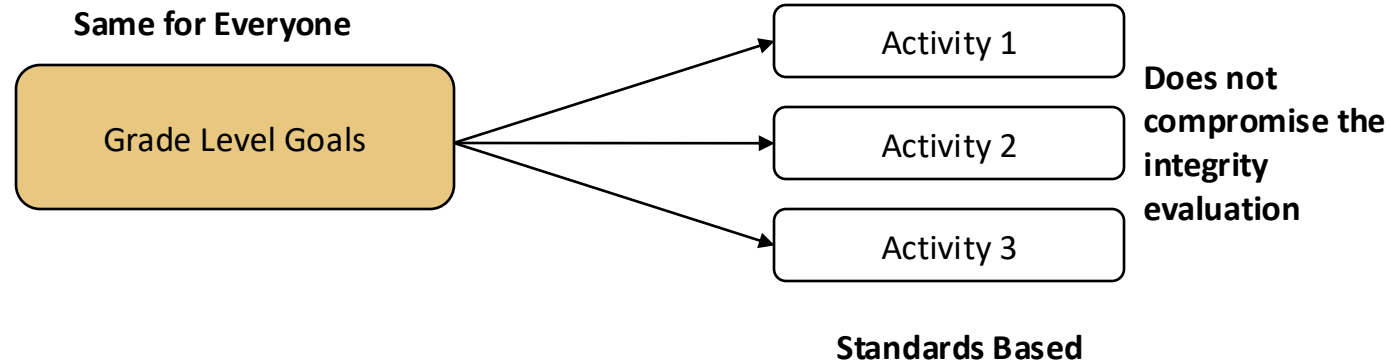


# UBD: Determining the Learning Standard

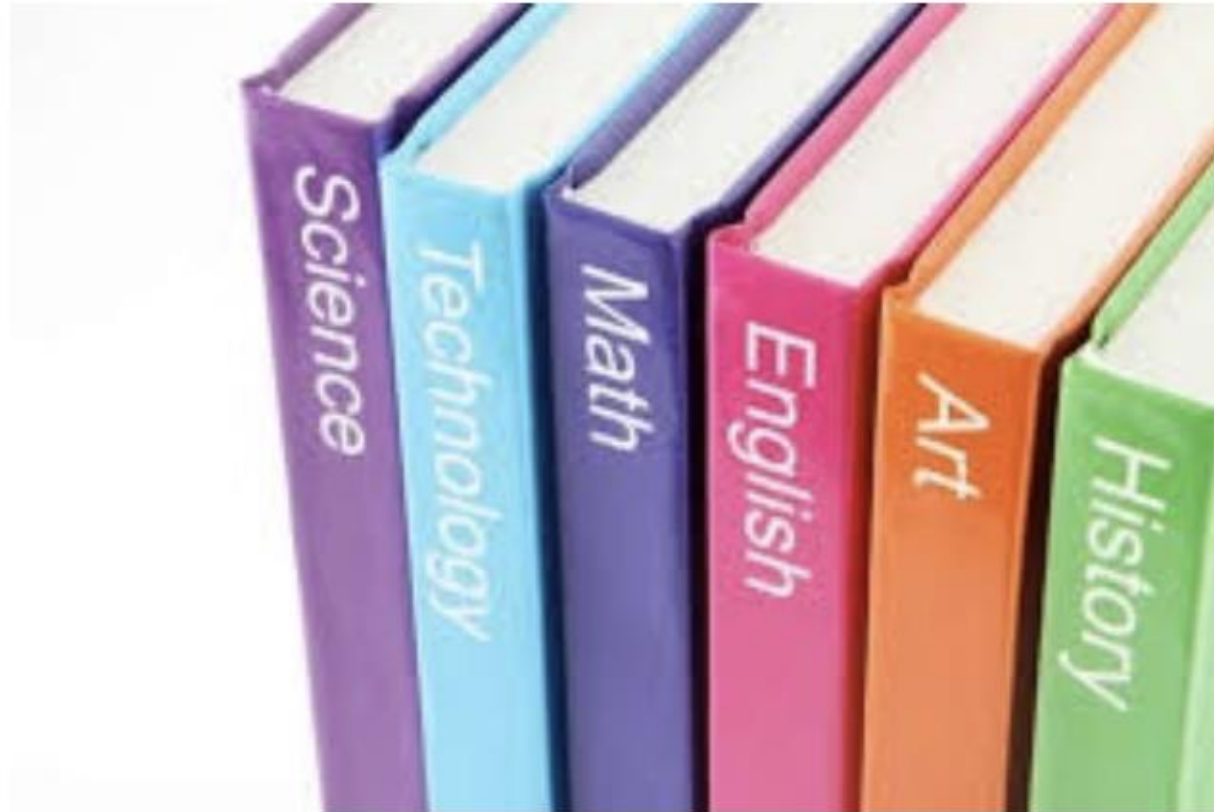
## Forward Design



## Backward Design



# Is curriculum linear?



# Backwards Design: Previous Curriculum

What types of goal are in the curriculum?

- **Content**

- What do we need to know?

- **Process**

- What do we need to do?



# Backwards Design: Previous Curriculum

What types of goals are in the curriculum?

- **Content**

- What do we need to know?

- **Process**

- What do we need to do?

Prescribed Learning Outcomes by Grade	
Grade 4	
<b>Processes and Skills of Science</b> It is expected that students will: <ul style="list-style-type: none"><li>• make predictions, supported by reasons and relevant to the content</li><li>• use data from investigations to recognize patterns and relationships and reach conclusions</li></ul>	
<b>Life Science: Habitats and Communities</b> It is expected that students will: <ul style="list-style-type: none"><li>• compare the structures and behaviours of local animals and plants in different habitats and communities</li><li>• analyse simple food chains</li><li>• demonstrate awareness of the Aboriginal concept of respect for the environment</li><li>• determine how personal choices and actions have environmental consequences</li></ul>	
<b>Physical Science: Sound and Light</b> It is expected that students will: <ul style="list-style-type: none"><li>• identify sources of light and sound</li><li>• explain properties of light (e.g., travels in a straight path, can be reflected)</li><li>• explain properties of sound (e.g., travels in waves, travels in all directions)</li></ul>	
<b>Earth and Space Science: Weather</b> It is expected that students will: <ul style="list-style-type: none"><li>• measure weather in terms of temperature, precipitation, cloud cover, wind speed and direction</li><li>• analyse impacts of weather on living and non-living things</li></ul>	

What do you notice?

# Backwards Design

What do we need to **UNDERSTAND**?

What do we need to **KNOW**?

What do we need to **DO**?

Who do we need to **BECOME**?

# Backwards Design: What are the GOALS?

- **Backwards Design**
  - **Big Idea**
    - What do we need to understand?
  - **Content**
    - What do we need to know?
  - **Curricular Competencies**
    - What do we need to do?
  - **Core Competencies**
    - Who do we need to become?



# Renewed Curriculum

## What do you Notice?



Area of Learning: SOCIAL STUDIES

Grade 8

### BIG IDEAS

The increasing interconnectedness of global society carries both positive and negative consequences.

Discoveries and innovations can result in progress or decline.

The pace, pattern, and direction of historical change is the product of a highly variable and unpredictable set of processes.

Intercultural contact and conflict lead to multiple complex experiences and perspectives.

### Learning Standards

#### Curricular Competencies

Students will develop competencies needed to be active, informed citizens:

- Use Social Studies inquiry processes (ask questions, gather, interpret and analyze ideas, and communicate findings and decisions)
- Compare different interpretations and assessments of the significance of people, places, events, and/or developments over time and place (significance)
- Ask questions and corroborate inferences about the content, origins, and purposes of multiple sources (evidence)
- Determine key historical turning points that led to progress and decline for different groups (continuity and change)
- Test and/or develop different geographic models and theories (continuity and change)
- Determine and assess the long- and short-term cause and the intended and unintended consequences of an event, decision, or development (cause and consequence)
- Explain different perspectives on past or present people, places, issues, and events, and distinguish between worldviews of today and the past (perspective)
- Recognize implicit and explicit ethical judgments in a variety of sources (ethical judgment)
- Make reasoned ethical judgments about controversial actions in the past and present after considering the context and standards of right and wrong (ethical judgment)

#### Concepts and Content

Students will know and understand the following concepts and content related to **Canada and the Early Modern World (15th to 18th Century)**:

- relationships between expansion, exploration, and colonization
- interactions and exchanges between explorers and indigenous people, including Europeans and Aboriginal people in North America
- social, political, and economic systems and structures, including those of at least one indigenous society in the world
- religious systems and spiritual practices, including those of at least one indigenous society in the world
- scientific, philosophical, and technological innovations in this period, including cartography and navigation
- the relationship between humans and the physical environment

#### Core Competencies

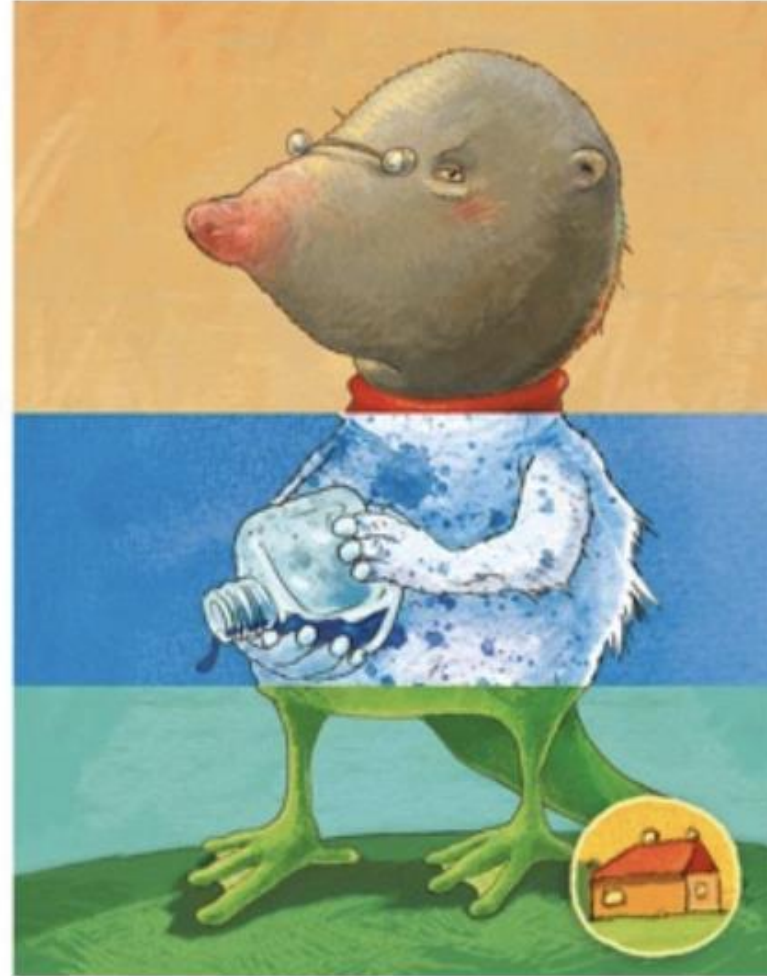
- Communication**
  - Consulting and engaging with others
  - Focusing on intent and purpose
  - Adapting and presenting information
- Collaboration**
  - Working collaboratively
  - Supporting group interactions
  - Determining common purposes
- Creative Thinking**
  - Creating understanding
  - Formulating hypotheses
  - Problem-solving
- Critical & Reflective Thinking**
  - Assessing information
  - Questioning and investigating
  - Linking and synthesizing
  - Reflecting on learning
- Personal Development & Responsibility**
  - Self-regulating
  - Self-regulating
  - Managing
- Positive Personal & Cultural Identity**
  - Reflecting on personal and cultural identity
  - Recognizing and valuing diversity
  - Developing personal and cultural identity
- Social Responsibility & Responsibility**
  - Understanding the social and environmental context
  - Contributing to community and caring for the environment
  - Resolving problems
  - Taking action

# Can curriculum be less linear and more responsive?

Miserable

Two-toed

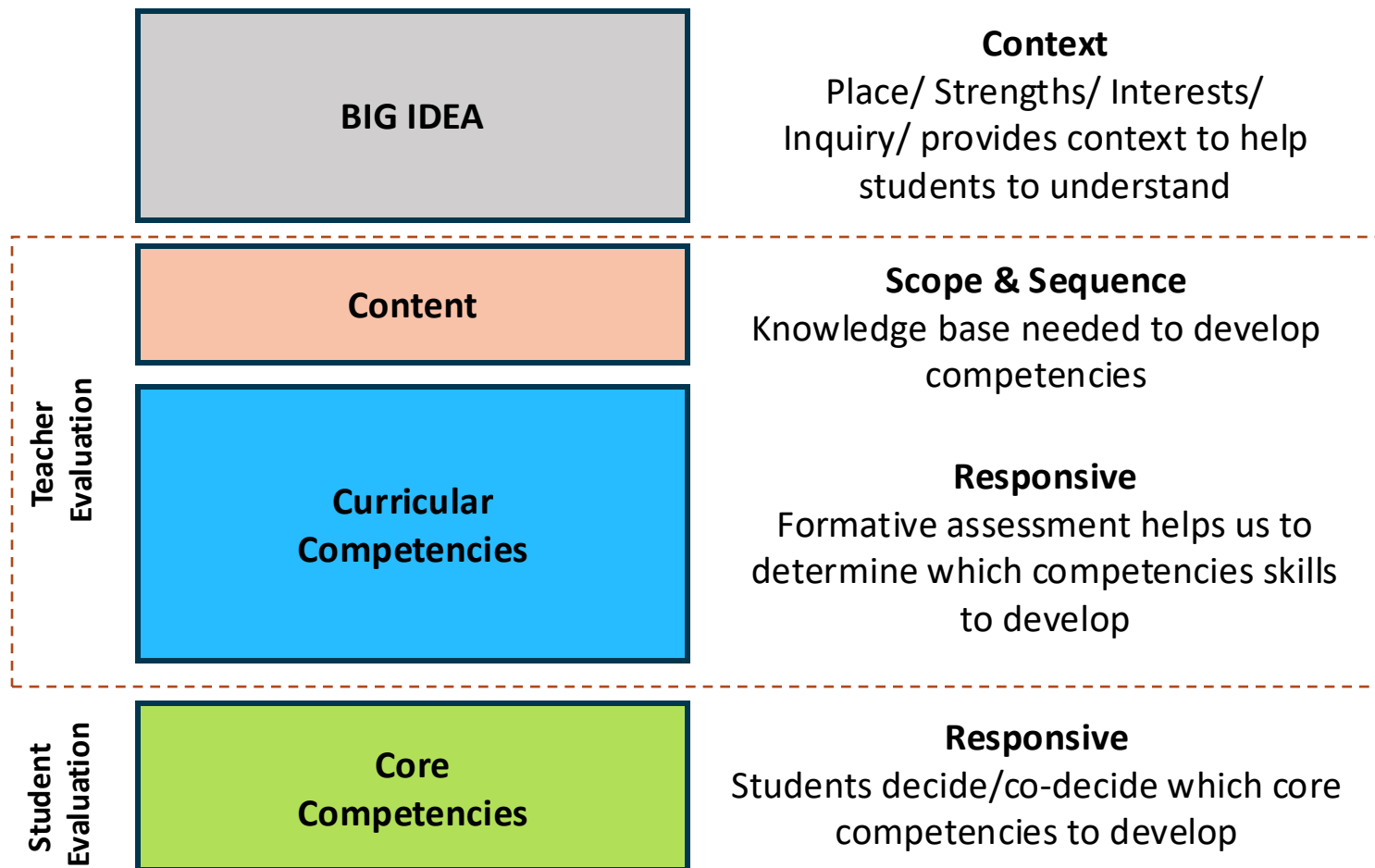
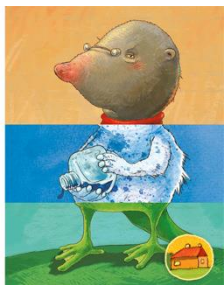
Lizard



Miserable

Two-toed

Lizard





<b>Grade:</b>	<b>Subject Area:</b>	<b>Planning Team:</b>
<b>Big Idea(s): What do I need to Understand?</b>		<b>Unit Guiding Question(s):</b>
<b>Key Vocabulary:</b>		
	<b>Learning Standard</b>	<b>Student Friendly Language</b>
<b>What do students need to know? Content</b>		<b>I know</b>
<b>What do students need to do? Curricular Competencies</b>		<b>I can</b>
<b>What do students need to do? Curricular Competencies</b>		<b>I can</b>
<b>What do students need to do? Curricular Competencies</b>		<b>I can</b>
<b>Who do student need to be? Core Competency Goals</b>	<b>I can become/ I am...</b>	

Class: Ms. P Gr. 2/3		Subject Area(s): Cross Curricular	Planning Team: Ms. P & Shelley
<b>Big Idea(s):</b> <ul style="list-style-type: none"> <li>• <b>Forces</b> influence the motion of an object. (Science)</li> <li>• Everyone has a unique <b>story</b> to share. (Language Arts)</li> </ul>		<b>Unit Guiding Question(s):</b> Who are our monsters? What are their <b>stories</b> ? How can we use <b>forces</b> to help us catch them?	
<b>Vocabulary to know and use (content):</b> Forces, story, ideas, audience, purpose, idea, tools, materials		<b>Vocabulary to know and use (skills &amp; competencies):</b> know, can, make, plan, try, create, use my sense, creative thinking, solving a problem, trying something new, changing what I am doing	
Unit Goals	Curricular Language	Student friendly language	
<b>Content Goal:</b> Science (2)	types of forces	I <b>know</b> different types of <b>forces</b>	
<b>Content Goal:</b> Language Arts (2/3)	Story/text: elements of a story	I <b>know</b> what makes a <b>story</b>	
<b>Curricular Competency Goal:</b> ADST (2/3)	Making: Make a product using known procedures or through modelling of others	I can <b>make</b> something for a <b>purpose</b>	
<b>Curricular Competency Goal:</b> Science (2/3)	Safely manipulate materials to test ideas and predictions	I can <b>make</b> a <b>plan</b> and <b>try</b> out my <b>ideas</b>	
<b>Curricular Competency Goal:</b> Language Arts (2/3)	Plan and create a variety of communication forms for different purposes and audiences	I can <b>create</b> a <b>story</b> for an <b>audience</b>	
<b>Curricular Competency Goal:</b> Art (2/3)	Exploring and creating: Explore elements, processes, materials, movements, technologies, tools, and techniques of the arts	I can <b>create</b> many things using different art <b>tools</b> and <b>materials</b>	
<b>Core Competency Goal:</b> (Profile 1/2)	<b>Creative Thinking:</b> I get ideas when I play (1) I can get new idea or build on or combine other people’s ideas to create new things within the constraint of a form, a problem or materials (2)	<b>We are creative thinkers because we get new ideas!</b> I get new ideas by: <b>(Students choose):</b> <ul style="list-style-type: none"> <li>• using my <b>senses</b> to <b>explore</b></li> <li>• <b>changing</b> what I am doing</li> <li>• <b>trying</b> something <b>new</b></li> <li>• <b>solving a problem</b> in a <b>new way</b></li> </ul>	

# Universal Design for Learning: The Ramp for Learning

## Universal Design for Learning Guidelines

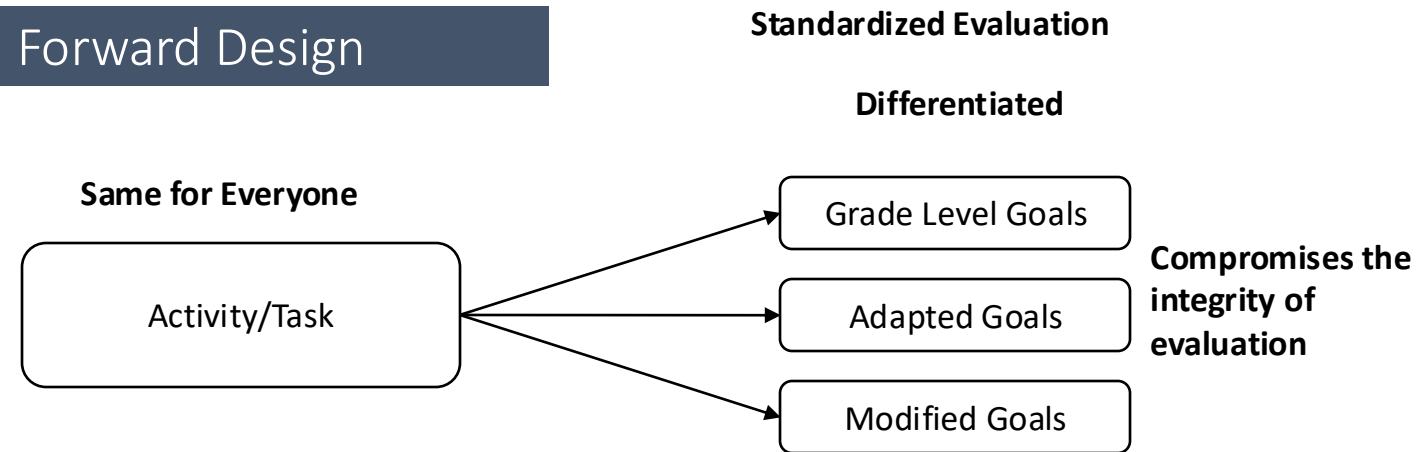




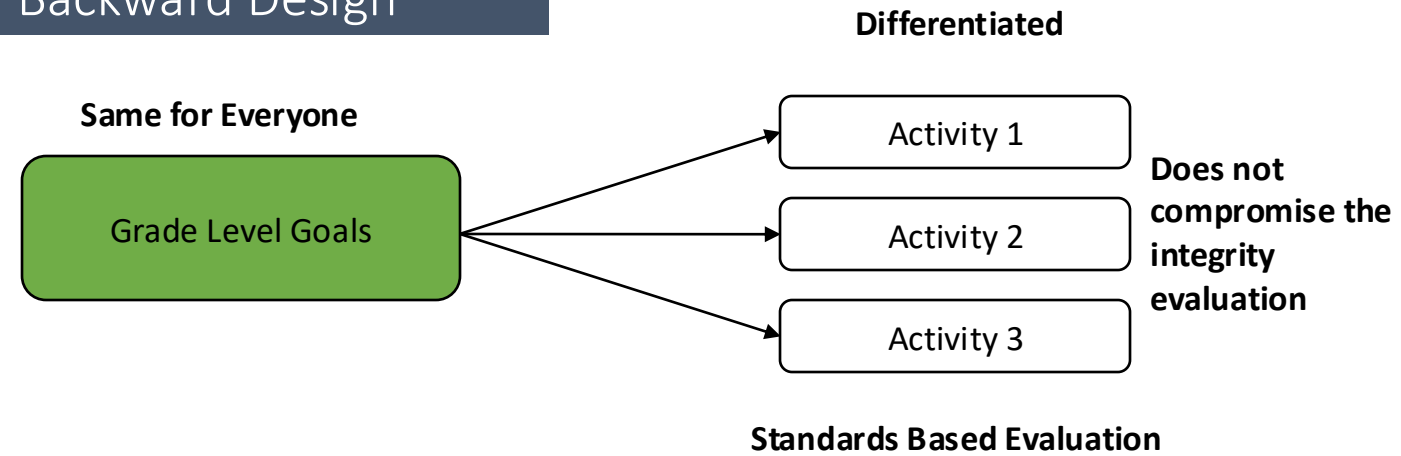
Subject:		Year:	Planning Team:	
Context for Learning:		Teacher generated provocation questions:		Student generated questions:
Key Vocabulary:				
	Learning Goals Curricular Language		Learning Goals Student Friendly Language	
What do students need to understand?				
What do students need to know?				
What do students need to do?				
Who do student need to be?				

Subject:		Year:	Planning Team:	
Context for Learning: <b>7.2, 8.3, 3.2</b>		Teacher generated provocation questions: <b>7.2, 8.3, 3.2, 3.4</b>		Student generated questions: <b>7.1, 7.2, 8.3, 9.1, 3.4</b>
Key Vocabulary: <b>2.1</b>				
	Learning Goals Curricular Language		Learning Goals Student Friendly Language	
What do students need to <b>understand</b> ?			<b>8.1, 9.1, 9.3, 6.4</b>	
What do students need to <b>know</b> ?				
What do students need to <b>do</b> ?				
Who do student need to <b>be</b> ?				

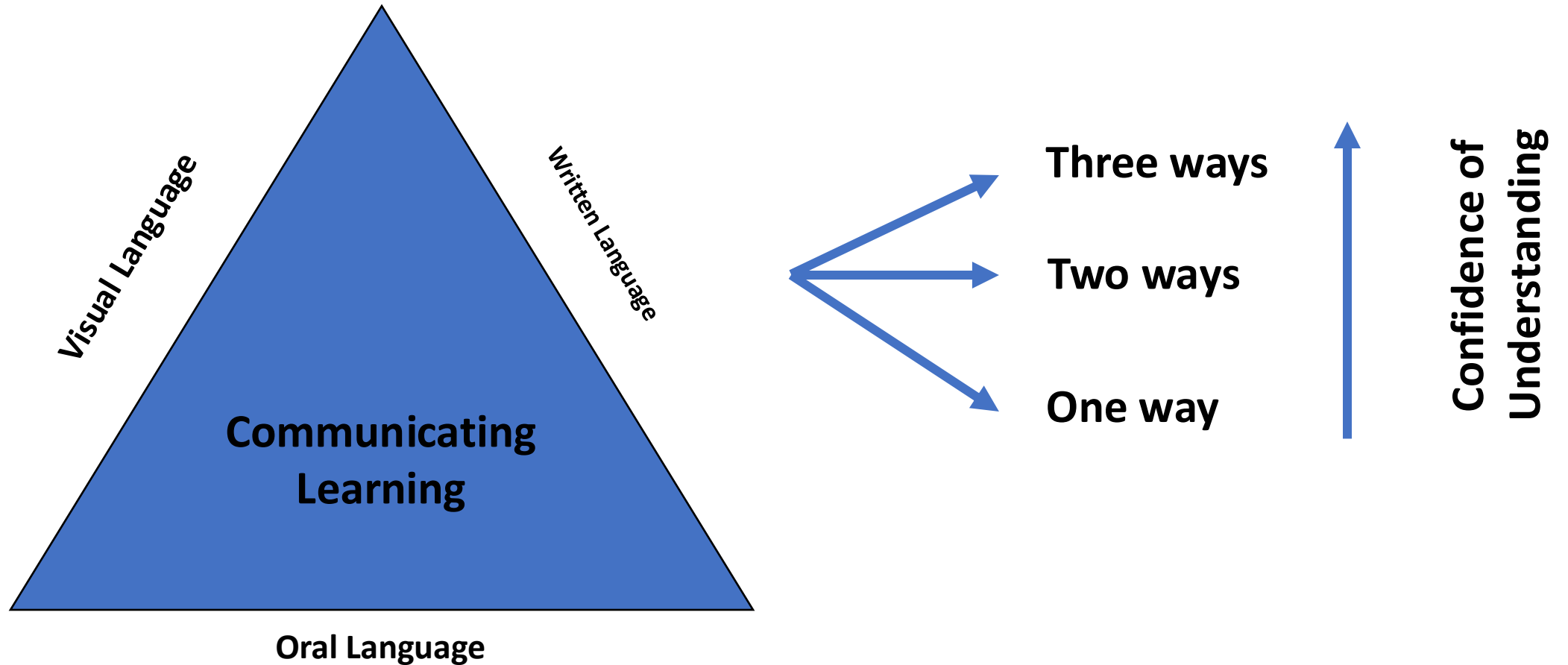
## Forward Design



## Backward Design



# How do students show what they know?



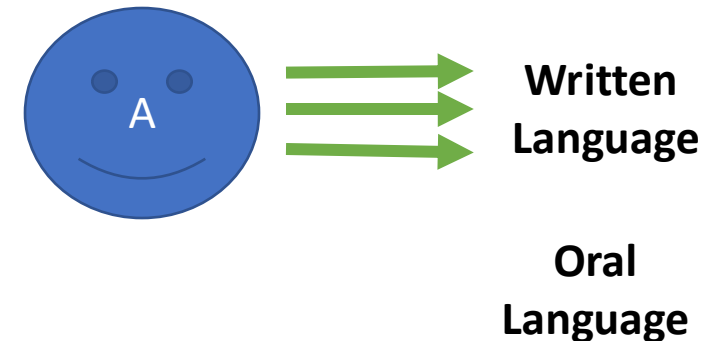
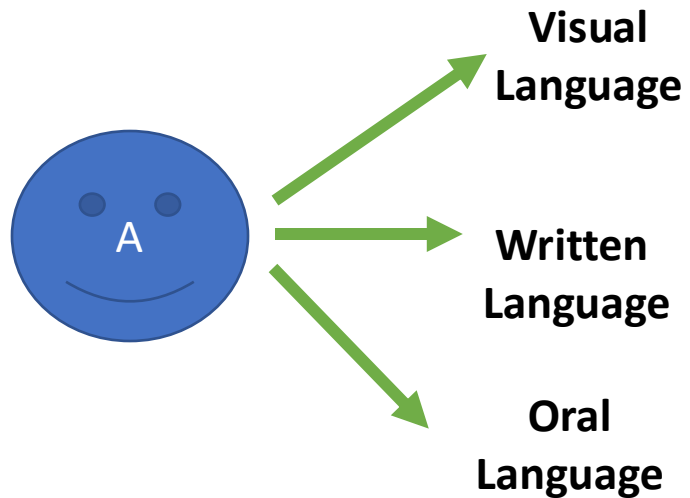


# All Languages (in literacy) are Treated Equal!

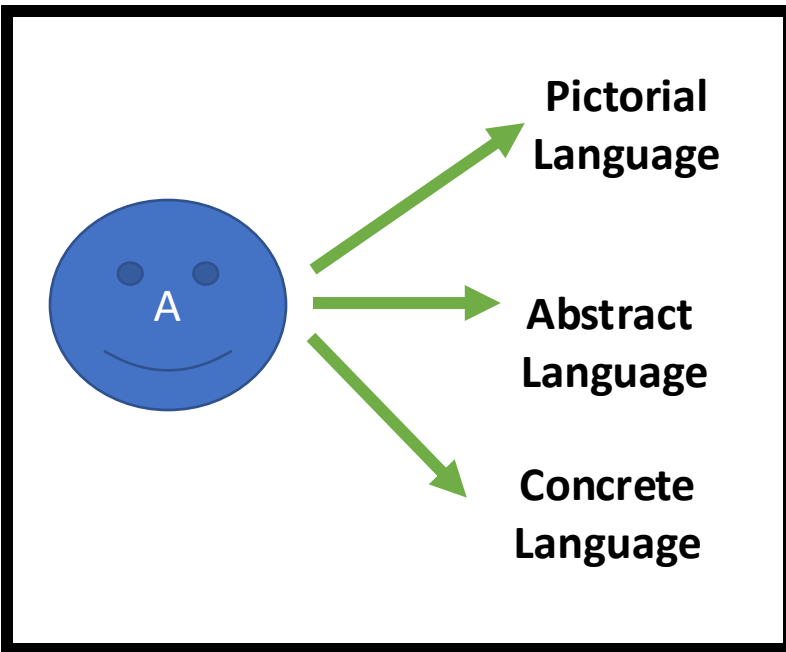
The **MORE WAYS** students can demonstrate learning, the deeper their understanding is

**Vs.**

The **NUMBER OF TIMES**, a student can show their learning in one way, the more fluent they become



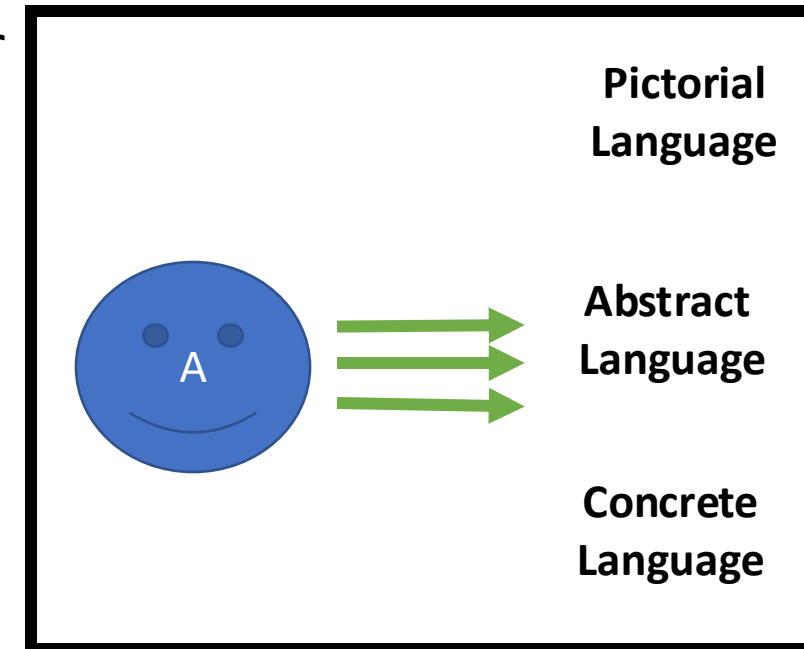
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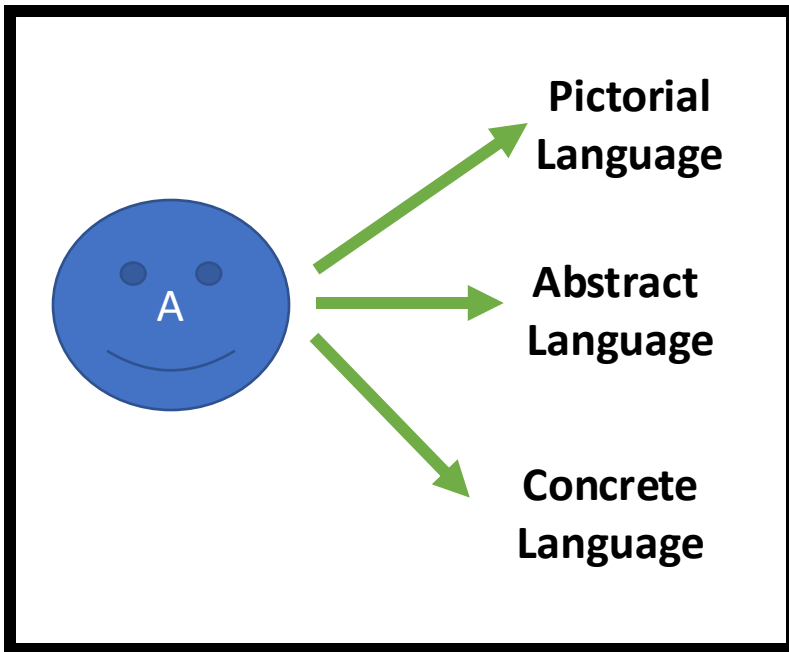
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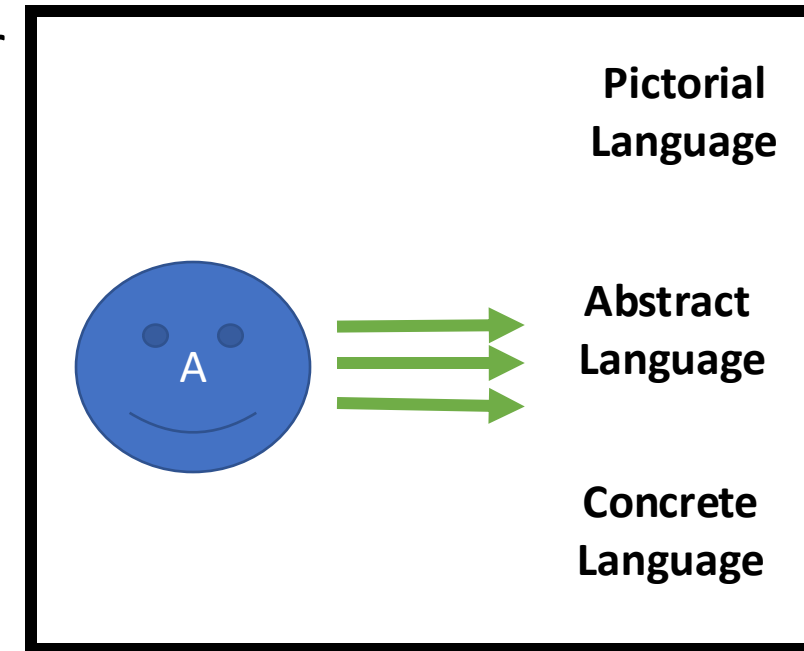
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The **MORE WAYS** students can demonstrate learning, the deeper their understanding is

**Vs.**

The **NUMBER OF TIMES**, a student can show their learning in one way, the more fluent they become



# Planning

**Anchor Text: Can You See Me?**

## Organizing Idea

### **Measurement:**

Attributes such as length, area, volume, and angle are quantified by measurement

## Guiding Question

In what ways can size be distinguished?

## Learning Outcomes

### **Math**

- Students will explore size through direct comparison

### **ELA**

- Students will develop vocabulary through a variety of literacy experiences
- Students will experiment with written expression of ideas and information.
- Students will make connections between letters and sounds in words.



## Competencies and Progressions

### **Literacy**

- Construct Meaning: Students will participate in guided activities that model the use of strategies when viewing, listening to, and interacting with texts

### **Numeracy**

- Spatial Information: Students will compare two familiar objects according to measurement attributes to complete a task (e.g., taller, shorter, heavier, smaller)

### **Competencies**

- Communication.



# Planning

## One Point Rubric

Anchor Text: Can you see me?



**Kindergarten Math**  
Students will explore size through direct comparison

### Grade Level Indicators of Success

#### Knowledge 1

- Size can be interpreted in many ways according to measurable attributes such as length, area, capacity, weight

#### Understanding 1

- Size describes the amount of one measurable attribute of an object or a space

#### Skills and Processes 1

- Identify measurable attributes of familiar objects to which size may refer

#### Knowledge 2

- Comparisons of size can be described by using words such as long, short, heavy, light, too big, too small

#### Understanding 2

- Size may refer to only one measurable attribute at a time
- The size of two objects can be compared directly
- The size of an object can be described in relation to a purpose of need

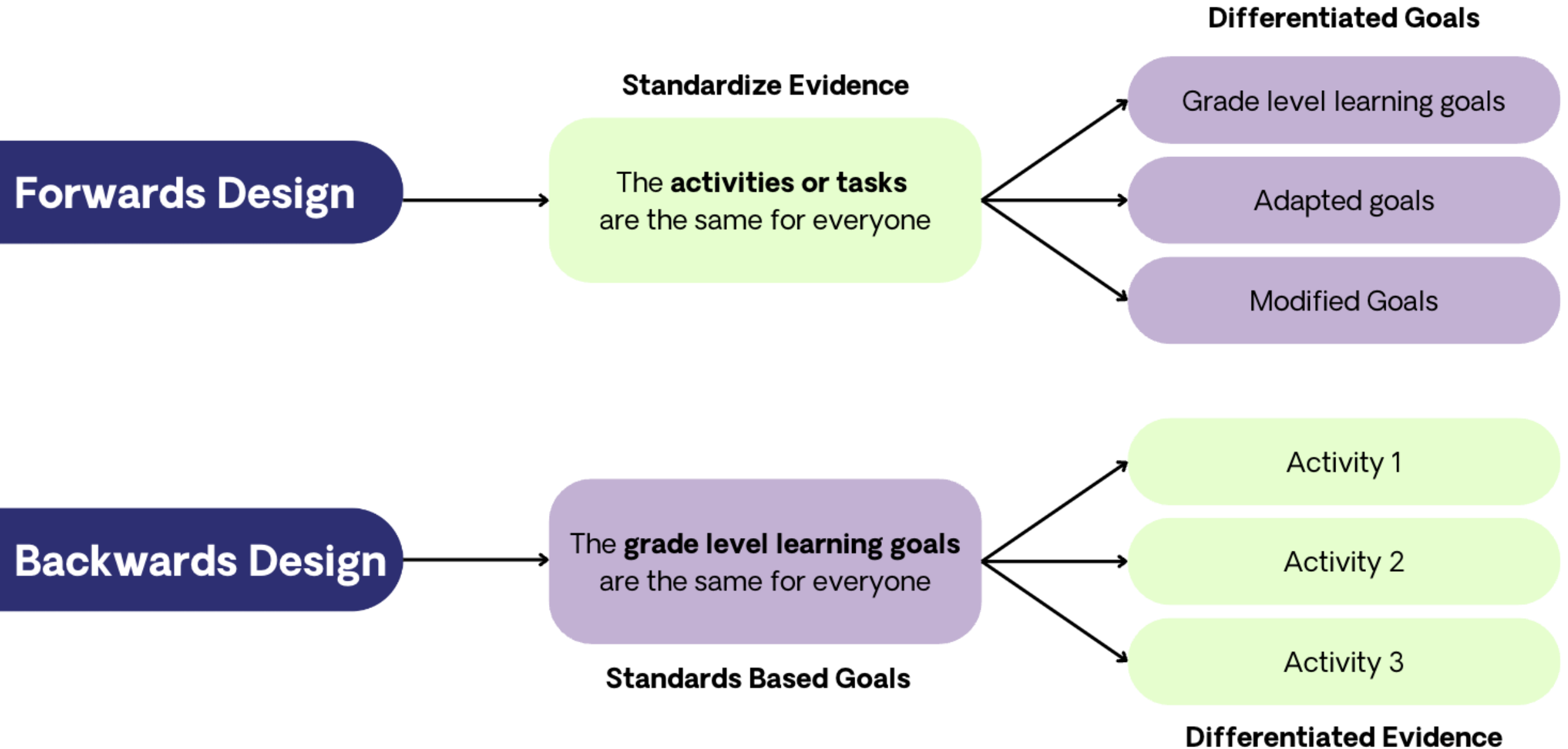
#### Skills and Processes 2

- Compare the length, area, weight, or capacity of two objects directly.
- Describe the size of an object in relation to a purpose or need, using comparative language.
- Describe the size of an object in relation to another object, using comparative language.





# Understanding by Design



The **grade level learning goals**  
are the same for everyone

**Math**

- Students will explore size through direct comparison

**ELA**

- Students will develop vocabulary through a variety of literacy experiences
- Students will experiment with written expression of ideas and information.
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**Literacy**

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**Numeracy**

- Spatial Information: Students will compare two familiar objects according to measurement attributes to complete a task e.g., taller, shorter, heavier, smaller

**Competencies**

- Communication

Learning  
Activities and Tasks

Differentiation of Evidence

Viewing and  
showing

Listening and  
speaking

Writing and  
decoding



## The **grade level learning goals** are the same for everyone

### Math

- Students will explore size through direct comparison

### ELA

- Students will develop vocabulary through a variety of literacy experiences
- Students will experiment with written expression of ideas and information.
- Students will make connections between letters and sounds in words.

### Literacy

- Construct Meaning: Students will participate in guided activities that model the use of strategies when viewing, listening to, and interacting with texts

### Numeracy

- Spatial Information: Students will compare two familiar objects according to measurement attributes to complete a task e.g., taller, shorter, heavier, smaller

### Competencies

- Communication

## Learning Activities and Tasks

### Anchor Text: Can You See Me?

- **Project:** Can you see me?
- **Activity:** Measurement O Rama

## Differentiation of Evidence

viewing and showing

Listening and speaking

writing and decoding





# Planning

## One Point Rubric

Anchor Text: Can you see me?



**Kindergarten Math**  
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- Size may refer to only one measurable attribute at a time
- The size of two objects can be compared directly
- The size of an object can be described in relation to a purpose of need

#### Skills and Processes 2

- Compare the length, area, weight, or capacity of two objects directly.
- Describe the size of an object in relation to a purpose or need, using comparative language.
- Describe the size of an object in relation to another object, using comparative language.





**Kindergarten Math**  
Students will explore size through direct comparison

## Access Point

### Knowledge 1

- There are objects that are different sizes in my life

### Understanding 1:

- Size describes how big or small something is

### Skills and Processes 1:

- Identify big and small objects in my life

### Knowledge 2:

- Objects can be compared using words to describe how they are related

### Understanding 2:

- Objects can be compared

### Skills & Processes 2:

- Describe familiar objects in relation to each other
- Compare two objects

## Grade Level Indicators of Success

### Knowledge 1

- Size can be interpreted in many ways according to measurable attributes such as length, area, capacity, weight

### Understanding 1

- Size describes the amount of one measurable attribute of an object or a space

### Skills and Processes 1

- Identify measurable attributes of familiar objects to which size may refer

### Knowledge 2

- Comparisons of size can be described by using words such as long, short, heavy, light, too big, too small

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### Skills and Processes 2

- Compare the length, area, weight, or capacity of two objects directly.
- Describe the size of an object in relation to a purpose or need, using comparative language.
- Describe the size of an object in relation to another object, using comparative language.

## Extention

### Knowledge 1:

- Sizes of objects and the space objects take up impacts decisions that are made in the world

### Understanding 1:

- Understanding size and space is important when we need to organize and plan

### Skills & Processes 1:

- Identify how size and space helps to make decisions and plans in the world

### Knowledge 2:

- Comparisons of size can be described by using words larger than, smaller than, just right

### Understanding 2:

- The size of an object can be determined by its intended use

### Skills & Processes 2:

- Describe how the size of an object helps it to be purposeful



# Final Reflections

What is one useful idea?

What is one thing you want to try?

What is a question that you have?

What is one thing you want to learn more about?

What is one thing you want to share with  
someone who is not here today?

# Standards-based curriculum design is...

Area of Learning: SOCIAL STUDIES  
Grade 8

**BIG IDEAS**

- The increasing interconnectedness of global society carries both positive and negative consequences.
- Discoveries and innovations can result in progress or decline.
- The pace, pattern, and direction of historical change is the product of a highly variable and unpredictable set of processes.
- Intercultural contact and conflict lead to multiple complex experiences and perspectives.

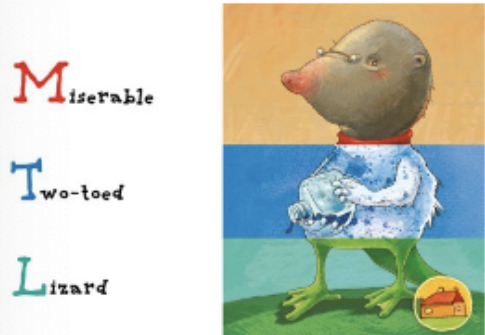
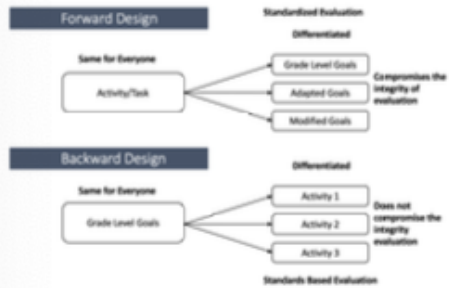
Curricular Competencies	Concepts and Content
Students will develop competencies needed to be active, informed citizens: <ul style="list-style-type: none"><li>Use Social Studies inquiry processes (ask questions, gather, interpret and analyze ideas, and communicate findings and decisions)</li><li>Compare different interpretations and assessments of the significance of people, places, events, and/or developments over time and place (significance)</li><li>Ask questions and conduct inquiry to assess about the content, origins, and purposes of multiple sources (evidence)</li><li>Determine key/historical turning points that led to progress and decline for different groups (continuity and change)</li><li>Test and/or develop different geographic models and theories (continuity and change)</li><li>Determine and assess the long- and short-term causes and the intended and unintended consequences of an event, decision, or development (cause and consequence)</li><li>Explain different perspectives on past or present people, places, events, and events, and distinguish between worldviews of today and the past (perspective)</li><li>Recognize implicit and explicit ethical judgments in a variety of sources (ethical judgment)</li><li>Make measured ethical judgments about controversial actions in the past and present after considering the context and standards of right and wrong (ethical judgment)</li></ul>	Students will know and understand the following concepts and content related to <i>Canada and the Early Modern World (15th to 18th Century)</i> : <ul style="list-style-type: none"><li>relationships between exploration, exploration, and colonization</li><li>interactions and exchanges between explorers and Indigenous people, including European and Aboriginal people in North America</li><li>social, political, and economic systems and structures, including those of at least one Indigenous society in the world</li><li>religious systems and spiritual practices, including those of at least one Indigenous society in the world</li><li>scientific, philosophical, and technological innovations in this period, including cartography and navigation</li><li>the relationship between humans and the physical environment</li></ul>

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- Planning that is aligned to **grade level learning standards** including unit and lesson planning, materials, tasks and activities.
- Activities and tasks are evidence of learning used to **evaluate a learning standard**.
- An approach that **promotes equity in education** by reducing bias in evaluating and increasing flexibility in what student evidence can be captured for learning and growth
- Helps students and parent to **better understand learning expectations** and how they are assessed by increasing transparency



# We can shift our *thinking* towards **standards-based design** by:

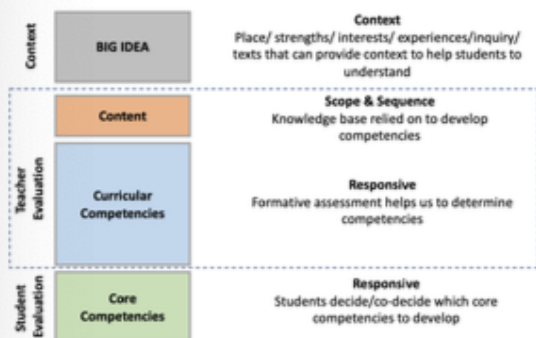


- Understand that learning activities and tasks are evidence of learning, not the goal itself. **Learning standards are evaluated, not tasks.**
- Understand that, unless it is specifically stated in the learning standard, any kind of evidence can count, **it doesn't not have to be the same** kind of evidence for everyone.
- Understand that if a student takes **a different pathway to meet a learning standard**, that this is not an adaptation or a modification.
- Understand that **curriculum is responsive** and does not have to be used in that same exact linear way in every classroom and school.



We can shift our *practices* towards **standards-based design** by:

Grade 4 Math		Curricular Competencies				
Content		Planning and Organizing	Managing Resources	Monitoring Progress	Evaluating and Reflecting	Transferring and Applying
Big Ideas	Students are curious and question (Socratic method)	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Development of a completed fraction and multiplication problem	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Transformation of a completed fraction and multiplication problem	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Students compare operations and evaluate in multiplication and division	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Students compare operations and evaluate in multiplication and division	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Students are given direct and indirect evidence that can be used to solve a problem	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
	Students are given direct and indirect evidence that can be used to solve a problem	Identifying a topic and sub-topics	Identifying what is given or what is needed	Identifying what is known or what is unknown	Identifying what is known or what is unknown	Identifying what is known or what is unknown
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[illegible]

- **Formatively assess** student to prioritize competency based (core & curricular) learning standards
- **Know the standards** you are targeting in each unit
- Ensure the unit plan **reflects the different kinds** of standards and **ratios** in in the curriculum
- **Align** materials, activities, tasks and assessments to **learning standards**
- **Assess standards**, not activities and tasks
- Allow students to show **any evidence to meet a standard**, both formally and informally

# Shelley MOORE PH.D.



@tweetsomemoore



@fivemooreminutes



@fivemooreminutes



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