

COSC Meeting Alberta's New Curriculum April 3, 2019

The History



"

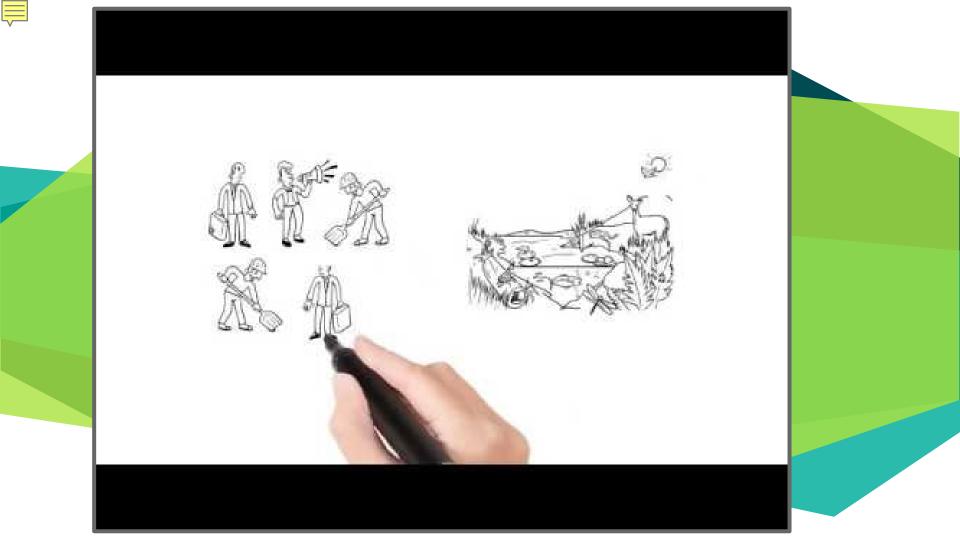
Why The Need to Shift?

••



_

Concept - Based Curriculum: Shifting From Learning to Understanding



Knowledge, Skills, and Attitudes	Concept -based		
Is based primarily on topics, skills, and facts.	Focuses on the transfer of the important conceptual ideas of a discipline.		
Content focuses on facts that are often isolated and disconnected. Knowledge is fragmented.	Concept -based focuses on making sense of facts and the world around us. Knowledge is presented as a "whole." Understand the relationship between individual facts, principles, or generalizations.		
Verbs are used to tell students what to know or do.	Concept -based is a thinking curriculum. The verb describes the ways through which we come to understand the concept.		
Represents a two -dimensional design model that includes process and content knowledge.	Has a third dimension –conceptual understanding.		
Content -based teaching may not get beyond the transmission of superficial learning.	Concept -based curriculum focuses on critical concepts and processes students will be able to transfer to new situations.		
Asks teachers to cover long lists of content and skill objectives but knowledge expands exponentially and there is not enough time to cover everything. Simply covering information does not result in deep understanding.	Key concepts (ideas) of a discipline become the "drivers" for learning, leading students to deeper understandings that transfer across different situations.		

DRAFT Kindergarten to Grade 4 Mathematics

-

	One of the big ig	leas of the subject/acros	ss subjects, K -12	Grade 3	Grade 4			
Essential		s through geometry enhances interpretations (an a					
Understanding								
Guiding Questions	Derived from the	EU and frame LO(s) for	r the grade	How can we replicate shapes using geometric properties?	How can we analyze and describe shapes using geometric properties?			
Learning	Children explore and recognize shapes in	Students describe and compare shapes in	Students consider attributes and geometric	Students classify and create shapes using	Students analyze and visualize shapes using			
Outcomes	Their surro	re evenested to know we	devotend be able to de	and put into action offer	nlannad			
Conceptual Knowledge		• • • • • • • • • • • • • • • • • • •	derstand, be able to do	and put into action after	planned			
Kilowiedge	owledge surround learning experiences							
	Used to describe snapes (attributes)	(synnieuy)	conners, races, and edges, are the	- geometric properties determine whether a	properties that help classify shapes			
	 some 3-b shapes roll, stack, or slide 	 size and shape are not affected by 	mathematical characteristics used to sort	shape is a regular or irregular polygon	 geometric properties, including parallel 			
	 shapes can be combined together to create 	orientation	2-D and 3-D shapes		sides and faces, perpendicular sides and			
	other shapes	ويتبد المعتر ويتجعبنا الماريح والمراجع	longton of the problem in the s	In contrast contractions	ces, and angles at vertices, allow for assification of shapes			
Descention								
Procedural Knowledge	 relating 2-D shape circles, rectangles, and triangles, to objects 	circles, rectangles, and triangles, and 3-D	quadrilaterals, pentagons, hexagons, and	geometric properties and describing the	assifying and identifying quadrilaterals according to geometric properties			
Later Cage	their surroundings	shapes, including cubes, cones, cylinders,	octagons, and 3-D shapes, including cubes,		 identifying and describing 3-D shapes, 			
	 sorting familiar 2-D shapes by a single 	and spheres, by a single attribute and	cones, cylinders, spheres, and pyramids, by	-	including right rectangular prisms and right			
	attribute and describing the sorting rule	describing the sorting rule	one or two attributes and describing the	irregular polygons, including triangles,	triangular prisms, according to geometric			
	 exploring rolling, s 			gons, and	properties			
	attributes of 3-D- What studer	nts should be able to do	to achieve the Learning	g Outcome	 modelling 3-D shapes, including right rectangular prisms and right triangular 			
	composing and de D shapes	shapes in varying orientations	 identifying and describing 2-D shapes in 	from verbal instructions, visualization, or	prisms, concretely			
	2 Shapes	 composing and decomposing composite 2- 	varying orientations	memory	prisitis, concecting			
		D shapes	 identifying 2-D shapes in composite 2-D 	 modelling 3-D shapes, including cubes and 				
		 exploring symmetry concretely 	shapes and designs	pyramids, concretely				
			 relating the faces of 3-D shapes to 2-D 	 identifying and describing 3-D shapes from 				
			 shapes composing and decomposing composite 3- 	different views				
			D shapes					
Competencies	Communication	Communication	Critical Thinking	Critical Thinking	Critical Thinking			
	Critical Thin		gInformation	Creativity and Innovation				
Literacy	• LKU3b.K: Vo Competencies.	Literacy, and Numeracy	Vocabulary	LKU3b.1: Vocabulary	LKU3b.2: Vocabulary			
	LKU4a.K: Cla		Clarity	LKU4a.1: Clarity				
Numeracy	NA1a.K: Purpose	NA1a.1: Purpose	NA1a.1: Purpose	NA3a.1: Task Analysis	NA3a.1: Task Analysis			
	NKU1e.K: Organization of Data NKU2a.K: Spatial Visualization	 NKU1e.1: Organization of Data NKU2a.1: Spatial Visualization 	 NKU1e.1: Organization of Data NKU2a.1: Spatial Visualization 	 NKU1e.1: Organization of Data NKU2a.1: Spatial Visualization 	NKU1e.2: Organization of Data NKU2a.2: Spatial Visualization			
	NKU2a.K: Spatial Visualization NKU3b.K: Interpretation and	NKU2a.1: Spatial Visualization NKU3b.1: Interpretation and	NKU2a.1: Spatial Visualization NKU3b.1: Interpretation and	NKU2a.1: Spatial Visualization NKU3b.1: Interpretation and	NKU2a.2: Spatial Visualization NKU3b.2: Interpretation and			
	Representation of Spatial Information							
	NKU3c.K: Communication	NKU3c.1: Communication	NKU3c.1: Communication	NKU3c.1: Communication	NKU3c.2: Communication			
·			•					

What About "The Basics"?





"

Timelines







Provincial K-12 Curriculum Implementation Plan

JAN 2019-AUG 2019 SEP 2019-AUG 2020 Option to continue K-4 Preparatory Phase = K-4 Full Provincial Implementation Pre-conditions Met? Pre-conditions Met? city Initiate Processes Assess Status -Release Capacity Building K-4 curriculum approved for by Communications Identify additional supports Capacity Building Toolkit Capacity Building Toolkit Continue to add supports to Capacity Building and Communications toolkits Toolkit and Capacity required to support and Communications and Communications Minister of Education for provincial Toolkit and Communications Toolkit ട്ഷ് **Building Toolkit** preparation Toolkit are up to date Toolkit are up to date implementation Initiate and lead teacher Increase efforts to build capacity, lead teacher approved learning Update toolkits based on Lead full implementation of learning and provide support to teachers to Gather feedback from K-4 feedback received deliver new curriculum in classrooms as they approved K-4 curriculum in classrooms across Alberta teachers on draft plan for are ready implementation and draft curriculum Confirm Plans -- Continue Research -Design-Draft K-4 Provincial Outline plan and approach Identify and confirm field-test Plan for field-testing of Draft K-4 Provincial Curriculum Initiate 48-month review cycle for Curriculum approved by for field-testing and participants Updated to reflect insights K-4 provincial curriculum K-4 Provincial Curriculum Lead field-testing activities Minister of Education for continuous improvement approved by Minister of from field-testing Identify and confirm Lead continuous improvement research Adjust research plan to ensure field-testing research Education continuous improvement K-4 Provincial Curriculum continued relevance and validity activities Provincial K-12 Curriculum research participants Approved for provincial of Alberta's new curriculum Plan for Continuous Iteratively collect feedback, analyze data implementation by the Implementation Plan Improvement Re-administerEssential and identify insights approved by Minister of Minister of Education Research approved by Conditions for K-4 Education Minister of Education Take appropriate action to adjust Capacity building materials, Curriculum Implementation curriculum drafts, resourcing, professional Update Implementation Plan communications materials. Survey to assess system Continuous Improvement learning and overall approach in support capacity based on insights on resources and professional of next phase. learning supports have been process identified to date. Take appropriate action to updated to reflect findings of adjust resourcing, research professional learning and overall approach in support Implementation process adjusted as needed. of next phase O Field-testing principles: · Alberta Education is partnering with the Alberta Teachers' · Field-testing participants will: . Input from field-testing participants will be Association to design and conduct field-testing of Alberta's gathered and addressed throughout the · be comprised of a cross-section of new curriculum Alberta's teachers: full-year process. . The purpose of field-testing is to ensure that: · Full implementation will follow the confirmation reflect the diversity of Alberta's of pre-conditions being in place. · teacher voice is at the forefront of informing adjustments students and classroom contexts. to new K-4 curriculum prior to approving that curriculum · Research will be conducted to inform K-4 · Selection of field-testing participants will be field-testing and implementation. for provincial implementation; based on voluntary consent of teachers and · curriculum "as-written" reflects the needs of curriculum schools, with consideration for supports from "as-lived"in a classroom. the school jurisdiction. **Create Resource** Identify Catalogue Resource Gans Initiate redevelopment of Convene Resource Review Release catalogue of Approve updated standards Lead approved approach to fill resource gaps to Resource gaps are filled Resource Review Board provincial standards for Board existing resources for resource selection and support K-4 curriculum continues to identify and System has access to an resource selection and development. review resources to support Define and communicate new Identify gaps that exist in Resource Review Board continues to identify updated resource library to development. Alberta's new K-4 and draft standards for resource new resource catalogue Release list of resources and review resources to support Alberta's draft support new K-4 provincial development and selection that align with new K-4 5-12 curriculum K-4 curriculum. curriculum Confirm approach to provincial curriculum and Initiate review of existing fill gaps standards for resource resources that align with K-4 selection and development. curriculum Plan to fill resource gaps approved and funding is in place to proceed. Build Teacher Capacity Evaluate System . New Curriculum is Fully **Beadiness** Bolster Readiness in the field Confirm next steps 8 Identify Existing Curriculum Supports *Build on Curriculum Supports

berta Government

Division Wide Focus

"



"