SHELLEY MOORE

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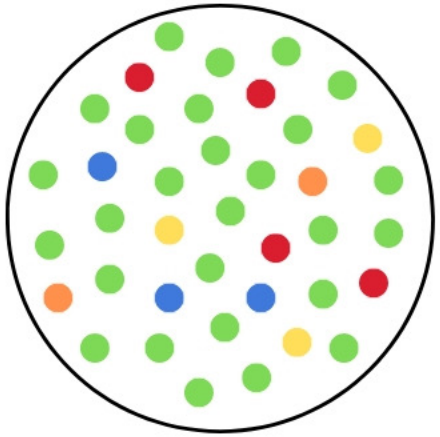
NEXWLéLEXM (BOWEN ISLAND)

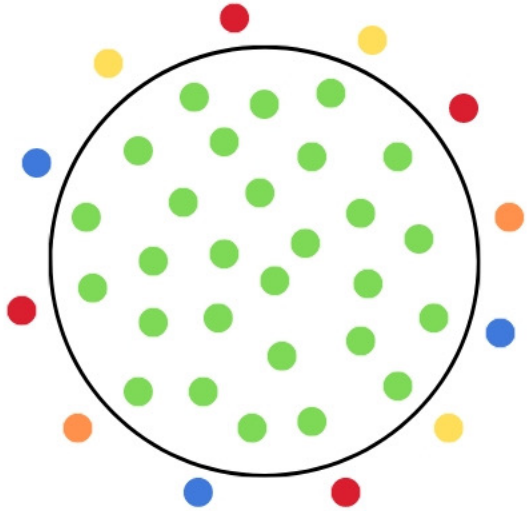
- The Islands Trust council acknowledges that the lands and waters that encompass the Islands Trust Area have been home to Indigenous peoples since time immemorial and honours the rich history, stewardship, and cultural heritage that embody this place we all call home.

- The Islands Trust council is committed to establishing and maintaining mutually respectful relationships between Indigenous and non-Indigenous peoples. Islands Trust states a commitment to Reconciliation with the understanding that this commitment is a long-term relationship-building and healing process.

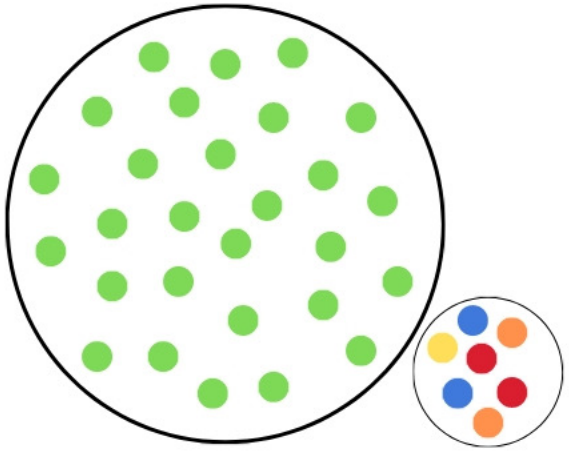
- The Islands Trust council will strive to create opportunities for knowledge-sharing and understanding as people come together to preserve and protect the special nature of the islands within the Salish Sea.



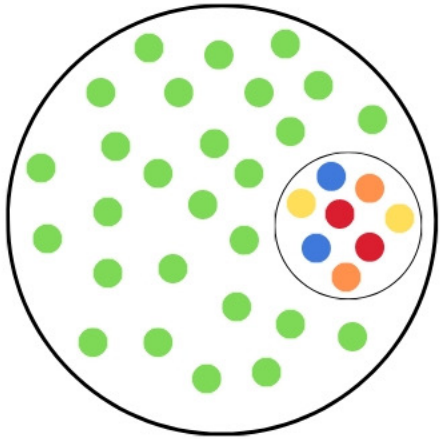
inclusion



exclusion

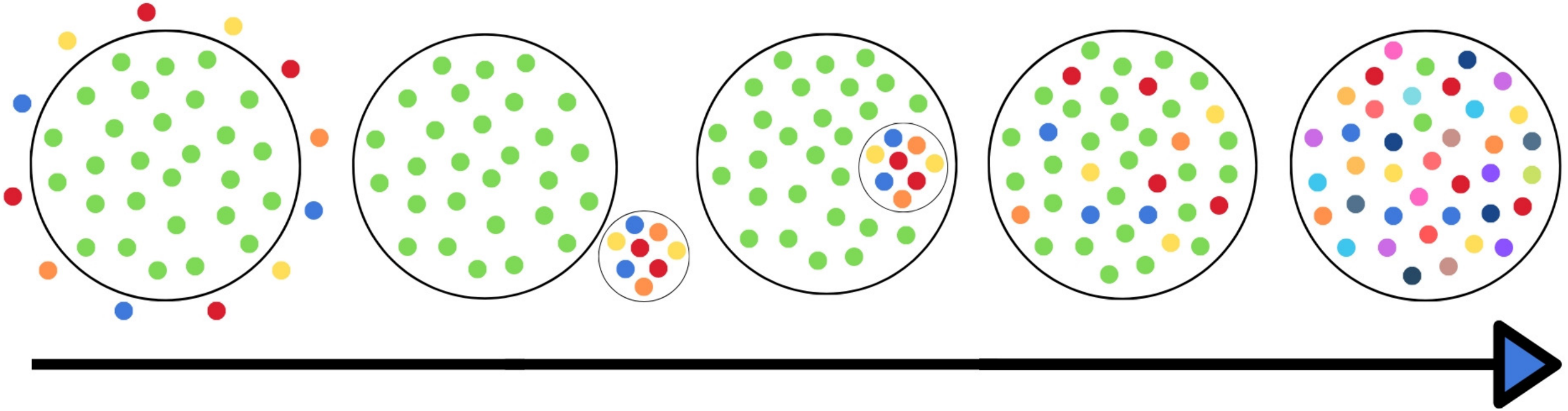


segregation



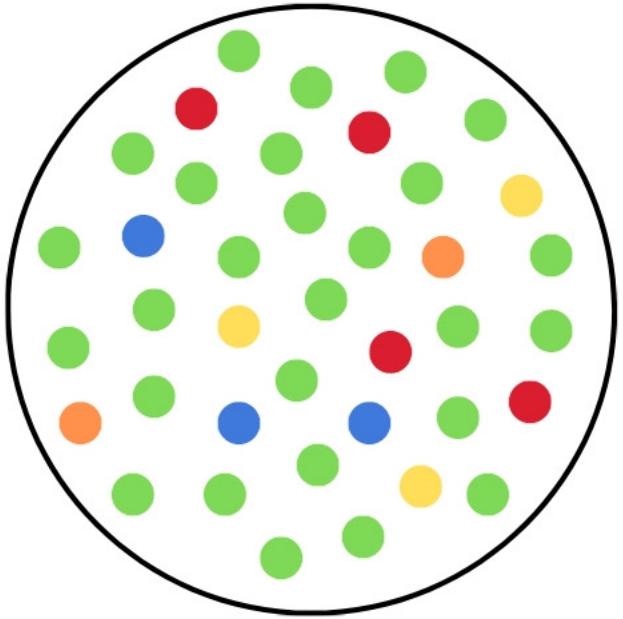
integration

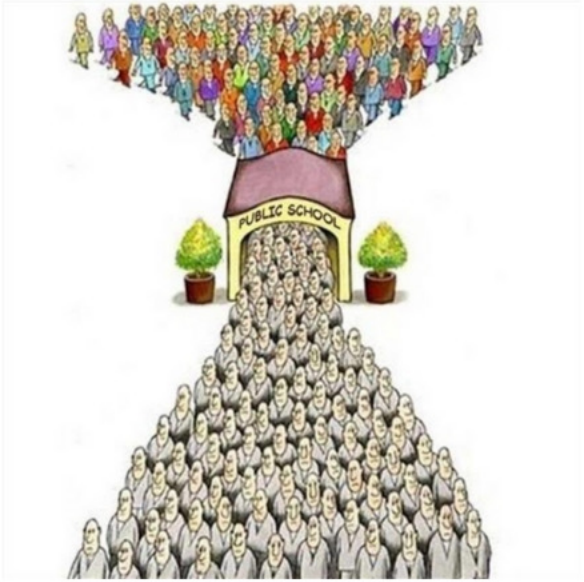
WHAT IS INCLUSION?



Where are you on this continuum? What's the next step?

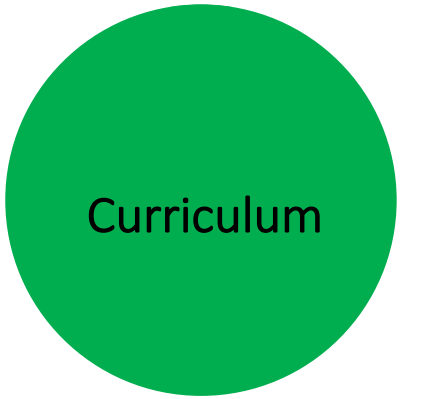
WHERE DID GREEN COME FROM?

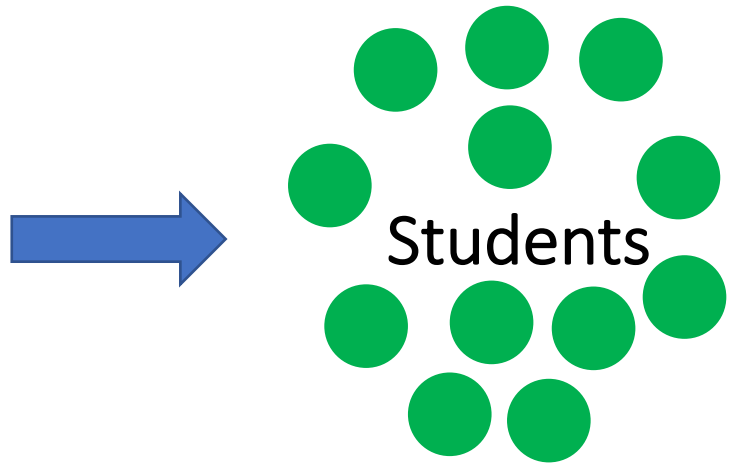


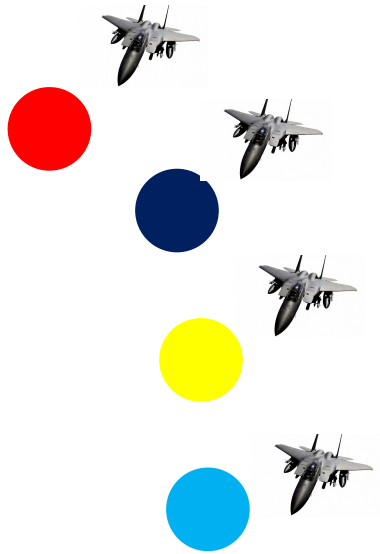


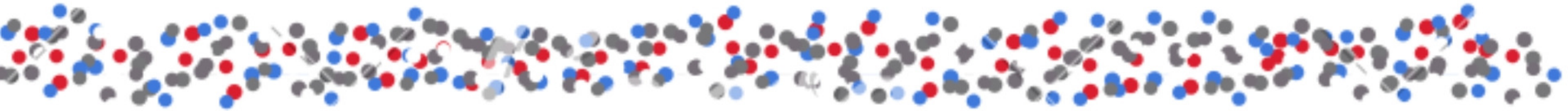
GREEN = AVERAGE

WHAT'S THE DIFFERENCE?

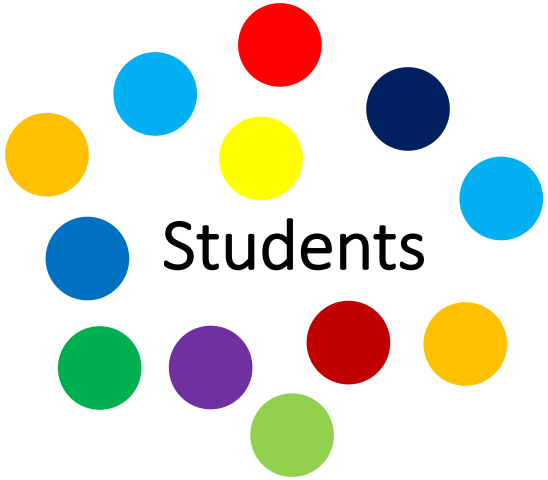


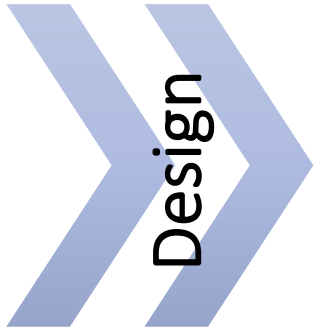


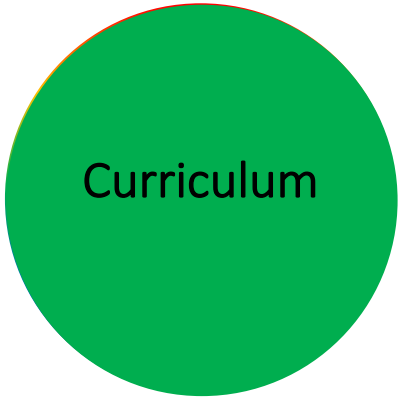




DESIGN: THE MOST UNDERUTILIZED SUPPORT

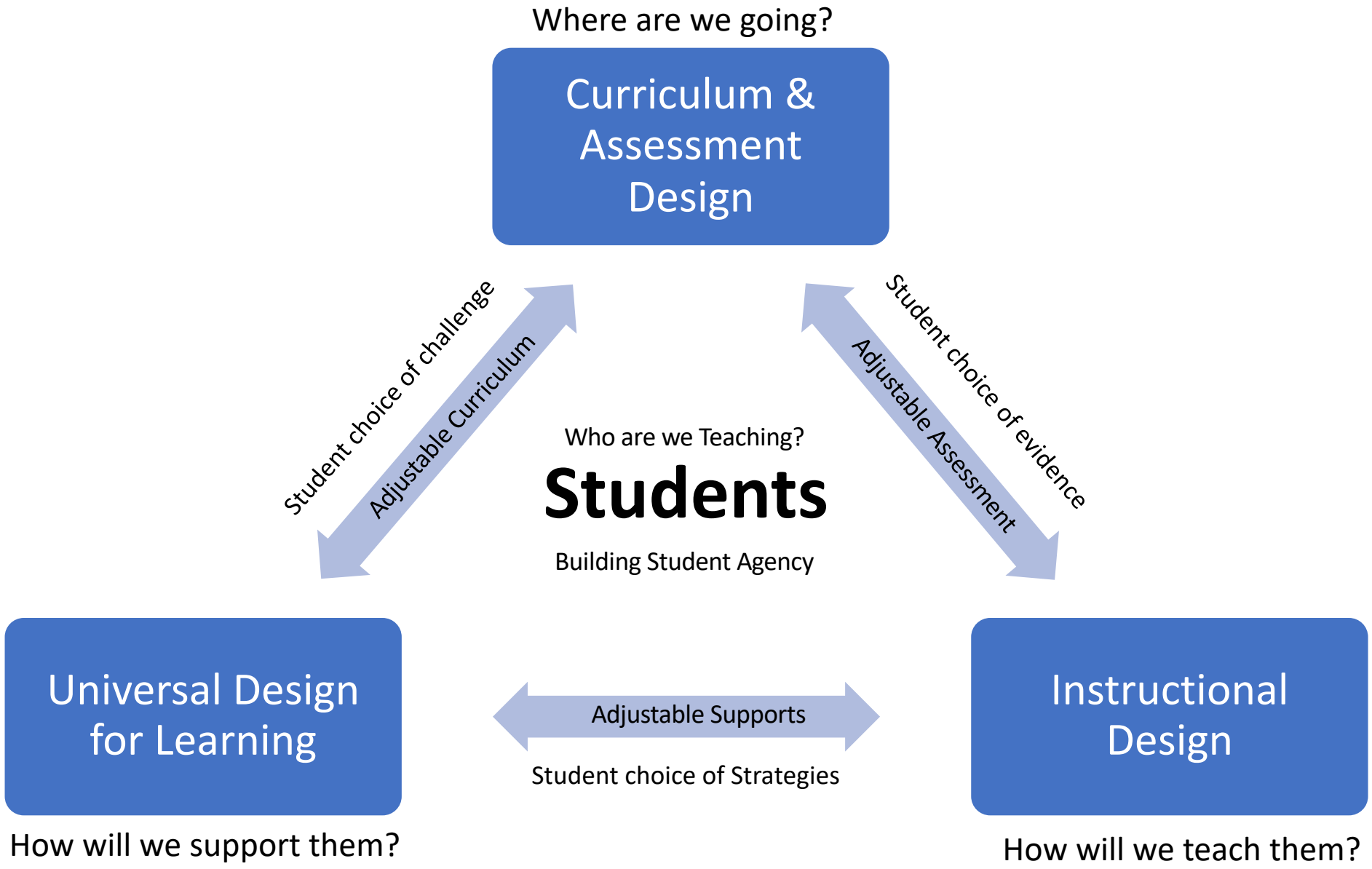






Shelley Moore, 2019

How can we change the system?
Designing with Equity in Mind



Shelley Moore, 2019

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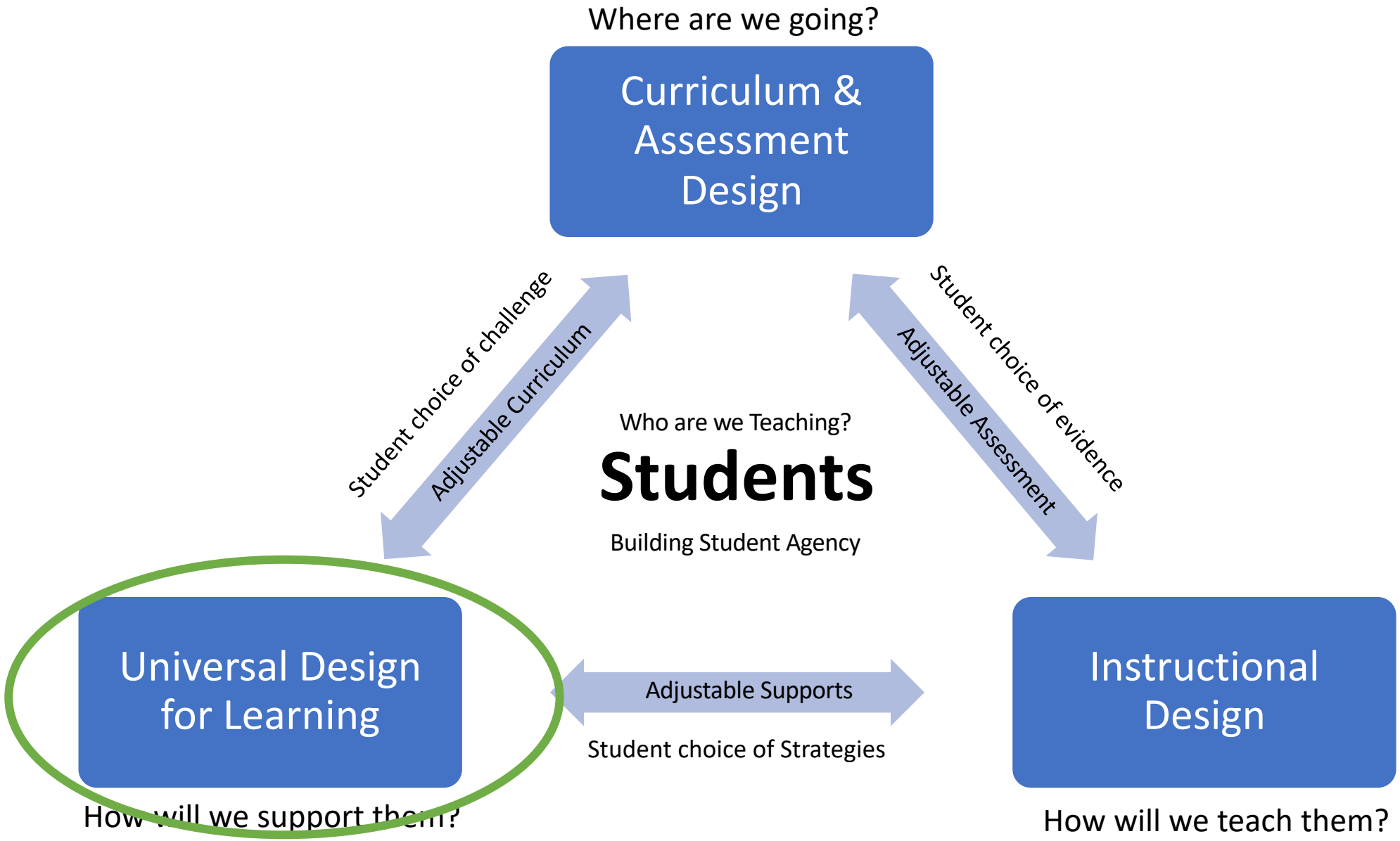
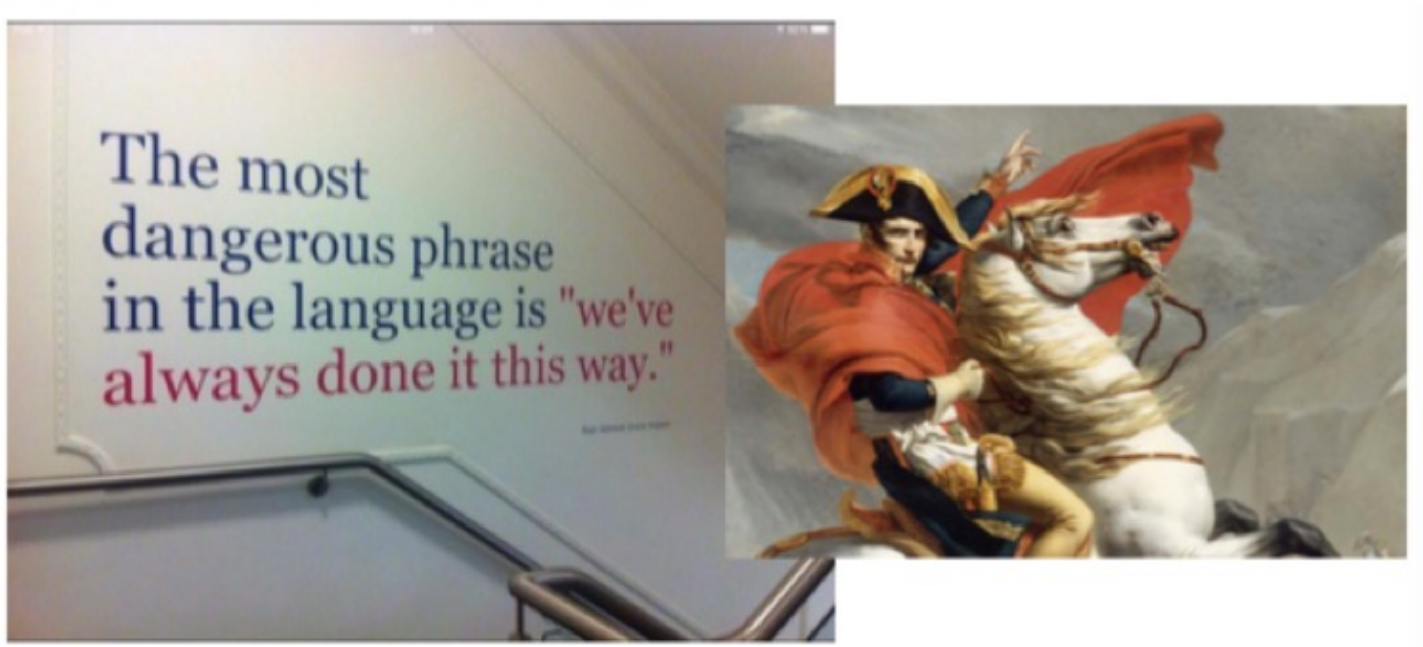


What kind of plane are we flying?
What are the goals?



Backwards Design

Backwards Design Big Ideas:

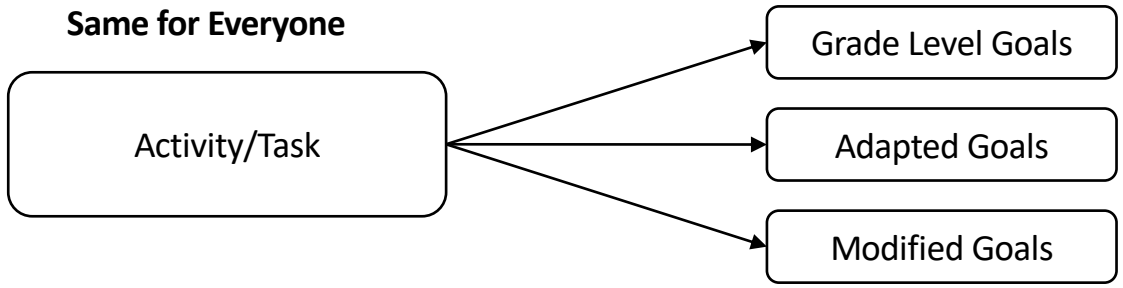
- Every curriculum has curricular goals
- We need to choose goals to teach for every unit
- We organize goals around a big idea/question
- We need to translate those goals into student friendly language
- Students need to know the goals
- Learning activities are EVIDENCE of learning
- We evaluate goals NOT activities
- Student choose their best examples of evidence (triangulation)

Forward Design

Standardized Evaluation

Differentiated

Same for Everyone

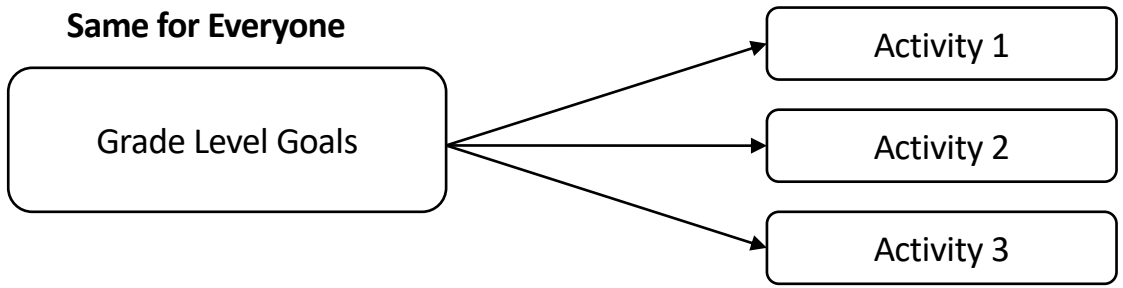


Compromises the integrity of evaluation

Backward Design

Differentiated

Same for Everyone



Does not compromise the integrity evaluation

Standards Based Evaluation

McTigue, 2010

Forward Design

Standardized Evaluation

Differentiated

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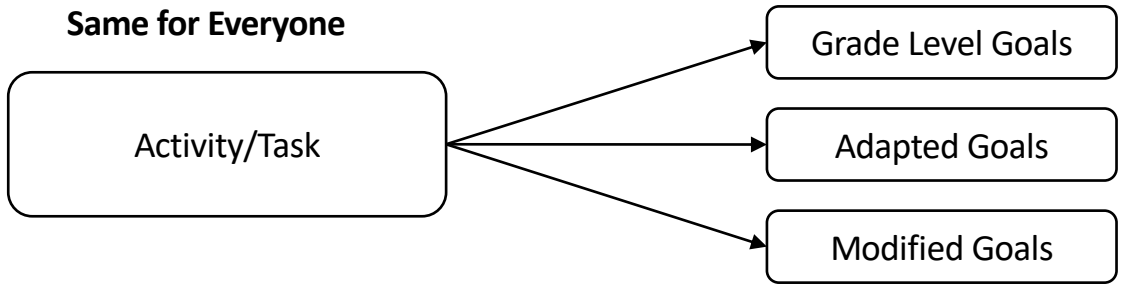

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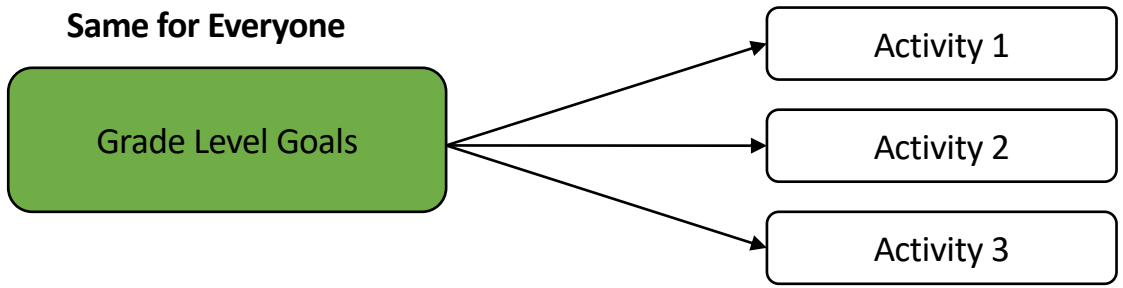


Does not compromise the integrity evaluation

Standards Based Evaluation

McTigue, 2010

Backwards Design: What are the GOALS?

- **Content**
  - What do we need to know?
- **Process**
  - What do we need to do?

Backwards Design:
What are the GOALS?

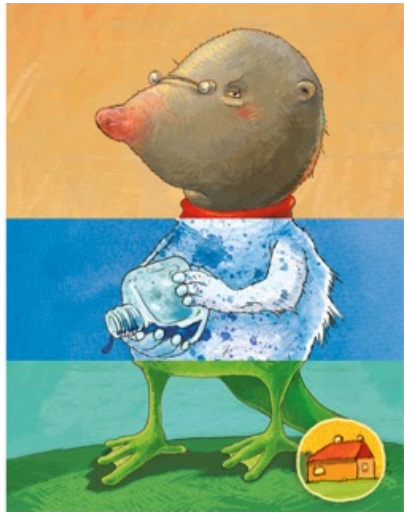
- **Backwards Design**
  - **Big Idea**
    - What do we need to understand?
  - **Content**
    - What do we need to know?
  - **Process & Skills**
    - What do we need to do?
  - **Competencies**
    - Who do we need to be?

Flip Book

Miserable

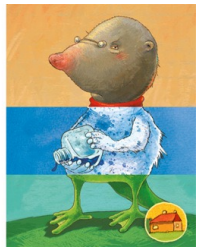
Two-toed

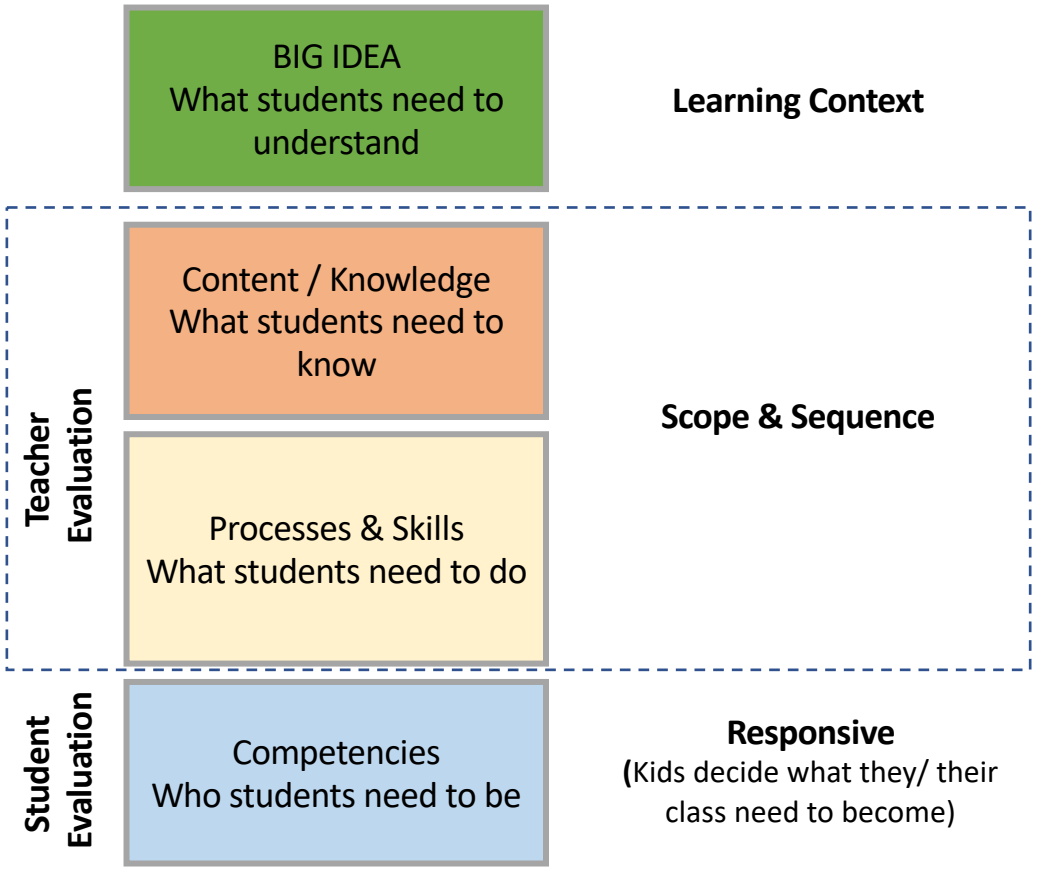
Lizard



The Backwards Design FLIPBOOK

Miserable
Two-toed
Lizard





Shelley Moore, 2107

Backward Design Unit Planning Template: Building the Curricular Airplane

Class/ Subject/ Course	**Topic**	**Planning Team:**
Big Idea(s):		**Unit Guiding Question(s):**
Type of Goal	Curricular Learning Standards/ Outcomes	Student Friendly Language

Backwards Design

Subject/Grade/Course	**Topic**	**Planning Team:**
Big Idea:		Unit Guiding question:
Curricular Language		Student Friendly Language
Knowledge Goals		I know…
Process Goals		I can…
		I can…
		I can…
Competency Goals		I can be…

Grade: 11	Subject Area: Math	Planning Team: Jen
Big Idea: Trigonometry involves using **proportional reasoning** to solve **indirect measurement** problems		Unit Guiding Question: 1. What is Trigonometry and why is it important? 2. How do I use trigonometry to find an indirect measurement?
Content Goal	**trigonometry:** non-right triangles and angles in standard position	I know how to use **trigonometry** to find **non right triangle angles** in **standard position**
Process Goal	**Respond & Analyse : Model** with mathematics in **situational contexts**	I can **reason and analyze** by **modelling** (mathematics) using real life situations
Process Goal	**Understand & Solve: Visualize** to explore and illustrate mathematical concepts and relationships	I can **understand and solve** by **visualizing** (mathematical concepts) and **relationships**
Process Goal	**Communicate & Respond:** Take risks when offering ideas in classroom **discourse**	I can **communicate and represent** by taking **risks** by sharing ideas during classroom discussion
Process Goal	**Connecting & Reflecting: Use mistakes as opportunities to advance learning**	**I can connect and reflect by making mistakes and using those as opportunities to learn**
Competency Goal	I can be a creative thinker	

Grade: 11	Subject Area: Bio	Planning Team:
Big Idea: All living things have common characteristics. Living things evolve over time.		Unit Guiding question: Why is our forest unique in Campbell River? How and why have our forest ecosystems evolved over time?
Content Goal:	I know speciation that occurs within our forest	
Process Goals	I can experience and interpret the local environment	
	I can Seek and analyze patterns, trends, and connections in data, including describing relationships between variables, performing calculations, and identifying inconsistencies	
	I can Construct, analyze, and interpret graphs, models, and/or diagrams	
Competency	I can become socially responsible by…	

One-point rubric

Name:	Date:	
Unit Guiding question: Why is our forest unique? - How and why have our forest ecosystems evolved over time?		
I still need support	**I can do this!**	**I need some challenge**
	I know speciation that occurs within our local ecosystems	
	I can process and analyze data and information by experiencing and interpreting the local environment	
	I can process and analyze data and information by seeking evidence and analyze data	
	I can process and analyze data and information by constructing, analyzing, and interpreting visual representations of data (graphs, models, diagrams)	

Name:	Date:

Unit Guiding question:
Why is our forest unique in Campbell River?
How and why have our forest ecosystems evolved over time?

Goals	**My evidence of learning**	Showing my Learning			**I Need Support**	**I Need Challenge**
	Actvtivities/ tasks	written	oral	visual		
I know speciation that occurs within our local ecosystems						
I can process and analyze data and information by experiencing and interpreting the local environment						
I can process and analyze data and information by seeking evidence and analyze data						
I can process and analyze data and information by constructing, analyzing, and interpreting visual representations of data (graphs, models, diagrams)						

Our Co-Planning Journey: Backwards Design

1. We turned the Big Ideas into unit guiding questions

2. We chose the content goals for the unit and highlighted important vocabulary

3. We chose the curricular competency goals for the unit and highlighted important vocabulary

Grade:	Subject Area:	Planning Team:
Big Idea(s): What do I need to Understand?		Unit Guiding Question(s):
Key Vocabulary:		

	Curricular Language	Student Friendly Language
What do students need to know? Knowledge Goals		I know
What do students need to do? Skills/Process Goals		I can
What do students need to do? Skills/Process Goals		I can
What do students need to do? Skills/Process Goals		I can

4. We rewrote the goals into *student friendly language* using I know/I can statements

Our Co-Planning Journey: Backwards Design

Kindergarten: Materials & Objects

Our Unit Questions

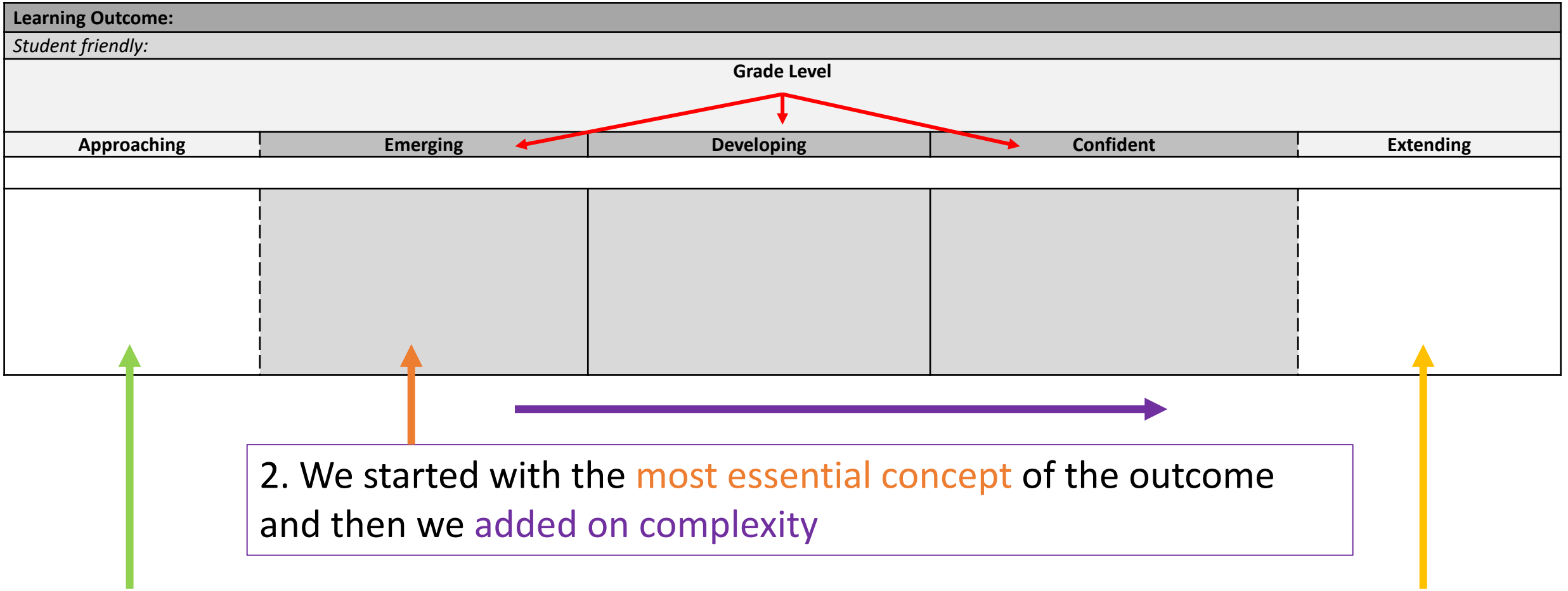
- How do I **interact** with different **materials** and **objects**?
- How can I **describe** different materials and objects?
- How can I be **curious** about and **play** with different materials and objects?
- How can I use different materials and objects to share **stories** about myself and my family?
- How can I choose specific materials and objects to **represent** my family?

Our Unit Goals

Content Goals		Curricular Competency Goals	
Science	Student knows the **properties of familiar materials** Student knows **local First Peoples uses of plants and animals as resources**	Science	Student can **plan and conduct** by • making exploratory observations using their senses Student can **question and predict** by • demonstrating curiosity and a sense of wonder about the world Student can **process and analyze data and information** by • discussing observations • representing observations and ideas by drawing charts and simple pictographs Student can **communicate** by • sharing observations and ideas orally or (other means)
Math	Student knows **single attributes of 2D shapes and 3D objects** Student knows **concrete or pictorial graphs as a visual tool**	Math	Student can **understand and solve** by • visualizing to explore mathematical concepts • engaging in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures Student can **connect and reflect** by • incorporating First Peoples worldviews and perspectives to make connections to mathematical concepts
Language Arts	Student knows **story structure of story** Student knows **language features, structures, and conventions the relationship between reading, writing, and oral language**	Language Arts	Student can **comprehend and connect (reading, listening, viewing)** by • Using personal experience and knowledge to connect to stories and other texts to make meaning Student can **create and communicate (writing, speaking, representing)** by • Exchange ideas and perspectives to build shared understanding
Social Studies	Student knows **ways in which individuals and families differ and are the same** Student knows **people, places, and events in the local community, and in local First Peoples communities**	Social Studies	Student can **sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change)** Student can **acknowledge different perspectives on people, places, issues, or events in their lives (perspective)**
Art	Student knows **processes, materials, movements, technologies, tools, and techniques to support arts activities** Student knows **traditional and contemporary Aboriginal arts and arts-making processes**	Art	Student can **create artistic works collaboratively and as an individual, using ideas inspired by imagination, inquiry, experimentation, and purposeful play**

Our Co-Planning Journey: Learning Continuums

1. Using the elaborations for each learning outcome, we constructed a grade-level scaffold in *student friendly language*



2. We started with the most essential concept of the outcome and then we added on complexity

3. We extended the grade level scaffold to include an access point and challenge point

Learning Continuums: Science

Content Goal: properties of familiar materials

Student friendly: I know how to **interact** with objects and materials by using my **senses by:**

Approaching	Emerging	Developing	Confident	Extending
Showing (or matching) that I know what fabric, soil, wood, sand, plastic, paper, sponges, metal	Using colour & texture to describe objects and materials Describing fabric and soil Describing roots, bark, trunk and needs of a cedar)	Using hardness and flexibility to describe objects and materials Describing wood, sand, plastic Describing rocks	Using absorbency to describe objects and materials Describing paper, sponges Describing berries (frozen), dyed fabric	Using lustre to describe objects and materials Describing metals Describing bones, fur

Content Goal: effects of pushes/pulls

Student friendly: I know different ways that objects move

Approaching	Emerging	Developing	Confident	Extending
I know (can show) push, pull, roll, and bounce	I know what action I am taking and what objects and materials I am using	I know what happens when I (roll, push, bounce etc.) objects over different materials	I know that some objects move better on some materials than others	I know why some objects move better on some materials than others

Content Goal: local First Peoples uses of plants

Student friendly: I know different ways that First Peoples **use** objects and materials

Approaching	Emerging	Developing	Confident	Extending
I know what cedar is, what rocks are etc.	cedar – parts of the cedar, how it is used	Rocks – use of rocks for making gardens, cooking, bentwood boxes	Berries – dying, fabric, art, food	Animals – food, clothing, entire animal, bones, symbolism/ character

Curricular Competency Goal: Planning and conducting: making exploratory observations using senses

Student friendly: I can share what happened by using my senses

Approaching	Emerging	Developing	Confident	Extending
I can look at different objects and materials I can follow a model to move objects	I can use properties of objects and materials to describe what I see and feel	I can observe different objects interact with different materials and describe what I see	I can compare how different objects move on different materials	I can explain which materials and surfaces work better for certain objects to move

Learning Continuums: Math

Content Goal: single attributes of 2D shapes and 3D objects

Student Friendly: I know what makes materials, objects (**3D**) and shapes (**2D**) different form each other

Approaching	Emerging	Developing	Confident	Extending
I can match names of basic 2D and 3D objects with their models. (I can show you these when you name them.)	I can find everyday objects that have the same shape.	I can sort objects by their properties.	I can compare different 2D and 3D objects and tell you how they are the same and how they are different.	I can tell you what 2D and 3D objects can be used for. I can make a model using these shapes.

Content Goal: concrete or pictorial graphs as a visual tool

Student Friendly: I know how to show **"how many"** using objects and pictures

Approaching	Emerging	Developing	Confident	Extending
I can count the objects or pictures.	I can draw a desired number of objects.	I can use symbols (digits) to indicate "how many." I can compare quantities by counting the objects.	I can compare quantities by using objects and symbols. I can identify 'fewer' and 'more' than.	I can compare quantities by using symbols. I can identify "fewer" and "more" by reading numbers.

Curricular Competency Goal: Understanding and solving: Visualize to explore mathematical concepts

Student Friendly: I can solve problems by using materials, and objects

Approaching	Emerging	Developing	Confident	Extending
I can identify a pattern.	I can make a simple repeating pattern using two elements and using materials that are readily available for manipulation.	I can distinguish between a pattern and non-pattern design.	I can identify a core of a pattern and continue with the pattern.	I can identify a mistake in a pattern, correct it and continue with the pattern. I can make more sophisticated patterns using 3 elements.

Curricular Competency Goal: Understanding and solving: Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures

Student Friendly: I can solve problems that are connected to mine and others, family, and community

Approaching	Emerging	Developing	Confident	Extending
I can listen to stories about different communities, cultures and places.	I notice that there are different stories, traditions and perspectives.	I can ask questions or make comments about a problem, story, practices or perspectives.	I can identify a problem and offer a solution to a problem.	I can identify a problem, offer one or more solutions, and explain how they solve the problem.

Learning Continuums: English Language Arts

Content Goal: Story structure of story

Student Friendly: I know how to use materials and objects to **recreate** a story

Approaching	Emerging	Developing	Confident	Extending
I can listen to a story I can build a character or a setting	I can choose an event in a story I can follow a model	I can show what happened first and next	I can show a problem in a story (middle)	I can show how the event started (beginning) and how it was solved (end)

Curricular Competency Goal: Comprehend and connect (reading, listening, viewing): Use personal experience and knowledge to connect to stories and other texts to make meaning

Student Friendly: I can **make connections** to **a story**, between **a story and another story,** and between **a story and the world**.

Approaching	Emerging	Developing	Confident	Extending
I can listen to a story.	I can tell who is in the story.	I can make a connection to myself or to my life based on the story.	I can make a connection with another story based on similarities/differences (e. g. setting, characters, problem, solution).	I can make a connection between a story and the world (family, community, nation, world).

Curricular Competency Goal: Create and communicate (writing, speaking, representing): Exchange ideas and perspectives to build shared understanding

Student Friendly: I can **show, draw, tell, and write about my ideas and share them** with others that I know

Approaching	Emerging	Developing	Confident	Extending
I can draw a picture or show you with gestures my story or ideas.	I can draw a picture or tell you my story or ideas.	I can tell you and draw a picture and write a few letters to share my story and ideas.	I can draw a picture, write a few words and read my story or ideas to you.	I can tell, draw, and write/read my story and share my ideas without assistance.

Learning Continuums: Social Studies

Content Goal: ways in which individuals and families differ and are the same				
Student Friendly: I know what makes my family **unique** I know what makes families different from each other				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
I can name people in my family.	I describe and name people in my family.	I can observe some differences in families.	I can compare my family with another one. I can point out similarities and differences.	I can compare my family with two other families and point out how is my family similar and different with the other two.

Content Goal: people, places, and events in the local community, and in local First Peoples communities				
Student Friendly: I know about different people, place, and events in my community I know about a local First Nations community				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
I know what First Nations or Indigenous people are.	I can name the two First Nations in our neighborhood/ community.	I can name a few events or places in our community that are tied to First Nations.	I can tell you a local First Nations story that is tied to our community.	I can tell you about events, stories, places and practices of the local First Nations (e. g. name giving, traditional medicine, celebrations, etc).

Curricular Competency Goal: Sequence objects, images, or events, and distinguish between what has changed and what has stayed the same (continuity and change)				
Student Friendly: I can show and/or tell **what changed** and what **stayed the same** **I can show and/or tell what happened first, next, and then**				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
I can sequence three events (beginning, middle, end) using pictures.	I can tell/describe what happened first, then, next.	By looking at two images (depicting past and present), I can tell what has changed.	By looking at two images, I can tell what changed and what stayed the same.	I can tell what changed and what stayed the same and predict possible future changes/development of the story.

Learning Continuums: Art

Content Goal: processes, materials, movements, technologies, tools, and techniques to support arts activities				
Student Friendly: I know how to use materials and objects to **create** art				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
I can create art based on a model.	I can create art based on a model and a limited number of materials and a limited number of steps.	I can create art based on a model and selected materials/ objects and following a step by step process.	I can create unique art using a variety of materials independently and describe the process.	I can create unique art and describe the process. I can tell you what I enjoyed about the process and explain why.

Content Goal: traditional and contemporary Aboriginal arts and arts-making processes (art)				
Student Friendly: I know how First Peoples use materials and objects to make art				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
??? Need help from Indigenous Team				

Curricular Competency Goal: Create artistic works collaboratively and as an individual, using ideas inspired by imagination, inquiry, experimentation, and purposeful play				
Student Friendly: I can **create** art by **playing** and using **different materials by myself** and **with others**.				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
I can create art by myself.	I can create art with others.	I can create art by following a plan by myself and with others.	I can make a plan and follow it when creating art. I can change my plan when I create art with others.	I can plan with others and follow our plan when creating art as a team.

Activities to Collect Possible Evidence of Student Learning

- Examining rocks
- Brick and stick house
- Science center: exploring materials with 5 senses
- Exploring rocks & trees
- Journal Writing: how Indigenous Peoples use rocks
- Journal Writing: creating stories
- Stories: The Two Rock Sisters
- Cedar art drawing & labelling

Activity:

Evidence: drawings (product), photos (observations)

Content Learning Outcomes

Science: properties of familiar materials
Kid Friendly: I know how to **interact** with objects and materials by using my **senses by:**

Math: concrete or pictorial graphs as a visual tool
Kid Friendly: I know how to show "**how many**" using objects and pictures

Curricular Competency Learning Outcomes

Science: Planning and Conducting: making exploratory observations using senses
Kid Friendly: I can share what happened by using my senses

Unit Guiding Questions

- How do I interact with different materials and objects?
- How can I describe different materials and objects?
- How can I be curious about play with different materials and objects?
- How can I use different materials and objects to share stories about myself and my family?
- How can I choose specific materials and objects to represent my family?

Learning Continuum: Science Content

Content Goal: properties of familiar materials				
Student friendly: I know how to interact with objects and materials by using my senses by:				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
→				
• Showing (or matching) that I know what rocks, fabric, soil, wood, sand, plastic, paper, sponges, metal are	• Using colour & texture to describe objects and materials • Describing roots, bark, trunk and needs of a cedar) • Describing fabric and soil	• Using hardness and flexibility to describe objects and materials • Describing wood, sand, plastic • Describing rocks	• Using absorbency to describe objects and materials • Describing paper, sponges • Describing berries (frozen), dyed fabric	• Using lustre to describe objects and materials • Describing metals • Describing bones, fur

Learning Continuum: Math Content

Content Goal: concrete or pictorial graphs as a visual tool				
Student friendly: I know how to show "**how many**" using objects and pictures				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
→				
• I can count the objects or pictures.	• I can draw a desired number of objects.	• I can use symbols (digits) to indicate "how many." I can compare quantities by counting the objects.	• I can compare quantities by using objects and symbols. I can identify 'fewer' and 'more' than.	• I can compare quantities by using symbols. I can identify "fewer" and "more" by reading numbers.

Learning Continuum: Science Curricular Competency

Content Goal: Planning and conducting: making exploratory observations using senses				
Student friendly: I can share what happened by using my senses				
Approaching	**Emerging**	**Developing**	**Confident**	**Extending**
→				
I can look at different objects and materials I can follow a model to move objects	• I can use properties of objects and materials to describe what I see and feel	• I can observe different objects interact with different materials and describe what I see	• I can compare how different objects move on different materials	• I can explain which materials and surfaces work better for certain objects to move

Backwards Design Planning: Manitoba

	Learning Context		Teacher Evaluation		Student Evaluation
Subject	**Topic**	**Big Idea**	**Knowledge/ Content**	**Skills**	**Competencies**
In Math it is called:	**Topic**	**Enduring Understandings / General Learning Outcome**		**Specific Learning Outcome/**	**Processes**
In Social Studies it is called:	**Cluster**	**Use cluster overview description**	**Knowledge/ Content**	**Skills**	**Values**
In Science in is called:	**Cluster #**	**Use cluster/unit overview description**	**Specific Learning Outcome (Students will…)**	**Cluster 0 – Overall scientific and technological Skills**	**Cluster 0 – Overall scientific and technological attitudes**

Backward Design Unit Planning Template: Building the Curricular Airplane

Class/ Subject/ Course: Grade 9 Math	**Topic: Patterns & Relations**	**Planning Team:**
Big Idea(s): Use patterns to describe the world and solve problems		**Unit Guiding Question(s): How can patterns help us to describe and solve problems in the world?**
Type of Goal	Curricular Learning Standards/ Outcomes	Student Friendly Language
Skills (Specific Learning Outcome)	9.PR.1. Generalize a pattern rising from a problem-solving context using linear equations and verify by substitution.	I can use a pattern to solve a linear equation I can use substitution to verify
Competencies (Processes)	[C, CN, PS, R, V] – Student/ Class chosen	

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