

Creating Concept and Competency-based Classrooms

Lower Vancouver Island

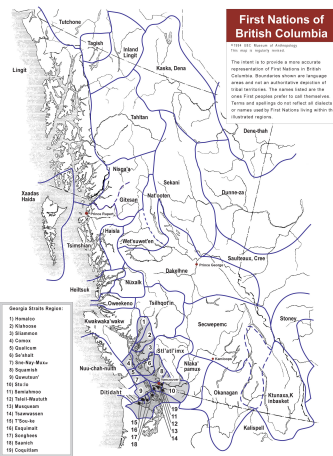
June 9, 2021

Leyton Schnellert, PhD
UBC

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Land Acknowledgement

I would like to begin by acknowledging that the land that I join you from is the unceded territory of the Syilx (Okanagan) Peoples. I live, learn, and research together with the Land and its inhabitants, human and more-than-human. I am grateful and respectful of this place and the countless generations of Indigenous Peoples who have cared for it. I acknowledge, respect, and honour the enduring presence of all First Nations, Metis, and Inuit Peoples.

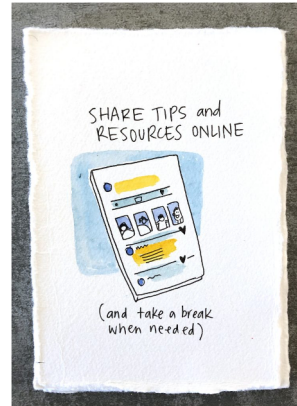


ruralteachers.com

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Our purposes for today...

- Apply a competency-based teaching lens through backward design
- Reground ourselves in the fundamental task of seeing and nurturing competency(ies) in our middle years learners
- Collaborate with colleagues to move y/our practice forward



Gorgeous work from Sam Bradd @ [Drawing Change](#) [click for full set of images!]

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- Experience the possibilities and features of [Liberating Structures](#) for gathering amazingly online
- Connect as colleagues to reflect on our work together this year, support each other, and generate possibilities for our work



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Our (visual) Agenda

Impromptu
Networking

Mad Tea

Conversation Cafe

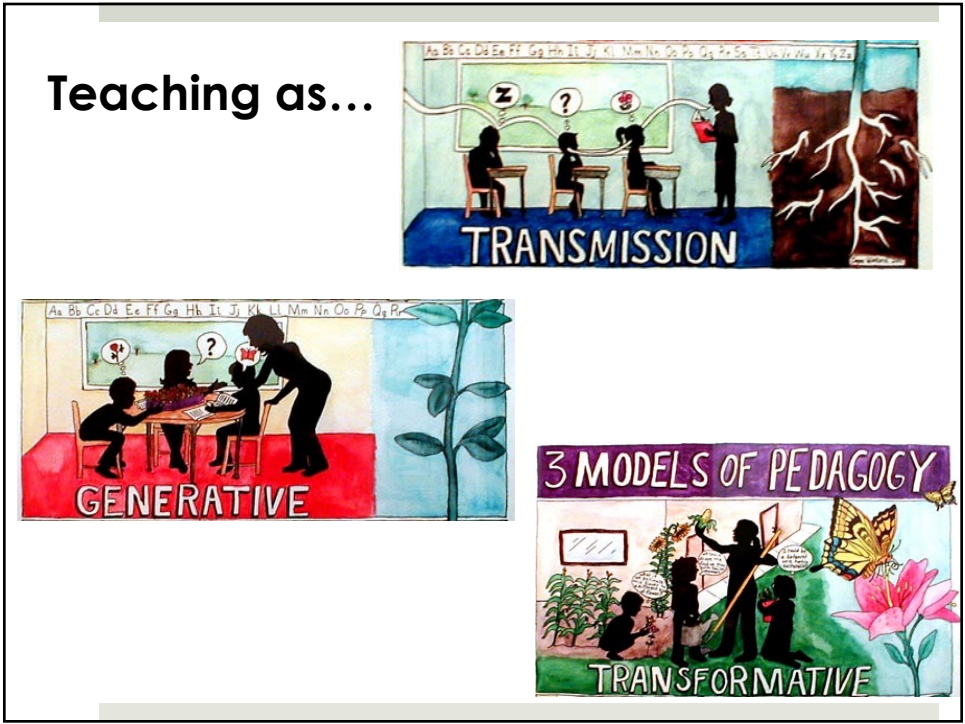
Slide credit: [Nancy White](#)

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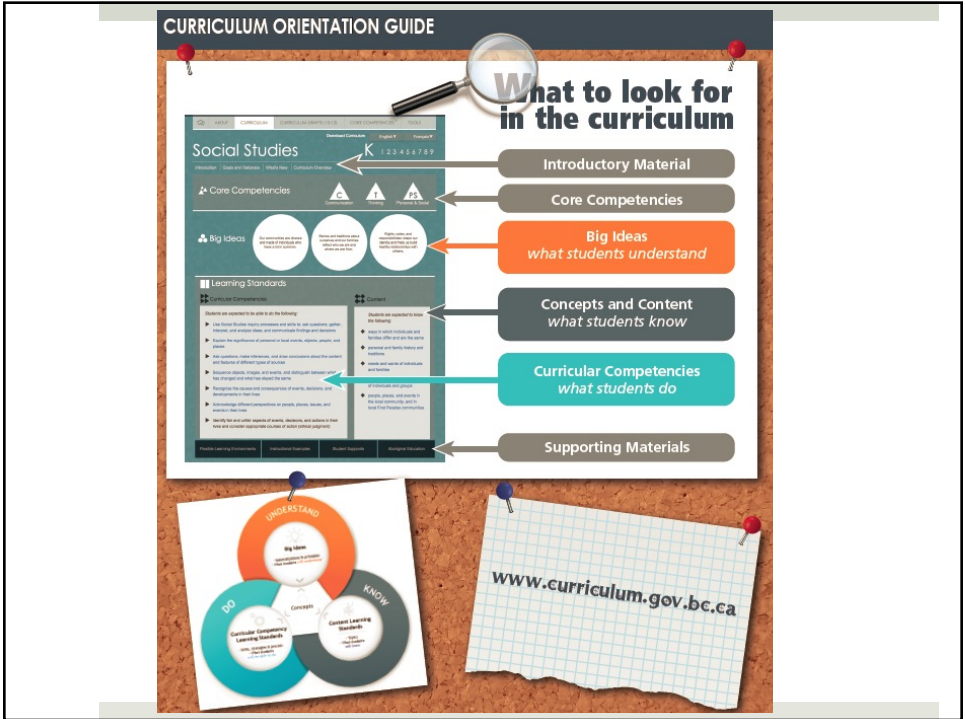
Essential Questions

- ▣ How can I plan for concept and competency-based learning?
- ▣ How might I re-imagine the language I/we use from an equity/diversity/inclusion lens?

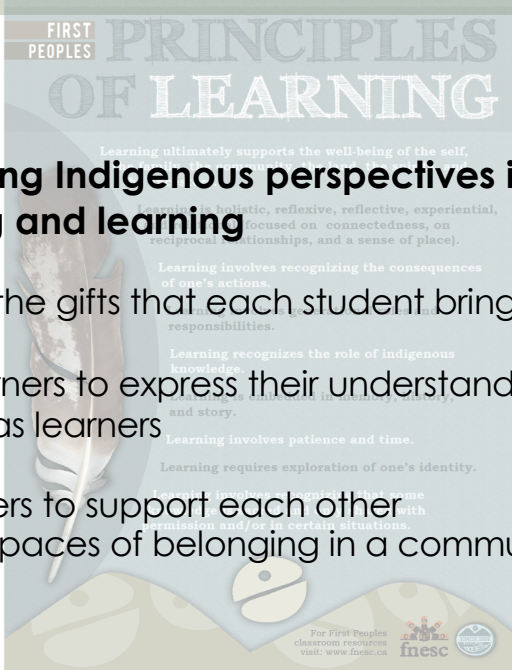
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welcoming Indigenous perspectives into our teaching and learning

- focus on the gifts that each student brings
- invite learners to express their understanding of who they are as learners
- ask learners to support each other creating spaces of belonging in a community of learners

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Concept-based curriculum

Why

- We want students to be strong thinkers, problem solvers, readers, writers and speakers
- We want students to see the world from multiple perspectives
- We want students to act differently because of what they have learned
- The key to understanding is **transfer**

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Concept-based curriculum

- If we remain at the topic and factual level, students stop trying to derive larger principles about what they are learning
- Students' understanding of conceptual relationships should alter how they see the world beyond the walls of the classroom and how they solve problems that occur outside the neat, teacher-constructed parameters of an academic exercise
- Conceptual transfer only occurs when students apply insights about the relationship among concepts to a new scenario.

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Concept-based curriculum

John Hattie's (2012) work supports the claim that conceptual understanding is key to transferring learning to new situations:

"We come to know ideas, and then we can be asked to **relate** and **extend** them. This leads to **conceptual understanding**, which can in turn become a **new idea**—and so the cycle continues.

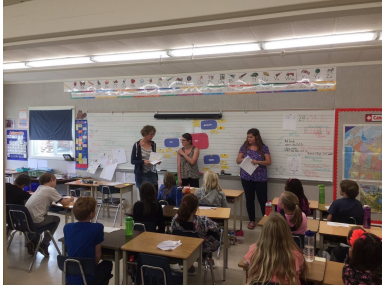

These conceptual transfer only occurs when students **apply insights about the relationship among concepts to a new scenario**. understandings form the "coat hangers" on which we interpret and assimilate new ideas, and relate and extend them (p. 115)."

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Class Profile

Class Profile Recording Form

Classroom Strengths	Classroom Stretches			
Interests				
Goals	Decisions			
Individual Concerns				
Medical	Language	Learning	Socio-Emotional	Other

Informative assessment

getting to know YOU


Who are you as a person and a learner?

Words that describe me are...	My favorite books/stories are...	Things I like to do with my friends...	Things I like to do when I'm alone...	Things I like to do with my family...
I'm very interested in or good at...	Things I'd like you to know about me... (or need to know...)	My hopes and dreams for myself are...	The easiest way for me to show what I know is:	Things I would like to get better at in school this year are....


Schuffert, Waino & Winkler

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Performance-Based Reading Assessment




Summarizing
Using a web, words, diagrams, and/or drawing, show that you can identify the key ideas and details from this passage (use the other side of this page).




Connections
How does what you just read connect with what you already know?



Vocabulary
Define each of the following words. Explain how you figured out what they meant.



Inferring
Read between the lines to find something that you believe to be true, but that isn't actually said. Explain your reasoning.



Reflecting
Was this reading easy or hard to understand? How did you rely yourself? Understand? If it was easy, what do you do to help yourself understand something more difficult?

Literacy assessment

PBA Conference Sheet:

6. When you come to a challenging word, how do you figure it out?

Word strategies:

- ___ sound it
- ___ sound it out
- ___ look it up in the dictionary
- ___ skip it
- ___ ask someone
- ___ try and figure out what makes sense in the sentence

Other: _____

7. If you are reading a passage like this and it does not make sense, what do you do?

Sense strategies:

- ___ reread it
- ___ try another book
- ___ make a picture in my mind
- ___ read notes on what I've read
- ___ make a connection between the text, yourself, the world, another text

Other: _____

8. What were the main ideas of this selection?


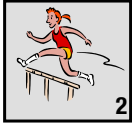

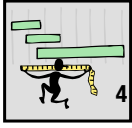
SRA Oral Reading

While the students are reading silently and responding, meet with each student and have them read the first 2 paragraphs to you. Score their oral reading as follows:

<p>home → omission</p> <p>home → repetition</p> <p>house → substitution</p> <p>old house → insertion</p> <p>in the → reversal</p> <p>dk → don't know</p> <p>s/c → self correct</p> <p>so → sound out</p>	<p>Score their use or misuse of punctuation by indicating their phrasing, especially if inappropriate phrasing seems to be interfering with fluency and/or comprehension.</p> <p style="text-align: right; font-size: x-small;">©Wells 2001</p>
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From Assessment to Instruction

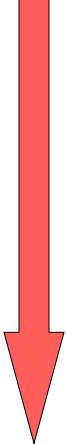
<p>Assess (against criteria)</p>		<p>What can my students do?</p>
<p>Set a Goal (target)</p>		<p>What do they need?</p>
<p>Plan/Teach (with the goal in mind)</p>		<p>What do I need to teach?</p>
<p>Reassess</p>		<p>Is my teaching making a difference?</p> <ul style="list-style-type: none"> - did it make a difference? - what do I need to do now? <li style="padding-left: 20px;">- move on? <li style="padding-left: 20px;">- revisit in a different way?

Brownlie, Feniak, Schnellert, 2016

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Gradual Release of Responsibility

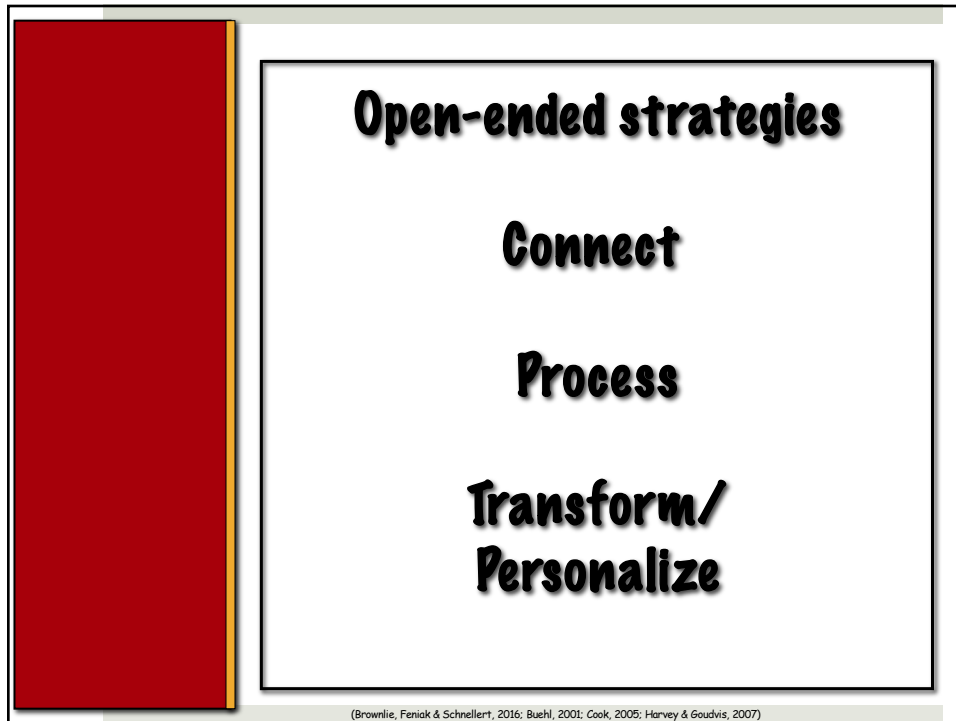




Modeled	I show, you watch
Shared	I do, you help
Guided	You do, I help
Independent	You do, I watch

Pearson & Gallagher, 1983

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Open-ended strategies

Connect

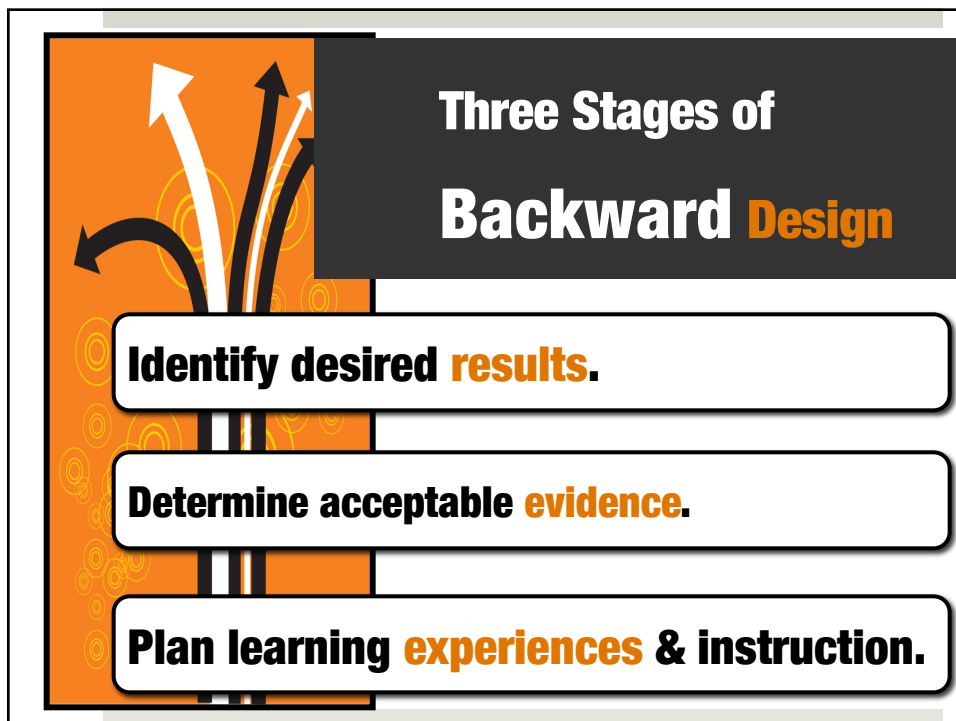
Process

**Transform/
Personalize**

(Brownlie, Feriok & Schnellert, 2016; Buehl, 2001; Cook, 2005; Harvey & Goudvis, 2007)

The diagram features a red vertical bar on the left side of a white rectangular frame. The text is centered within the frame.

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**Three Stages of
Backward Design**

Identify desired results.

Determine acceptable evidence.

Plan learning experiences & instruction.

The diagram has an orange background with a pattern of small circles. On the left, there are three curved arrows pointing upwards and to the right. The text is arranged in a dark grey header box and three white rounded rectangular boxes below it.


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Impromptu Networking

- Respond to the invitation with a partner
- One round of 2 minutes each
- Randomly Assigned Breakout Rooms
- Use to build quick connections, invite people's voices in, generate initial responses to a question



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Invitation

How have these ideas been influencing your practice?

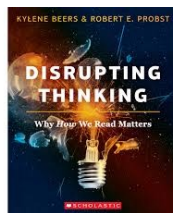
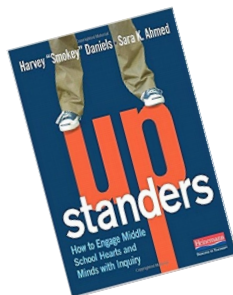
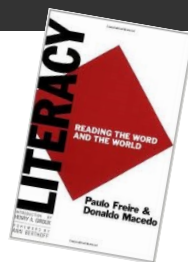
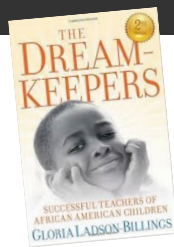
How are you hoping to deepen your practice today?

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Learning sequences

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Careful attention and deep listening



- Seek out our students' perspectives and funds of knowledge and identity
- Sharing responsibility for creating and adjusting the curriculum
- Responsive teaching is an ethical practice where students and teachers are co-learners
- Using diversity-positive and diversity welcoming language

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Lesson Planning

Lesson: _____

Big Ideas or Key Concepts
Students will understand that ...

Competencies or Strategies
Students will be able to ...

Connecting	<p>Purpose: Engagement. Activate prior knowledge. Predict content. Focus on a purpose for reading.</p> <p>I/we will ...</p>	<p>How can I/we tap into students' interests, offer appropriate challenges, and increase motivation?</p>
Processing	<p>Purpose: Construct meaning. Monitor understanding. Process ideas.</p> <p>I/we will ...</p>	<p>How will I/we help students interact with new ideas they encounter?</p>
Transforming and Personalizing	<p>Purpose: Process ideas. Apply knowledge. Reflect on thinking and learning.</p> <p>I/we will ...</p>	<p>How can I/we provide learners with alternatives for demonstrating what they know?</p>

Assessment
If students are engaged and I/we have modeled this well, I/we hope that they will ...

1. _____	2. _____
3. _____	4. _____

Prentice Publishers © 2016 Student Diversity, 3rd ed., by Hye Bessie, Catherine Frenik, Lepton Schofield ISBN 978-1-5036-314-7

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Open-ended strategies

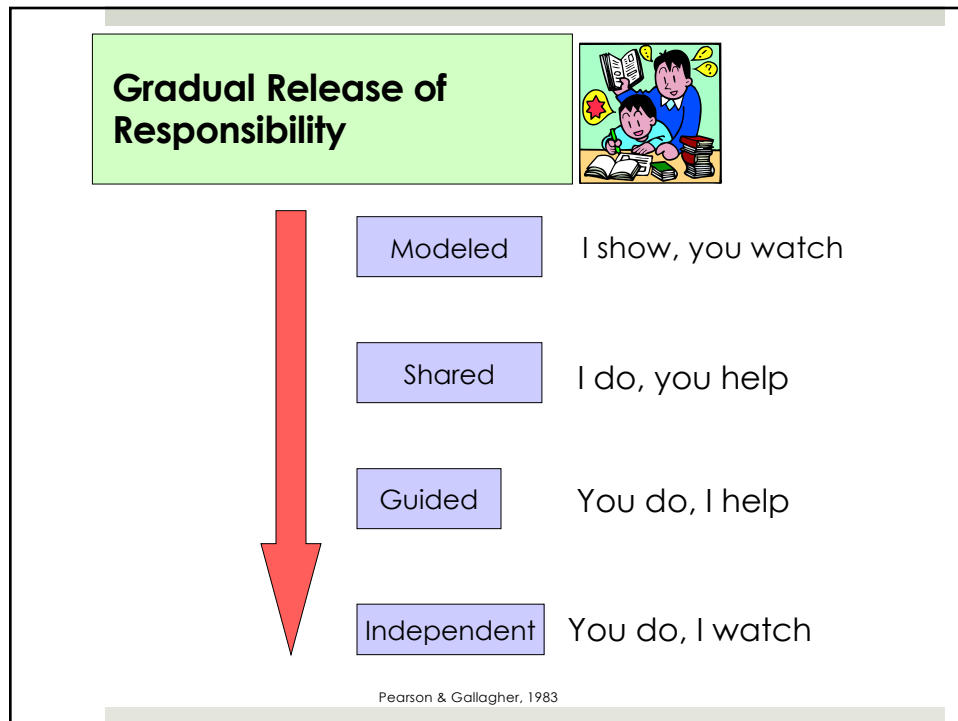
Connect

Process

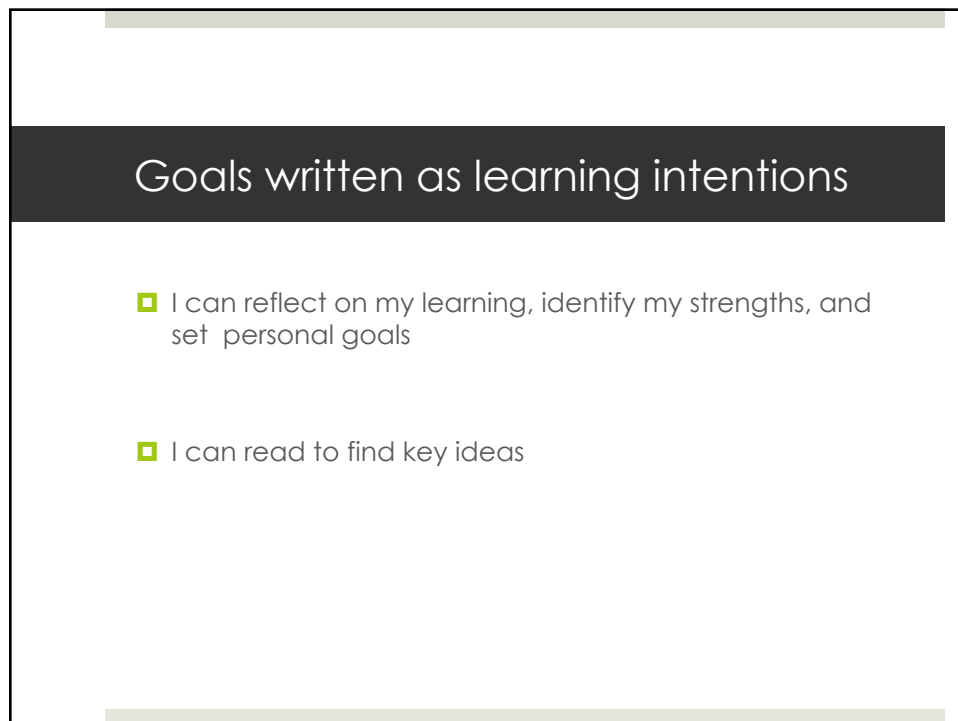
Transform/
Personalize

(Brownlie & Close, 1988; Brownlie, Feniak & Schnellert, 2016; Buehl, 2001; Cook, 2005; Harvey & Goudvis, 2007)

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Competency Based Classrooms

Tammy Renyard - District Principal, District Team
 Jessica Hoyt - Grade 8 Teacher, Gordon Head Middle School
 Jayme Forrest, Teacher Candidate, UBC Middle Years Cohort



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Virtual Learning Rounds and Example

[Link: Virtual Learning Rounds - District Learning Team](#)

- **Final Student Performance Task:**
 - What does it...look like...sound like...feel like...to be recognized as an ally by a community?
- **Quick write mini-task**
 - Given what you know so far, write to explain the difference between a bystander and an upstander? Use evidence from your life, the text and the world to support your thinking.

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Example: Grade 8 ELA

Curricular Competencies

- Apply appropriate strategies to comprehend written, oral, and visual texts, guide inquiry, and extend thinking
- Synthesize ideas from a variety of sources to build understanding
- Exchange ideas and viewpoints to build shared understanding and extend thinking
- Use writing and design processes to plan, develop, and create engaging and meaningful literary and informational texts for a variety of purposes and audiences

Shared Student Learning Goals

- Justify thinking using evidence
- Develop awareness around thinking, behaviours and actions that are harmful versus helpful
- Understand the differences: bystander, upstander and ally? What does it look like, sound like, feel like to be recognized as an upstander? As an ally?
- Identify that the traits of an upstander are present within all of us

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District Teams

- The Learning Team
- Learning Support
- Indigenous Education
- Healthy & Caring Schools
- Tech for Learning
- Pathways and Partnerships

Other Topics

Select Category

LITERACY LEARNING ROUND – APRIL 7TH 2021 – GORDON HEAD

April 7, 2021
Topics: Middle, Middle Learning Rounds: Social Emotional Well-being

Final Student Performance Task

What does it...look like...sound like...feel like...to be recognized as an ally by a community?

Curricular Competencies (ELA Grade 8)

- Apply appropriate strategies to comprehend written, oral, and visual texts, guide inquiry, and extend thinking
- Synthesize ideas from a variety of sources to build understanding
- Exchange ideas and viewpoints to build shared understanding and extend thinking
- Use writing and design processes to plan, develop, and create engaging and meaningful literary and informational texts for a variety of purposes and audiences

Shared Student Learning Goals

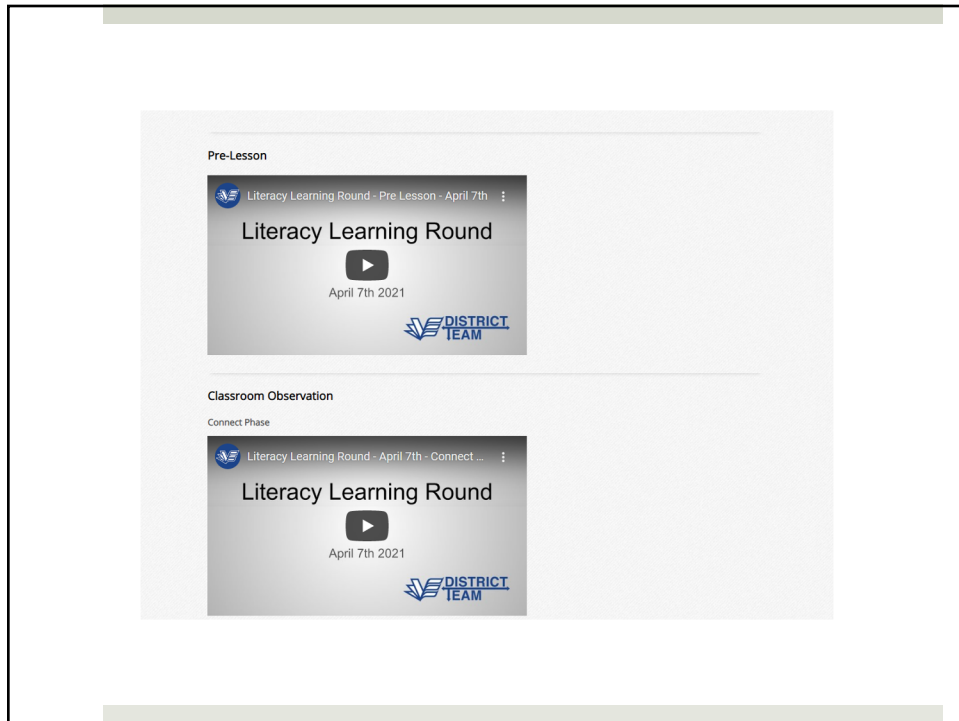
- Justify thinking using evidence
- Develop awareness around thinking, behaviours and actions that are harmful versus helpful
- Understand the differences: bystander, upstander and ally? What does it look like, sound like, feel like to be recognized as an upstander? As an ally?
- Identify that the traits of an upstander are present within all of us.

Resources

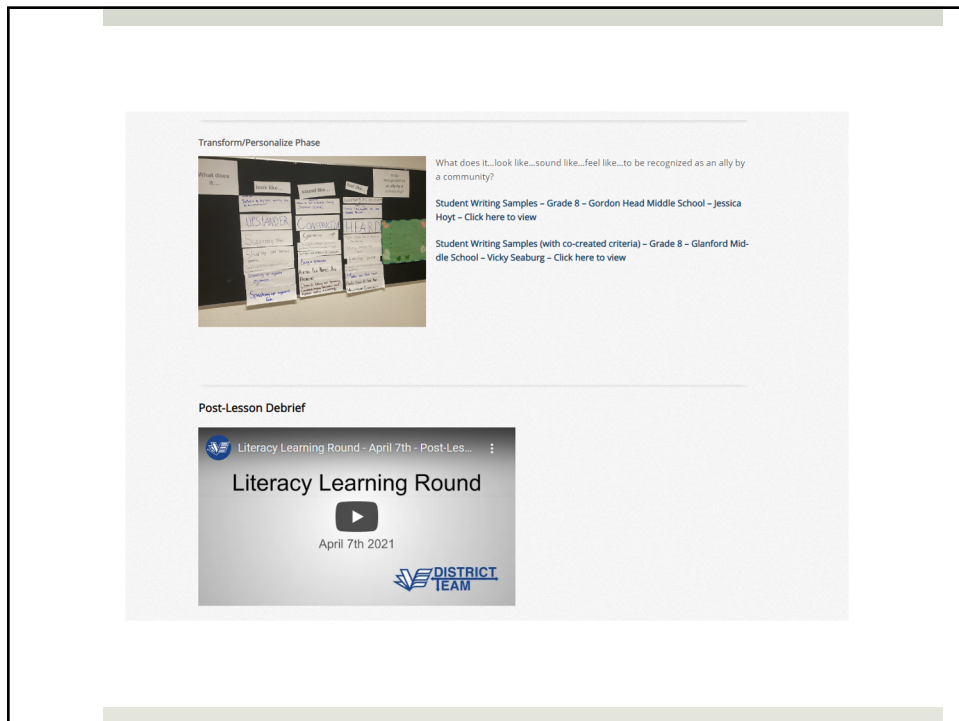
- Link to Lesson and Unit Guide
- Classroom Slide Deck – TEMPLATE
- Student Open Sort Activity (Connect Phase)
- Quick Scale: Grade 6-8 Social Responsibility Rubric (Connect Phase)
- Humannights.ca/upstander (Process Phase)
- Student Writing Artifacts – Jessica Hoy – Grade 8 – Gordon Head Middle School
- Student Writing Artifacts (with co-created criteria) – Vicky Seaburg – Grade 8 – Glanford Middle School

Given what you know so far, write to explain the difference between a bystander and an upstander?

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Classroom Slide Deck

- Click this link to create your own - Classroom Slide Deck (Template)


Learning Round #2

Literacy


Jessica Hoyt, Jayme Forrest, Tammy Renyard

Google Slides

Click below to access other archived sessions and resources



Literacy Learning Round - April 22nd 2021 - Cedar Hill
 Student Task Each student is an aid worker for the Red Cross and has recently been assigned to Ethiopia. They are asked to review the information about Itang camp. Create a... [Read more](#)



Numeracy Learning Round - April 21st 2021 - Cedar Hill
 Final Student Performance Task Each student takes on a budget sheet and real-life scenario and shares it with the class along with a poster of their life, justifications and conclusions. Lesson Resources ... [Read more](#)

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Links to All resources

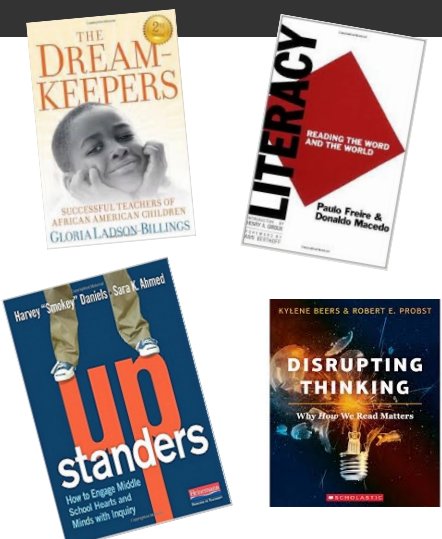
- [Literacy Planning Guide - Bystander, Upstander, and Ally](#)
- [Classroom SlideDeck](#)
- [Student Open sort Activity \(Connect Phase\)](#)
- [Quick Scale: Grade 6-8 Social Responsibility Rubric](#)
- <https://humanrights.ca/upstander/#/>
- [Quick Write Artifacts \(mini-task\)](#)
- [Student Writing Artifacts - Jess Hoyt Grade 8 - GHMS](#)
- [Student Writing Artifacts \(with co-created criteria\) – Vicky Seaburg – Grade 8 – Glanford Middle School](#)
- [Examples of Co-created criteria for Lit circles](#)

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Strategic Teaching in the Middle Years		
Connecting	Processing	Transforming/ Personalizing
<ul style="list-style-type: none"> ▶ Work with essential concepts ▶ Activate appropriate background knowledge ▶ Focus interest and sets purpose <p>Model/ Guide with Students: Previewing content Previewing text organization</p>	Checking predictions Compare information with prior knowledge Asking clarification questions Summarizing segments of text Identifying contradictions and gaps in knowledge Self-correcting Asking questions about the content	Use of organizational patterns for restructuring information Ask students to represent concept(s) in another mode Assess achievement of purpose Provide opportunities to apply new information Provide opportunities for questions and extension Reflecting in learning
3-2-1 Anticipation Guide What's In? What's Out? Predicting Vocabulary/ PReP Rating Vocabulary Placemat Four Words Think of a Time KWL	Marking/Coding Text Power Notes Cornell Notes Skinny/ 3 Column Notes Placemat Magnet Strategy Mind Map Possible Sentences Think Alouds	Exit Slip Connect Two Pair Analysis Two Column Journal Ideagram/ Visual Cluster Collaborative Summary Frayer Model Critical Timeline Concept Map KWL+
EXAMPLES		

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Careful attention and deep listening



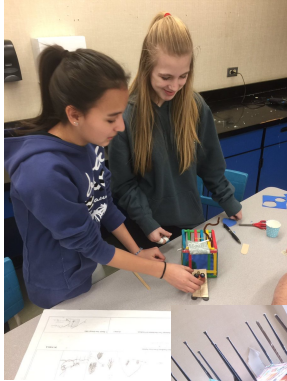
- ▶ Seek out our students' perspectives and funds of knowledge and identity
- ▶ Sharing responsibility for creating and adjusting the curriculum
- ▶ Responsive teaching is an ethical practice where students and teachers are co-learners
- ▶ Using diversity-positive and diversity welcoming language

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Backward Design

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The curriculum we need



- Deeper learning needs to be *about something*
- Develop knowledge and competence over time



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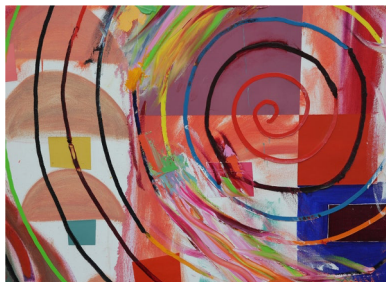
Backward Design



- Building interest over time
- Working with a big idea – foundational knowledge to a field or discipline
- Engaging learners in a quest
- Repeatedly tapping into background knowledge, making connections, and seeking diverse resources, information, perspectives

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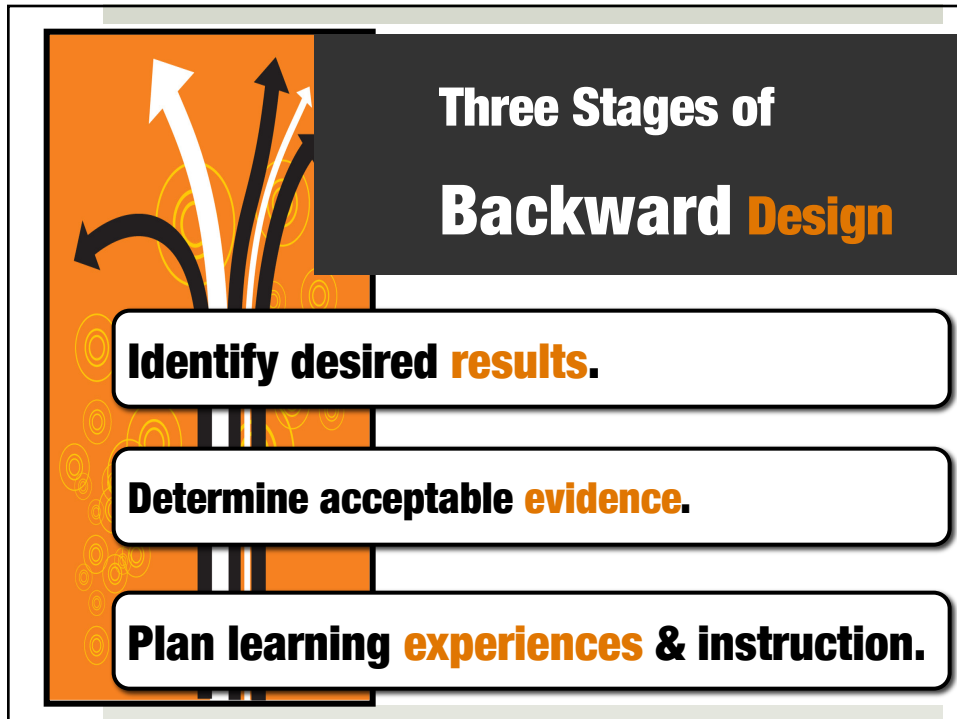
The bigger picture



- Working with a **big ideas** allows for inquiry and exploration
- Permission to uncover, instead of cover, content

<https://vernoncommunityschool.files.wordpress.com/2016/02/math-mag-social-justice-pdf.pdf>

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Backward Design and Competency-Based Assessment

Shannon Moore - Stelly's Secondary
Jodi Beaudry - North Saanich Middle School


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Identify Desired Results


Backward Design in Grade 9 ELA

 **Core Competency**


Communication: People who communicate effectively use their skills and strategies intentionally to ensure understanding their audience.

 **Curricular Competencies**

- Express an opinion and support it with credible evidence
- Assess and refine texts to improve their clarity, effectiveness, and impact
- Use writing and design processes to plan, develop, and create texts for a variety of purposes and audiences

 **Essential Question**

How do writers use language to persuade?



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Determine Acceptable Evidence

Competency-Based Assessment

PERSUASIVE WRITING (ESSAY)		
Emerging / Developing	Proficient	Extending
	Introduction - topic introduced effectively - focused on one central idea - organized in logical order - strong thesis statement (SOS)	
	Body Paragraphs - clear topic sentences - supported with relevant details - clear concluding sentences - transitions are used throughout	
	Conclusion - effectively wraps up argument - no new information - thesis is restated in different words	
	Style and Mechanics - complete and varied sentences - well-edited for punctuation, capitalization, etc. - vocabulary (language) is varied - any research is cited in MLA format - few spelling errors	
	Writing Process - planning sheets used effectively - rough draft completed - final draft demonstrates revision	
Notes Title, Contact information, Font size and type		

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Plan Learning Experiences & Instruction

Instructional Philosophy - Key Elements

Hook

- 'Take a Stand' activity
- Supporting opinions with evidence

Background Knowledge

- Ethos, Pathos, Logos
- Formulating arguments

Thesis Statements

- Structured practice (S.O.S.)
- Gradual release of responsibility

Structured Planning

- Chunk a larger assignment into larger pieces (planning sheet)

Individual Feedback

- Continuous feedback loop
- One-on-one conferences
- Peer editing stations

Bell Ringers

- Mini lessons catered to student need

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Plan Learning Experiences & Instruction

Instructional Philosophy - Featured Element

Form of Writing	Emerging	Developing	Proficient	Extending
Expository Key elements include organization, topic sentence (thesis), clear conclusion, supporting evidence, transitions, and conclusion.	- Intro from topic - clear organization - no clear topic sentence (thesis) - no clear conclusion - may be too short - no supporting details - lack of transitions	- includes topic sentence (thesis), but no supporting details - may include conclusion, but conclusion may be weak - some supporting details, but may stray from topic - beginning to use transitions	- clear topic sentence (thesis) supported by details - clear concluding sentence - evidence is clear and supports the argument - transitions are smooth and help the writing flow	- topic sentence (thesis) is insightful - details show extended thinking - writing is organized logically to clearly convey message - transitions are used seamlessly, and a wide variety of words are used correctly
Narrative Key elements include a main theme, characters, plot and setting.	- simplistic word choice - multiple errors in spelling and grammar - limited descriptive language - many words are vague or unclear - sentences are somewhat varied in length and structure - basic punctuation used incorrectly - no transitions - beginning, middle, and end are present, but not well defined	- attempts to use vivid words - several errors in spelling and grammar - beginning to use descriptive terms with an regard, instead of unclear - sentences are somewhat varied in length and structure - basic punctuation used - no transitions or are choppy - beginning, middle, and end are present, but not well defined	- experimenting with more complex vocabulary - descriptive language - sentences are varied in length and structure - descriptive experiments with more complex punctuation - transitions used - clear beginning, middle, and end - strong moments, few cliché - writer's voice is present	- confident and creative vocabulary - clear and logical language in plot - varied sentence lengths and structures used effectively - clear and concise - transitions used effectively - voice apparent throughout - perspective used effectively - story is very well developed - writer's voice is present
Descriptive Key elements include sensory details, figurative language, precision of language and diction, and detailed structure/organization.	- simple descriptive language - no figurative language - no sensory details - many errors in spelling and grammar - may be too short or incomplete - may not use only one of the five senses	- more words in regard to vividness or unclear - lack of consistent sentence variety, too many short or long sentences - multiple errors in spelling and grammar - may require more detail - sensory to some of the five senses, while others may be underdeveloped or missing	- clear language used to create strong moments, few cliché - few errors that distract from the meaning of the text - sensory details, most sentences lengths are varied - appears to use all five senses effectively - writer's voice is present in the pieces	- clear, original language - powerful words, striking imagery - complex text, purposeful control - almost no errors - sensory details that distract from the writing flow is mostly avoided - appears to use all five senses effectively - sensory writers own thoughts / feelings


Form of Writing	Emerging	Developing	Proficient	Extending
Persuasive Key elements include purpose and audience, thesis, strong conclusion, supporting evidence, transitions, and conclusion.	- no clear message, focus - introduction (thesis) and conclusion are weak or missing - no clear organization - no supporting details (or too short) - no transitions used	- introduction (thesis) is present, but is not concise or relevant - strong introduction (thesis) - conclusion is present, but may be weak or long - clear organization - some supporting details - transitions are used, but may be infrequent or incorrect - writing may be choppy in places	- clear and focused throughout - strong introduction (thesis) - conclusion provides closure and connects back to thesis statement - clear and relevant supporting details - strong transitions are used - sentences are well used and connected	- strong main point, compelling argument - persuasive opening, satisfying conclusion - powerful verbs, unique phrasing - strong sentences provide instantly clear meaning
Interpretive / Analysis Key elements include a clear thesis, identify literary elements and their purpose, connect with evidence, multiple errors in spelling and grammar, reads like a first draft and/or incoherent.	- many gaps - weak thesis or organization - analysis represents a limited or basic level of understanding of the text - may summarize at times instead of analyze - many errors in spelling and grammar, reads like a first draft and/or incoherent	- stated objectives, some gaps - some organization and structure - analysis reflects a beginning level of understanding of text - may summarize at times instead of analyze - some literary devices are clearly identified and analyzed - few errors in spelling and grammar	- some new info, some common knowledge - purposeful organization - analysis reflects a good understanding of text - literary devices are clearly identified and analyzed - few errors in spelling and grammar	- striking insight - thoughtful structure and organization - analysis reflects a thorough understanding of text as an interpretive text - complex literary devices are identified and analyzed - almost no errors in spelling and grammar
Original Poetry / Prose Key elements include a clear thesis, identify literary elements and their purpose, connect with evidence, multiple errors in spelling and grammar, reads like a first draft and/or incoherent.	- vocabulary is basic or simple - cliché / themes of piece is unclear - figurative language used in a predictable or formulaic way - multiple errors in formatting or conventions	- repeated, quiet, cautious - more voice or different voice is heard in some places - clear use of conventions and literary elements - seems like the more predictable or formulaic - several errors in formatting or conventions	- repeated, strong, present voice - clear use of conventions - voice / theme of piece is clear - correct use of conventions and literary elements - appears to use more complex elements - some errors in formatting or conventions	- passionate, vibrant, electric, compelling - original and distinctive voice - compelling, sophisticated elements - original use of literary elements - almost no errors in formatting or conventions

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Identify Desired Results

Backward Design in Multi-Age Math


Grade 6/7

 **Big Ideas**


- Mixed numbers and decimal numbers represent quantities that can be decomposed into parts and wholes.
- Decimals, fractions, and percents are used to represent and describe parts and wholes of numbers.

 **Competencies**

- Apply multiple strategies to solve problems in both abstract and contextualized situations
- Communicate mathematical thinking in many ways

 **Essential Question**

- How are fractions, decimals and percentages related?



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Determine Acceptable Evidence

Competency-Based Assessment



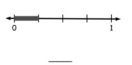
01

Name: _____ Date: _____

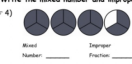
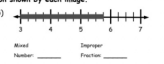
Unit 3 Assessment: Understanding Fractions

*1 Start here * More challenging

Write the fraction shown by each image.

*1)  *2)  *3) 

Write the mixed number and improper fraction shown by each image.

*4)  *5) 

Mixed Number: _____ Improper Fraction: _____

Convert each mixed number to an improper fraction.

6) $3 \frac{1}{4} =$ 7) $8 \frac{3}{5} =$ 8) $42 \frac{2}{7} =$

Convert each improper fraction to a mixed number.

9) $\frac{11}{2} =$ 10) $\frac{53}{7} =$ 11) $\frac{345}{22} =$

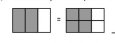
03

12) Explain how you did #6-#9 and #11 and **WHY** this works. Use pictures, word, and/or numbers to show your thinking.

02

04

*13) Name the pair of equivalent fractions. Explain **WHY** they are equivalent.

 = _____ = _____

Write any two equivalent fractions for each fraction.

14) $\frac{3}{4} =$ 15) $\frac{2}{10} =$

Complete each pair or string of equivalent fractions.

*16) $\frac{1}{5} = \frac{\quad}{10}$ 17) $\frac{4}{7} = \frac{48}{\quad}$ *18) $\frac{9}{27} = \frac{\quad}{36}$

Simplify each fraction.

19) $\frac{6}{20} =$ 20) $\frac{21}{49} =$ 21) $\frac{165}{264} =$

Use logic and/or benchmarks to compare each pair of fractions using >, <, or =. Explain how you know which is greater.

*22) $\frac{1}{5}$ > $\frac{2}{5}$ *23) $\frac{5}{6}$ > $\frac{5}{8}$ 24) $\frac{5}{9}$ > $\frac{9}{20}$

Explanation: _____ Explanation: _____ Explanation: _____

Use >, <, or = to compare. Show all your work.

25) $\frac{5}{18}$ > $\frac{7}{26}$

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Determine Acceptable Evidence

Competency-Based Assessment

26) Order from least to greatest. Show all your work/thinking.

$$\frac{11}{5} \quad \frac{54}{18} \quad 2\frac{2}{13} \quad 2\frac{5}{44}$$

For the following problems, use pictures, words, and/or numbers to show your thinking.

27) At the local pizza shop, large pizzas are cut into 8 slices. Ruben and his friends ate 28 slices and had less than a whole pizza left over. Show the amount they ate as a mixed number and an improper fraction. How many pizzas did they order?

28) A recipe calls for $2\frac{1}{2}$ cups of flour. Juliet only has a $\frac{1}{4}$ cup measuring cup. How should she measure the flour she needs? Explain.

*29) The hour hand of a clock is $\frac{1}{8}$ of the distance between the 3 and the 4. What time is it?

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Unit 3 Assessment: Understanding Fractions

As demonstrated on this assessment and in classroom activities, the student...	Not Yet	Getting There	Got It!
able to represent proper fractions, improper fractions and mixed numbers (e.g., #1-3)			
able to convert between mixed numbers and improper fractions (e.g., #6-12)			
able to create equivalent fractions and simplify fractions (e.g., #13-22)			
able to compare basic fractions using logic and/or benchmarks, and can show/explain thinking (e.g., #23-24)			
able to compare basic fractions using common denominators (e.g., #25-26)			
clearly explains and/or shows thinking and steps used to solve problems (e.g., #27-28)			

Emerging (Grade 6)	Developing (Grade 6)	Pficient (Grade 6)
Emerging (Grade 7)	Developing (Grade 7)	Pficient (Grade 7)

08

07

Extending: The student:

- is able to clearly explain understanding of concepts using words and/or illustrations (e.g., #12)
- uses multiple advanced strategies to solve complex problems (e.g., #25)
- demonstrates sophisticated understanding of concepts during participation in in-class activities
- completes extension activities
- is able to break down complex concepts in order to help other students
- demonstrates a passion for mathematics and seeks challenge independently
- other:

Additional Comments:

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Plan Learning Experiences & Instruction

Instructional Philosophy - Key Elements

Daily Warm-Ups

- Review/Preview
- Math concepts not in insolation

Direct Teaching

- Introduce and review concepts
- Provide multiple access points
- Modelling of different strategies

Levelled Practice

- Student agency
- Students are met where they're at and feel successful

Individual Coaching

- Mini-lessons and small groups
- Pre-teach, re-teach, and extend

Skill Builders

- Repetition
- Mastery of skills

Collaborative Learning

- Focus on problem solving tasks that use multiple strategies
- Creative and Critical thinking

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Plan Learning Experiences & Instruction

Instructional Philosophy - Featured Element

BEFORE
 What do I know for sure? - Highlight in **YELLOW**.
 What am I trying to find out? - Highlight in **PINK**.
 Are there any special RULES, CONDITIONS, or BACKGROUND KNOWLEDGE that I need to know? - Write in top left corner and put a ★ beside it.
 ABOUT how much is the answer? - Write in top right corner and circle it.

AFTER
 How sure am I of my answer? ✓ = I'm positive
 ✓ = I'm pretty sure
 ✓ = I'm not sure

Reflection: What have I LEARNED? How am I SMARTER? - Write on a sticky note. 📄

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Plan Learning Experiences & Instruction

Instructional Philosophy - Featured Element

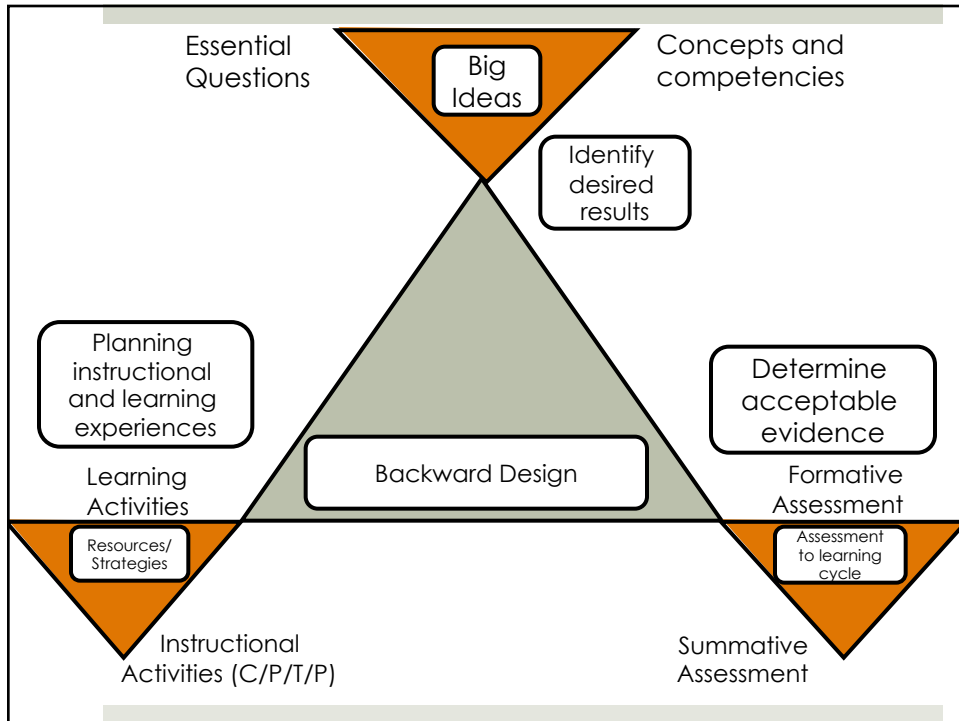
7/8 Problem of the Week Problem B A Feline Puzzle 10-17

Mrs. Murphy takes her two cats to the veterinarian in a pet carrier which weighs 2.1 kg. Her older cat, Chuckles, weighs 3 kg more than her younger cat, Shylock. When the vet weighs both cats in their carrier, the scale registers 11.3 kg. How much does each cat weigh?

In between and ✓

Chuckles 5.1 kg
 Shylock 4.1 kg
 11.3 kg - 2.1 kg = 9.2 kg
 9.2 kg / 2 = 4.6 kg
 1 left over
 adds to chuckles weight because he is heavier. The 2.1 then split into 1s that
 4.1 kg and 5.1 kg

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I M P R O V E M E N T

"If at any time in the instructional process students demonstrate that they've learned the concepts well and mastered the intended learning goals, doesn't that make all previous information on their learning of those concepts inaccurate and invalid?"

~ Tom Guskey

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Curricular competency: I can identify and assess what was deemed significant.

- Identify what the creators of accounts, narratives, maps, or texts have determined is significant
- Assess the significance of people, places, events, or developments at particular times and places.

First... this is what I NEED TO DO	Then... this is what I MUST DO	After that... this is what I CAN DO	Next... this is what I COULD DO	Finally, this is what I can TRY TO DO
I can identify what is historically significant by noticing a person, place, event, or development has been represented in accounts, narratives, maps, or texts. IE: Historian write about what is important. Artists paint about what is important.	I can identify what makes a person, place, event, or development historically significant by its impact at the time. IE: These are the features that make it stand out.	I can explain the extent of its significance at the time. IE: how it was significant – positive impact and negative impact.	I can explain how a person, place, event, or development impacted people at this time. OR I can explain how a person, place, event, or development initiated subsequent meaningful change (either immediately or later). IE: What legacy did they leave behind for later groups?	I can determine and explain the lasting impact a person, place, event, or development had on a time in history. OR I can explain why a person, place, event, or development is still remembered and studied.
	Charlemagne did this...	Charlemagne did this...which was positive for his people because...	Charlemagne is known for being a great leader because he ruled for 47 years and changed education.	

Date	GROWS My challenges for next time	GLOWS My personal strengths and learning	How I feel about it
			😊 😊 😊 😊
			😊 😊 😊 😊
			😊 😊 😊 😊
			😊 😊 😊 😊

Shannon Schinkel, SD57

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Curricular competency: I can determine cause and consequence.

First... this is what I NEED TO DO	Then... this is what I MUST DO	After that... this is what I CAN DO	Next... this is what I COULD DO	Finally, this is what I can TRY TO DO
I can define cause and consequence. I can distinguish between causes and consequences. Eg: o Flooding CAUSE o Damage to houses CONSEQUENCE o damage to crops CONSEQUENCE	I can determine what the short-term effects were for historical decisions, actions, or events. Eg: Flooding ↓ Damage to houses Damage to crops	I can determine what the long-term effects were for historical decisions, actions, or events. Eg: Flooding ↓ Damage to houses Damage to crops ↓ Crops not harvested ↓ Loss of income	I can determine what cause(s) most influenced the resulting historical decisions, actions, or events. • I can explain what causes had the greatest or most impactful consequence and why. I can determine what consequences had the most impact (positive/negative) on a historical time period and why. • I can explain what consequences had the most impact on historical time period and why.	I can assess causes and consequences of historical decisions, actions, or events and their impact on current civilizations. • For how long did the long-term effects last? Why? • Are the long-term effects of some historical decisions, actions, or events still felt at present? How do you know?
	Eg: As a result of the terrorist attack on the Twin Towers in NYC, passengers on the jet were killed, the towers collapsed, and first responders reported to the towers.	Eg: The long-term impact on the first responders who responded to terrorist attack on the Twin Towers include mental health issues (PTSD) which has resulted in not being able to work, which has resulted in loss of income and reliance on subsidies from the government.		

Date	GROWS My challenges for next time	GLOWS My personal strengths and learning	How I feel about it

Shannon Schinkel, SD57

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Physics – Inquiry Based Learning

Learning
Partnership

Learning
Conversations

Kari Niven & Sandra McAulay

SD#54 – Bulkley Valley, BC

Exploration

Essential Question

Creation of Content Goals

Choice of Curricular Competencies

Mid-Learning Reflection

Learning Presentation

Self-assessment of Learning

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Exploration

Name: _____
BIG IDEA: _____
Unit: _____

Terms to Know

Formulas I might need to use

Real-life applications

Concepts and/or Laws

Models, diagrams or graphs

Possible Investigations

Problems to know how to solve

idea

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Essential Questions

Guides the exploration of a topic.

Promotes exploration of a topic in greater depth.

Encourages students to think deeply about the topic.

Students use their learning and own judgment to form the answer.

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Creation of Content Goals

My Learning Log

BIG IDEA:		Topic:
Guiding Question:		
Content Goals:	What I will need to learn	Evidence of my learning
	→	→
	→	→
	→	→

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My Learning Log

BIG IDEA: Forces can cause linear and circular motion		Topic: Equilibrium
Guiding Question: Is there a numerical relationship between the variables that allows objects to remain in equilibrium?		
Content Goals:	What I will need to learn	Evidence of my learning
Static Equilibrium	<ul style="list-style-type: none"> Use vector diagrams to calculate a force, either using trig or vector components Identify situations 	I can construct and use vector diagram. I can use trig to solve for unknown forces and angles. I can break down a force into horizontal and vertical components in order to use the first condition. I can identify situations in static equilibrium in order to solve.
Rotational Equilibrium	<ul style="list-style-type: none"> Know what torque is Calculate torque Use free body diagrams Determine sum of torques Define center of gravity determine its location Identify situations 	I know what torque is and can identify situations in which I need to calculate it. I can use a free body to determine location and direction of torques. I can use formulas to calculate the torque on an object and find the sum of the torques. I can find the center of gravity for uniform objects.
Translational Equilibrium	<ul style="list-style-type: none"> Use free body diagrams Determine sum of forces Solve problems Recognize that you get to choose pivot point Identify situations 	I can use free body diagrams to find the direction and magnitude of forces. I can determine the sum of forces and I recognize that the pivot point can be chosen in a place that eliminates unknown forces. Lastly I can identify situations that are in translational equilibrium.

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Choice of Curricular Competencies

Curricular Competency Goals	How I will develop these skills	Evidence of my learning

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Curricular Competency Goals	How I will develop these skills	Evidence of my learning
Construct, Analyze, and interpret graphs, models, and diagrams	<ul style="list-style-type: none"> Drawing vector diagrams Drawing free body diagrams Construct situation models Graph Data From Labs Analyze graphs in practice 	<p>I can draw/use vector-free body diagrams to help with calculations.</p> <p>I can construct and analyze situation models and use them to complete calculations. I understand how to graph data, I collect through investigations.</p>
Implement multiple strategies to solve problems in real-life, applied, and conceptual situations	<ul style="list-style-type: none"> Solve using trig ratios Solve using vector components Use diagrams and/or models 	<p>I can solve problems using trig ratios and vector diagrams. I can use free body diagrams and vector components along with the first condition to solve problems. I can use the first and second conditions together when needed to solve problems.</p>
Analyze cause-and-effect relationships	<ul style="list-style-type: none"> Investigations Change mass, tension, and torque Creating situations 	<p>I am able to create situations to analyze the impact of cause-and effect relationships. I conducted an investigation dealing with cause and effect relationships.</p>
Seek and analyze patterns, trends, and connections in data, including describing relationships between variables, performing calculations and identifying inconsistencies	<ul style="list-style-type: none"> Creating situations Change mass, tension, torque, angle Practice calculations 	<p>I can identify and analyze patterns in data collected through an investigation. I can identify relationships between variables and inconsistencies in my work. I can describe the relationship between situations and perform calculations to find relationships.</p>

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Learning Presentation

Question: Is there a consistent relationship between the masses that allow objects to remain in equilibrium?

Answer: Yes, there is a consistent relationship between the masses that allow objects to remain in equilibrium. The ratio of the masses is constant. In this experiment, the ratio of the masses was found to be 1:2. This means that for every 1 unit of mass on one side, there must be 2 units of mass on the other side for the system to remain in equilibrium.

Conclusion: The ratio of the masses is constant. This relationship can be used to predict the mass needed to keep a system in equilibrium.

Question: How does the length of the string affect the equilibrium position of a pendulum?

Answer: The length of the string affects the equilibrium position of a pendulum. As the length of the string increases, the equilibrium position of the pendulum moves further away from the vertical position.

Conclusion: The length of the string is directly proportional to the equilibrium position of the pendulum.

EQUILIBRIUM

Question: How does the mass of the object affect the equilibrium position of a beam?

Answer: The mass of the object affects the equilibrium position of a beam. As the mass of the object increases, the equilibrium position of the beam moves further away from the vertical position.

Conclusion: The mass of the object is directly proportional to the equilibrium position of the beam.

Question: How does the distance from the pivot affect the equilibrium position of a beam?

Answer: The distance from the pivot affects the equilibrium position of a beam. As the distance from the pivot increases, the equilibrium position of the beam moves further away from the vertical position.

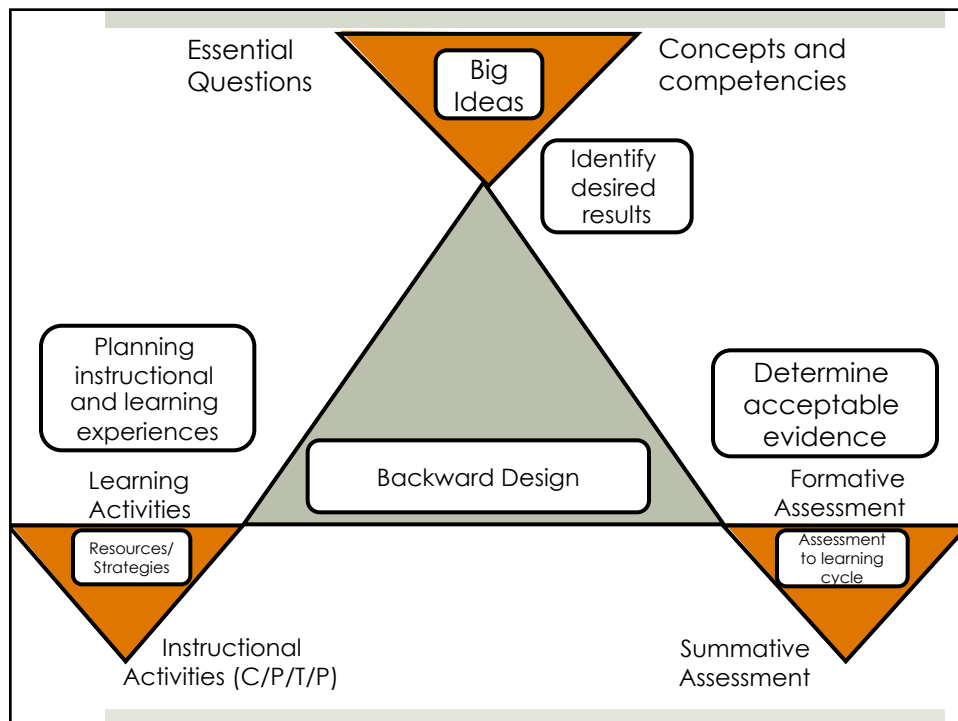
Conclusion: The distance from the pivot is directly proportional to the equilibrium position of the beam.

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Self-Assessment

Where am I right now?				
Emerging	Developing	Comprehending	Applying	Extending
<i>I don't know</i> I need support	<i>Meh</i> I'm on my way	<i>OK</i> I'm doing okay	<i>Thumbs up</i> I'm doing well	<i>2 Thumbs up</i> I'm doing awesome
Still a little confused	Starting to make sense	Makes sense	Makes total sense	Makes so much sense I did more learning on my own
I'm not sure	I'm figuring it out	I understand	I understand and can use it	I really understand and can explain it to others
I don't think I developed this yet	I'm just starting to develop this	I developed this and am starting to use it	I can identify when to use this and can apply this	I can apply this to multiple situations and can teach others how to use it
Where to next?				
Where do I need support? What can I do to continue moving my learning forward? How can I extend my learning? What's the plan?				

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Lesson Planning

Lesson: _____

Big Ideas or Key Concepts
Students will understand that ...

Competencies or Strategies
Students will be able to ...

Connecting	<p>Purpose: Engagement. Activate prior knowledge. Predict content. Focus on a purpose for reading.</p> <p>I/we will ...</p>	<p>How can I/we tap into students' interests, offer appropriate challenges, and increase motivation?</p>
Processing	<p>Purpose: Construct meaning. Monitor understanding. Process ideas.</p> <p>I/we will ...</p>	<p>How will I/we help students interact with new ideas they encounter?</p>
Transforming and Personalizing	<p>Purpose: Process ideas. Apply knowledge. Reflect on thinking and learning.</p> <p>I/we will ...</p>	<p>How can I/we provide learners with alternatives for demonstrating what they know?</p>

Assessment
If students are engaged and I/we have modeled this well, I/we hope that they will ...

1. _____	2. _____
3. _____	4. _____

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Open-ended strategies

Connect

Process

Transform/
Personalize

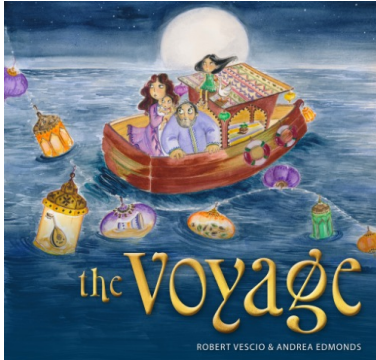
(Brownlie & Close, 1988; Brownlie, Feniak & Schnellert, 2016; Buehl, 2001; Cook, 2005; Harvey & Goudvis, 2007)

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Diane Wiens – SD62

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Creating 10-Word Stories inspired by "The Voyage" by Robert Vescio and Andrea Edmonds



PLANNING WITH THE END IN MIND	
Big Ideas	Curricular competencies
Learning Target (goal) – Understand the impact of different types of literary conventions/devices, including text features	Students will be able to... Create a story using only ten impactful words and images
Big Ideas - key concepts/essential question – How can authors use both words and images to engage and impact their audiences?	Skills - important curricular competencies – Respond to text in creative and personal ways – Use writing process to create meaningful, original texts – Understand how literary elements, techniques, and devices enhance and shape meaning – Recognize an increasing range of text structures and how they contribute to meaning
Materials: <ul style="list-style-type: none"> • "The Voyage" by Robert Vescio and Andrea Edmonds • Paper and pencils for each student • 10-Word Story Template (printed on 11x17 size paper) • Colouring materials 	

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Connect	Process	Personalize and transform
<p>Engage/Active prior knowledge/Predict content/Focus on a purpose</p> <ul style="list-style-type: none"> Show cover of the book "The Voyage" Discussion questions: "How can people tell stories?" "Do stories need words to communicate their meaning?" "How many words are necessary?" "What do you predict the story to be about?" Read the first couple pages and discuss "What do you notice about how this story is told?" "Why do you think the author and illustrator chose to tell this story this way?" "Do you think it will continue in a similar manner?" Continue through the story At the end, discuss "What do you notice now?" "Has your opinion changed about what a story needs in order to be impactful?" 	<p>Purpose: Construct meaning/Monitor understanding/ Process ideas</p> <ul style="list-style-type: none"> Task the class to write their own story using only ten frames (with one image and word in each frame) Give time to brainstorm stories and events from their own lives (talking with partners, writing, sketching, etc.) that might lend well to this format Students sketch out a draft of their ten-word story and decide which images they will use, making sure that their stories have a beginning, middle, and end 	<p>Purpose: Construct meaning/Monitor understanding/ Process ideas</p> <ul style="list-style-type: none"> Go back to the book "The Voyage" and ask, "What do you notice about the types of words the author chose?" "Do any of the words repeat?" The students might notice that there are not many nouns. Most words are action words or descriptive words. No words repeat. Discuss "If we change the words from the story to nouns, does that impact the meaning?" Challenge the students to look at their drafts and exchange any nouns they've used with more impactful verbs or adjectives to move the story along and communicate meaning Once the students have chosen the most impactful words, they will complete a good copy of their story, complete with detailed images

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Assessment – Single Point Rubric

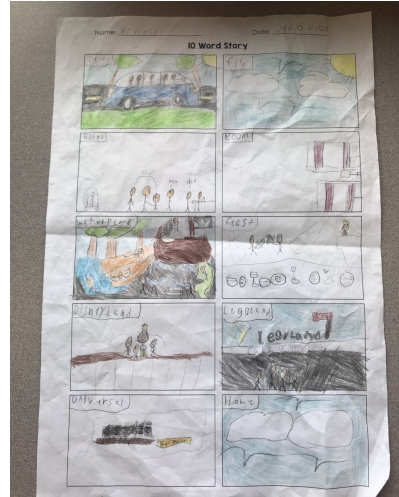
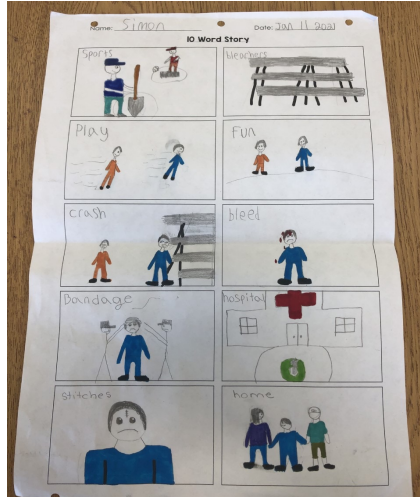
10-Word Story Rubric

Student Name: _____

	<input type="checkbox"/> Story includes 10 frames, each with an original image and one word <input type="checkbox"/> Story includes a title	
Areas that are still DEVELOPING	Criteria for PROFICIENCY	Evidence of EXTENSION
	<input type="checkbox"/> Story has a distinct beginning, middle, and end and is told through original images and single words. (Use writing process to create meaningful, original texts) <input type="checkbox"/> Story and images are original (Respond to text in creative and personal ways) <input type="checkbox"/> Chosen words are impactful and communicate meaning to the reader (Understand how literary elements, techniques, and devices enhance and shape meaning) <input type="checkbox"/> Images are detailed and help to communicate meaning to the reader (Recognize an increasing range of text structures and how they contribute to meaning)	

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Student examples



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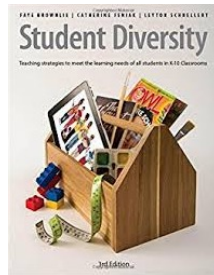
Resources You Can Draw On

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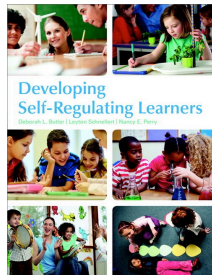
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Resources

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Schnellert, Watson & Widdess (2015). ***It's all about thinking: Building pathways for all learners in the middle years.*** Portage and Main Press.

