



Draft K-6 Curriculum - Public Feedback Survey Detailed Report

March 2022

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Engagement timeline

This report presents the key findings of feedback received through the provincial Draft K-6 Curriculum – Public Feedback Survey from March 29, 2021 to February 28, 2022. The results provide an analysis of public feedback on the Draft K-6 Provincial Curriculum and will inform potential next steps towards development. Related events that may have influenced the input provided through the survey include:

March 2021

The Ministry of Education released the new K-6 curriculum for public review. The curriculum provided details about the knowledge, understandings and foundational skills and procedures that all elementary students must learn in each subject and grade.

March 2021 - February 2022

Albertans provided feedback on the new K-6 curriculum by participating in an online survey. The online survey was offered in English and French, and was accessible through links on alberta.ca and Education's digital curriculum platform, new.learnalberta.ca.

May 2021

Analysis of 84,646 unique comments received via online surveys between March 29 and April 18.

September 2021

Draft K-6 curriculum piloted in some classrooms.

October 2021

Analysis of 132,108 unique comments received between March 29 and September 30.

December 2021

Alberta Education announced a September 2022 implementation of the new curriculum in three subjects – English Language Arts and Literature, Mathematics, and Physical Education and Wellness.

A new Social Studies draft design blueprint addressed substantive feedback related to age and developmental appropriateness of the curriculum and set out a plan to make content changes.

January to February 2022

A total of 44 virtual engagement sessions held, covering each region of the province, subject area and the draft social studies design blueprint.

Grants were also provided to 12 partner organizations to help them conduct consistent and coordinated engagement processes with their communities to capture unique perspectives and report back to Alberta Education by the end of January 2022.

February 2022

Analysis of 153,451 unique comments received between the public survey launch on March 29, 2021 and its close on February 28, 2022.

Participation

Key trends

Between March 29, 2021, and February 28, 2022, analysts received a total of 34,142 surveys with feedback, containing 70,016 responses to the Draft K-6 Curriculum.

Table 1: Overall survey numbers, by wave

Wave	Date range	Surveys with feedback	Responses	Unique comments
Wave 1	March 29 - April 18, 2021	24,798	54,422	123,441
Wave 2	April 19 - September 30, 2021	7,666	11,154	22,000
Wave 3a	October 1 - December 12, 2021	536	1,412	2,566
Wave 3b	December 13, 2021 – February 28, 2022	1,142	3,028	5,444
Total		34,142	70,016	153,451

Though the survey received nearly three-quarters of all responses between March 29 and April 18 2021, members of the public continued to provide feedback almost every day the survey was available.

Chart 1: Surveys with feedback, by month

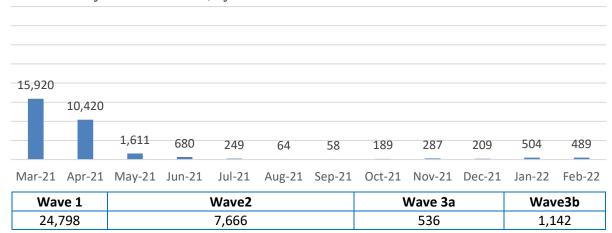
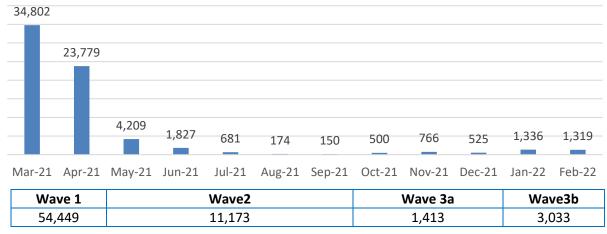


Chart 2: Total responses to key questions (Q3, Q4, Q5), by month



Respondent profiles

A significant volume of the feedback during the surveying period came from:

- Females (73% of surveys with feedback);
- Ages 35-54 (54%);
- Parents of school-aged children (41%); and
- Employees in K-12 schools (15%).

Though feedback received during Wave 3b (December 13, 2021 – February 28, 2022) accounted for only 3% of the total surveys received, proportionally more feedback in this final wave came from:

- Employees in K-12 schools (19% of surveys with feedback in the wave); and
- Albertans from non-metropolitan areas of the province (31%)

Table 2: Surveys with feedback, by selected respondent types

	Total	Wave 1	Wave 2	Wave 3a	Wave 4a
Age n=	32,690	23,798	7,296	513	1,083
18-34	35%	40%	23% -17	20% -3	21% +1
35-54	54%	50%	62% +12	64% +2	67% +3
55+	11%	10%	15% +5	16% +1	12% -4
Respondent type n=	29,511	23,753	4,178	497	1,083
Parent/guardian of school-aged (K-12) children	41%	39%	46% +7	51% +5	43% -8
Employee in a K-12 school	15%	16%	12% -4	13% +1	19% +6
Member of general public	23%	22%	26% +4	23% -3	24% +1
Gender n=	25,511	20,607	3,604	423	877
Female	73%	74%	66% -8	67% +1	66% -1
Male	25%	24%	32% +8	33% +1	34% +1
Region n=	27,649	22,298	3,884	468	999
Metropolitan Alberta (Calgary + Edmonton)	71%	72%	71% -1	75% +4	69% -6
Calgary region	35%	34%	38% +4	50% +12	38% -12
Edmonton region	37%	38%	33% -5	24% - 9	31% +7
Rest of Alberta	28%	28%	28%	24% -4	31% +7

Note: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in red font. Base sizes for each question vary, as not all demographic questions were mandatory. Complete respondent profile distributions are included in the Appendix.

Focus of Feedback (subject and grade)

Q1. Which subject would you like to provide comments on?

Q2. Which grade would you like to provide comments on?

The following analysis looks at the total number of responses to core questions, by the subject area and grade the respondent selected. While it is important to note that responses are not always limited to the subject and grade indicated by survey respondents, this analysis highlights which subjects and grades may be driving relatively more (or less) feedback.

Key trends

Since December 13, 2021, following the Minister's announcement, more than half of the survey responses were directed to individual subjects, with an increased focus on subjects that are planned for implementation in 2022 (English Language Arts and Literature, Mathematics, and Physical Education and Wellness).

Table 3: Responses, by subject area

Subject	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
Responses n=	70,068	54,449	11,173	1,413	3,033
English Language Arts and Literature	2%	2%	3 % +1	5% +2	7% +2
Fine Arts	2%	2%	2%	2%	3% +1
French First Language and Literature	0%	0%	0%	0%	0%
French Immersion Language Arts and Literature	0%	0%	0%	0%	1% +1
Mathematics	4%	3%	6% +3	6%	11% +5
Physical Education and Wellness	2%	2%	3% +1	1% -2	6% +5
Science	2%	2%	3% +1	4% +1	3% -1
Social Studies	37%	41%	27% -14	25% -2	-
Social Studies Blueprint	1%	-	-	-	23%
General feedback	49%	48%	56% +8	56%	46% - 10

Table 4: Responses by selected grade

Grade		Total	Wave 1	Wave 2	Wave 3a	Wave 3b
Responses	n=	70,068	54,449	11,173	1,416	3,038
Kindergarten		2%	2%	3 % +1	3%	4% +1
Grade 1		5%	5%	4% -1	6% +2	5% -1
Grade 2		12%	13%	9% -4	9%	5% -4
Grade 3		3%	3%	3%	3%	4% +1
Grade 4		2%	1%	3% +2	2% -1	4% +2
Grade 5		1%	1%	2% +1	2%	3% +1
Grade 6		7%	8%	4% -4	6% +2	6%
General feedback		68%	67%	72% +5	69% -3	70% +1

Note: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in red font.

While Kindergarten and Grade 1 are a more recent focus for the English Language Arts and Literature curriculum, Mathematics feedback is focused more on higher grade levels.

Table 5: Responses by subject area, grade and time period (Including "General Feedback")

Wave 3b (December 13 2021 – February 28, 2022)	К	1	2	3	4	5	6	General	Total
English Language Arts and Literature	0.9%	0.8%	0.3%	0.3%	0.5%	0.2%	0.4%	3.3%	202
Fine Arts	0.0%	0.1%	0.1%	0.0%	0.2%	0.2%	0.4%	1.5%	76
French First Language and Literature	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.3%	15
French Immersion Language Arts and Literature	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.5%	25
Mathematics	0.2%	0.4%	1.1%	1.4%	0.9%	0.9%	1.3%	4.7%	330
Physical Education and Wellness	0.2%	0.4%	0.5%	0.4%	0.0%	0.1%	0.6%	4.1%	191
Science	0.1%	0.2%	0.2%	0.1%	0.5%	0.1%	0.4%	1.7%	100
Social Studies Blueprint	1.1%	1.7%	2.4%	1.5%	1.1%	0.9%	1.8%	12.9%	712
General feedback	1.1%	1.2%	0.6%	0.8%	0.3%	0.6%	0.6%	40.5%	1,382
Total responses	111	146	161	136	111	90	167	2,111	3,033

<u>Note</u>: Green shading denotes relative frequency of comments within subject/grade specific responses. It does not indicate any statistical differences.

Curriculum strengths

Q3. Describe what you believe are the strengths of the [draft curriculum / Social Studies blueprint].

A significant number of responses to this question contained information that did <u>not</u> relate to strengths. For example, many responses contained detailed rationale of why respondents do not perceive the Draft K-6 Curriculum to have any strengths, and in doing so mentioned themes that would be incorrect to allocate to a specific theme code for this question.

Verbatim Example: "Religion does not belong in public school. I'm opposed to my tax dollars funding religion of any sort in the public school system"

To provide a more accurate view on strengths highlighted in this question, analysts conducted theme and sentiment analysis prior to tabulation, to filter out:

- Comments that imply no strengths (e.g., "I don't see any strengths in the curriculum."); and
- Reponses that are coded to a theme, but determined to have a negative sentiment (e.g., "Religion
 does not belong in public school. I'm opposed to my tax dollars funding religion of any sort in the
 public school system")

The cleaning operation filtered out 11,911 responses from the original 20,662 responses to this question, leaving 8,751 responses to analyze.

Key trends

- Financial Literacy was the most highlighted strength in the draft curriculum, mentioned in more than 1,500 survey responses. Though this content has received relatively less focus since October 1, 2021, it has remained among the top 2-3 strength mentions until the end of the survey.
- History (General) was also a common curriculum strength highlighted throughout the surveying period, mentioned in more than 1,000 survey responses.
 - Like financial literacy, this aspect of the curriculum was among the top 2-3 strengths highlighted, but received less attention in the final survey wave.
 - Generally, more frequently than with other topics, feedback received since December 13
 acknowledged what were perceived to be positive changes to parts of the curriculum that
 covered history:

Verbatim examples:

"Better flow between grades. I like that they aren't expected to know ancient Egypt and ancient China at 6 years old."

"The changes that have started to be made are an improvement over the original draft which was quite ridiculous. The removal of ancient middle east and origins of monotheistic religious from grade 2 is an improvement"

"The greater focus of the indigenous peoples customs, and teachings. The focus on showing the development of relationship between indigenous peoples, and the explores, settler's. The whole development of Canada. It gives the students a cleared picture of the beginning of what we now called Canada"

• **Wellness**, along with related topics like physical activity, was the subject of more strengths feedback in Wave 3.

Verbatim examples:

"I am pleased that Alberta Education and government is concerned about the Mental Health of children. I'm referencing the CAC program. We are wise to give kids handles on how to handle difficult situations in their lives and also the lives of other family/friends lives."

"I can appreciate incorporating Wellness into the new Curriculum. That being said, the bulk of the curriculum in Physical Education, should be on the physical aspect."

Table 6: Top 30 Curriculum strengths

Strengths	To	otal	Wave 1	Wave	2	Wave 3	3a	Wave	3b
	n= 8,	8,261		1,389)	175		376	
Financial literacy	1,547	19%	20%	16%	-4	10%	-6	9%	-1
General: History	1,075	13%	14%	9%	-5	13%	+4	8%	-5
First Nations, Métis and Inuit	874	11%	12%	5%	-7	8%	+3	10%	+2
Literacy	865	10%	10%	11%	+1	10%	-1	10%	
Numeracy	830	10%	10%	10%		13%	+3	8%	-5
General: Mathematics	792	10%	9%	11%	+2	14%	+3	7%	-7
Consent	609	7%	8%	5%	-3	2%	-3	2%	
Culture	558	7%	7%	6%	-1	6%		4%	-2
Age/developmental appropriateness	512	6%	7%	4%	-3	2%	-2	6%	+4
Technology	475	6%	6%	5%	-1	6%	+1	3%	-3
Canadian history	458	6%	6%	3%	-3	6%	+3	3%	-3
Religion	430	5%	6%	4%	-2	3%	-1	1%	-2
Diversity	406	5%	5%	3%	-2	4%	+1	3%	-1
General: Science	366	4%	5%	4%	-1	3%	-1	3%	
Phonics	358	4%	4%	6%	+2	6%		5%	-1
Subject comprehension	355	4%	4%	5%	+1	6%	+1	3%	-3
Back to basics	349	4%	4%	6%	+2	3%	-3	2%	-1
Racism/inclusion	334	4%	5%	2%	-3	1%	-1	2%	+1
Diverse topics	240	3%	3%	2%	-1	2%		3%	+1
Wellness	231	3%	3%	3%		1%	-2	5%	+4
Life skills	223	3%	3%	2%	-1	1%	-1	0%	-1
Clarity	179	2%	2%	2%		1%	-1	1%	
Structure	170	2%	2%	2%		2%		2%	
Alberta content	156	2%	2%	1%	-1	1%		1%	
Music examples	138	2%	2%	1%	-1	1%		1%	
Community	131	2%	2%	1%	-1	1%		2%	+1
Wellness: Physical activity	104	1%	1%	1%		2%	+1	2%	
Critical thinking	102	1%	1%	1%		2%	+1	1%	-1
Memorization	89	1%	1%	2%	+1	2%		1%	-1
U.S. content	80	1%	1%	1%	İ	1%		1%	

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in **red font**.

Opportunities for improvement

Q4. Describe what you believe are the opportunities for improvement in the [draft curriculum / Social Studies blueprint].

The second of the key questions asked respondents for their feedback about opportunities for improvement to the draft curriculum. The following feedback themes exclude any responses that mentioned:

- "Everything / All of it"; and
- "None / No changes / Leave it"

Key trends

- **Age/developmental appropriateness:** Nearly 8,000 responses to the online survey highlighted concerns with the age/developmental appropriateness of the curriculum.
 - This continued to be the most-mentioned 'opportunity' in the online feedback through all waves of the survey. However, the acute focus on this earlier in the survey timeline did slowly diminish in late 2021 and early 2022.
- History, religion, and First Nations, Métis and Inuit content: Similarly, these topics were in sharp
 focus at the start of the survey but gradually accounted for a lower proportion of the identified
 opportunities as the survey neared its close date.
- Mathematics, Literacy, and Wellness: With an increased focus on the fall 2022 subjects, the proportion of opportunities related to Mathematics, Literacy, and Wellness also increased after December 13.
 - Some of the more recent comments on these topics addressed concerns with implementation:

Verbatim comments:

"This curriculum cannot be implemented from k-6 in the first year. This would mean that students in 6, would not get the proper pre-requisites required from grade 5. Math is a building subject, as in it always builds from the previous years skills. Our grade 6's will be missing skills required. An example of this: Students in grade 2 start working on adding and subtracting fractions, by decomposing fractions into unit fractions. By grade 6 they are multiplying and dividing fractions. But a student who is entering the new curriculum in grade 6 next year, will have missed 4 years of operations on fractions"

"Scaffolding of learning - how do we support learners with background knowledge and pre-requisite skills. For the new curriculum as there is no link or progression from their previous curriculum Implementation - how will we support implementation and planning as the short timeline does not offer appropriate time for resource collection, implementation planning for teachers. Progression/sequencing - gaps in proper progression and sequencing. Disruptions in Learning - major disruption to learning occurred this year related to covid. Students should be given a recovery year before being exposed to the demands of new curriculum implementation. Multiple subjects - concerned with the pace and number of subjects being implemented at one time. Should consider one grade at a time and one subject at a time for implementation. Ex year 1 implement ELA in gr 1, year 2 implement ELA in gr 2 and MA in gr 1, year 3 implement ELA gr 3, MA in gr 2. A phased implementation addresses pace/progression concerns, allows

for resource development, allows for managing budgets, allows for time to respond to any required adjustments to the curriculum for successful implementation"

"Students that are involved in a dual curriculum for health and Physcial education will have one of two things happen. Either the health will be a filler and not covered well. 'Do this worksheet and then we will play a game ' type of mentality and wont be given proper structure for a normal course just to allow for physcial education OR if it is done well then it will take away time from the physical education portion of the class and students will be active for fewer minutes than they already are."

Table 7: Top 20 opportunities for improvement

		Total		Wave 1	Wav	re 2	Wave	3a	Wave 3b		
	n=	24,	921	20,046	3,4	78	445	5	952	2	
Age/developmental appropriateness		7,979	32%	33%	29%	-4	28%	-1	24%		
General: History		5,985	24%	26%	15%	-11	16%	+1	12%		
Religion		5,952	24%	27%	12%	-15	6%	-6	4%		
First Nations, Métis and Inuit		4,787	19%	20%	15%	-5	16%	+1	11%		
Canadian history		3,314	13%	15%	9%	-6	6%	-3	5%		
Racism/inclusion		3,275	13%	15%	7%	-8	8%	+1	4%		
Subject comprehension		2,921	12%	12%	9%	-3	8%	-1	7%		
Culture		2,679	11%	11%	9%	-2	7%	-2	7%		
Memorization		2,547	10%	10%	11%	+1	12%	+1	8%		
Get feedback from teachers/others		2,476	10%	9%	14%	+5	16%	+2	15%		
U.S. content		2,358	9%	10%	7%	-3	5%	-2	4%		
Community		1,860	7%	8%	5%	-3	3%	-2	4%		
Diversity		1,828	7%	8%	6%	-2	5%	-1	4%		
General: Mathematics		1,441	6%	5%	7%	+2	9%	+2	9%		
Critical thinking		1,441	6%	6%	6%		7%	+1	5%		
Music examples		1,371	6%	6%	2%	-4	3%	+1	2%		
Numeracy		1,270	5%	5%	6%	+1	9%	+3	9%		
Resources		1,102	4%	4%	5%	+1	5%		5%		
General: Science		1,044	4%	4%	4%		7%	+3	5%		
Alberta content		1,018	4%	4%	3%	-1	3%		2%		
Literacy		982	4%	4%	5%	+1	7%	+2	6%		
Diverse topics		942	4%	4%	4%		4%		5%		
Financial literacy		846	3%	3%	4%	+1	5%	+1	6%		
Too much content		729	3%	3%	3%		3%	Ì	4%		
Wellness		689	3%	3%	3%		3%	Ì	5%		
Inaccuracies		677	3%	2%	5%	+3	2%	-3	2%		
Research practices		619	2%	2%	3%	+1	5%	+2	4%		
Structure		580	2%	2%	3%	+1	3%		4%		
Technology		573	2%	2%	2%		2%		3%		
Inclusivity		554	2%	2%	2%		1%	-1	1%		

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in **red font**.

Strengths vs. Opportunities

- Q3. Describe what you believe are the strengths of the [draft curriculum / Social Studies blueprint].
- **Q4**. Describe what you believe are the opportunities for improvement in the [draft curriculum / Social Studies blueprint].

Key trends

Overall, for every curriculum strength highlighted in the online survey, respondents suggested approximately three opportunities for improvement.

The ratio of strengths to opportunities improved slightly after April 2021, including responses in Wave 3b (December 13, 2021 – February 28, 2022) that acknowledged what respondents perceived as positive changes:

Verbatim comments:

"Moving some of the developmentally complex concepts to more age appropriate levels is good. Inclusion of a broader historical narrative has been attempted.."

"The greater focus of the indigenous peoples customs, and teachings. The focus on showing the development of relationship between indigenous peoples, and the explores, settler's. The whole development of Canada. It gives the students a cleared picture of the beginning of what we now called Canada"

"Teaching children in grade three about fractions, adding fractions, multiplying, square root numbers, etc. This is a VERY GOOD change. Student this age are able to learn these concepts as long as math skills are gradually introduced and built upon in grades 1&2."

Table 8: Type of feedback by wave

Table 6. Type of feedback by wave	Strengths	Ratio of streng	Opportunities	
All feedback to date	8,261	25%	75%	24,921
Wave 1 : March 29 - April 18, 2021	6,321	24%	76%	20,046
Wave 2 : April 19 - September 30, 2021	1,389	29%	71%	3,478
Wave 3a: October 1 – December 12, 2021	175	28%	72%	445
Wave 3b : December 13, 2021 – February 28, 2022	376	28%	72%	952

Table 9: Ratio of strengths to opportunities by subject and wave

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	33,182	26,367	4,867	620	1,328
All feedback to date	25%	24%	29% +5	28% -1	28%
English Language Arts and Literature	39%	38%	42% +4	*	38%
Fine Arts	27%	27%	28% +1	*	*
French First Language and Literature	30%	*	*	*	*
French Immersion Language Arts and Literature	29%	23%	*	*	*
Mathematics	33%	31%	39% +8	*	29%
Physical Education and Wellness	33%	33%	35% +2	*	31%
Science	34%	33%	39% + 6	*	33%
Social Studies / Social Studies Blueprint	23%	22%	27% +5	27%	32% +5
General Feedback	24%	24%	26% +2	28% +2	23% -5

Table 10: Ratio of strengths to opportunities by grade and wave

	Total	Wave 1	Wave	2	Wave	3a	Wave 3b	
n=	33,182	26,367	4,867		620		1,328	3
All feedback to date	25%	24%	29%	+5	28%	-1	28%	
Kindergarten	31%	29%	35%	+6	*		36%	
Grade 1	27%	25%	31%	+6	*		36%	
Grade 2	20%	19%	27%	+8	26%	-1	23%	-3
Grade 3	27%	26%	35%	+9	*		28%	
Grade 4	32%	30%	37%	+7	*		34%	
Grade 5	30%	28%	33%	+5	*		34%	
Grade 6	25%	24%	33%	+9	*		36%	
General Feedback	25%	24%	27%	+3	29%	+2	26%	-3

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in red font.

^{*} Small base size (less than 50 responses), result suppressed.

Approximation of sentiment and additional feedback

Q5. General comments – Please provide any additional feedback you believe will be helpful.

Sentiment

Quantifying public sentiment using qualitative survey responses should be considered 'directional' and is done in lieu of the questionnaire including a quantitative question that captures overall satisfaction with the curriculum. Some expressions can be difficult for an algorithm to evaluate, as demonstrated by the following verbatim examples:

Example 1: Negative sentiment expressed toward positive outcomes

"This presents a curriculum that discourages critical thinking that will produce thoughtful, engaged adults"

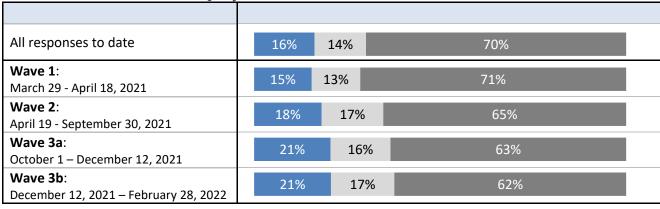
Example 2: Positive sentiment expressed using negations

"I feel teachers don't like change because it's more work for them, so don't let that discourage you from making it"

Advanis made improvements to the sentiment classification model between reporting waves to address some of these challenges and applied the updated model to all waves. As a result, analysts reclassified some responses received in Wave 1 and 2 to enable more reliable trending across waves.

As the survey timeline progressed, a higher proportion of analyzed responses to Q5 ('Additional feedback') could be considered 'positive' in nature.

Chart 3: Sentiment based on Q5 by wave



Overall response sentiment Positive Neutral Negative

Additional feedback themes

When providing additional feedback (Q5), it was common for survey respondents to repeat or elaborate on themes they had already raised as strengths (Q3) and opportunities (Q4). To provide a clearer view on 'additional' feedback, analysts excluded themes already highlighted within each individual survey form.

The resulting analysis provides insight into some of the broader considerations that may influence responses to questions around curriculum strengths and opportunities for improvement. Highlights included:

- A consistent theme suggesting more **consultation with teachers and others** when developing the curriculum.
- A steady decrease in the proportion of feedback talking about **age/developmental appropriateness** and **religion**.

Table 11: Top 20 additional feedback themes (Excluding themes already covered by individuals in O3 and O4)

		Tot	al	Wave 1	Wave	2	Wave	3a	Wave	3b
	n=	22,2	92	17,274	3,58	2	452		98	4
Get feedback from teachers/others		2,987	13%	13%	14%	+1	15%	+1	15%	
Age/developmental appropriateness		2,272	10%	11%	10%	-1	8%	-2	6%	-2
Religion		1,944	9%	10%	5%	-5	3%	-2	2%	-1
General: History		1,701	8%	8%	6%	-2	3%	-3	3%	
First Nations, Métis and Inuit		1,315	6%	6%	5%	-1	3%	-2	4%	+1
Racism/inclusion		1,291	6%	6%	4%	-2	4%		2%	-2
Subject comprehension		1,231	6%	6%	5%	-1	6%	+1	4%	-2
Culture		1,141	5%	5%	5%		4%	-1	3%	-1
Canadian history		1,007	5%	5%	3%	-2	2%	-1	2%	
Memorization		930	4%	4%	4%		4%		3%	-1
U.S. content		921	4%	4%	4%		1%	-3	2%	+1
Financial literacy		812	4%	3%	5%	+2	4%	-1	3%	-1
Community		803	4%	4%	3%	-1	2%	-1	3%	+1
Diversity		782	4%	4%	3%	-1	2%	-1	2%	
Music examples		663	3%	3%	1%	-2	1%		1%	
Critical thinking		655	3%	3%	3%		2%	-1	2%	
Resources		638	3%	3%	3%		2%	-1	3%	+1
Alberta content		586	3%	3%	3%	Ì	2%	-1	2%	
Inaccuracies		585	3%	2%	4%	+2	2%	-2	2%	
Numeracy		582	3%	2%	4%	+2	3%	-1	3%	

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report. Shifts between waves greater or equal to 5% are highlighted in red font.

Phase 1: Curriculums to be implemented in September 2022

English Language Arts and Literature

A total of 1,750 surveys with feedback were specifically directed to the English Language Arts and Literature curriculum. Across the surveying period, grade level-specific feedback tended to skew to K-2 and Grade 6 curriculums. Compared to the first wave of survey feedback, the final wave of the survey contained a higher proportion of general feedback (49%).

Table 12: Surveys with feedback, by grade level (counts)

, , , , , , , , , , , , , , , , , , ,	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	1,750	1,097	374	77	202
Kindergarten	266	180	54	5	27
Grade 1	208	139	39	5	25
Grade 2	178	130	33	6	9
Grade 3	85	37	36	3	9
Grade 4	93	43	32	3	15
Grade 5	71	37	17	12	5
Grade 6	183	108	49	13	13
General feedback	666	423	114	30	99

Aspects relating to Literacy and Phonics were among the perceived strengths of the curriculum.

Table 13: Top 10 "Strength" themes (counts)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	367	228	88	13	38
Literacy	169	109	38	3	19
Phonics	126	78	30	4	14
Subject comprehension	33	20	8	2	3
Clarity	26	14	8	1	3
Back to basics	25	17	8	0	0
Age/developmental appropriateness	18	14	3	0	1
General: Science*	18	14	2	1	1
First Nations, Métis and Inuit	15	10	5	0	0
Research practices	13	13	0	0	0
Culture	9	7	2	0	0

^{*} Comments generally refer to the 'Science of reading', or similar

Selected verbatim feedback from Wave 3a and Wave 3b **On literacy**

"Including requirements to teach grammar can help ensure both English language learners and native speakers actually learn proper grammar rather than relying on intuitive but sometimes incorrect knowledge."

"I very much appreciate the strong focus on phonics and literacy in the English Language Arts curriculum! Well done!"

"The overall layout and ease of use when planning. The fact that the literacy and numeracy progressions are built into the outcomes."

"Im very pleased with it! Great start to foundational reading acquisition"

On phonics

"There is benefit to providing clear instruction in both phonics and sight words while students are still gaining fluency in reading. This encourages multiple strategies."

"Front matter is appropriate, speaks to the interconnectedness of the strands, and a fairly broad definition of text. Inclusion of explicit phonological awareness and phonics for primary. Inclusion of explanations of specific terminology such as phonemes, onset, rime, deletion, types of poetry, etc. Appreciated morphology being included in all grade levels."

"More focused study of phonemic awareness and phonics. Less general and vague than previous curriculum"

Along with Literacy, **Age/developmental appropriateness** has been a consistent theme in the feedback, including concerns about the impact higher levels of difficulty have on students' enjoyment of the subject.

Table 14: Top 10 "Opportunity" themes (counts)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	626	398	132	27	69
Literacy	245	164	52	7	22
Age/developmental appropriateness	152	95	34	6	17
Phonics	72	49	10	2	11
Subject comprehension	69	48	12	3	6
Get feedback from teachers/others	49	24	12	4	9
First Nations, Métis and Inuit	48	31	12	1	4
Memorization	44	30	5	2	7
Resources	40	20	8	3	9
Technology	37	25	6	1	5
General: History	35	28	4	2	1

Selected verbatim feedback from Wave 3a and Wave 3b

On age appropriateness

"Introducing Grade 5 and 6 students the Shakespeare and Greek literature is too advance for their age group."

"... the concepts are far beyond kinder level. The skills match developmental level but the concepts are way too much for kinder aged kids. This is also very 'academic' for kindergarten. Kindergartens rarely have the special needs students separated and the majority of the curriculum is far far ahead of students who may have challenges. (Most classes have several children with speech/behaviour/fine motor delays.) ..."

Additional topics of interest

Reading for enjoyment

At least 15 survey respondents provided specific feedback on reading for enjoyment. Some of the more common opinions on this topic included:

- Reading for pleasure facilitates learning
- The selection of texts should be age-appropriate; and
- Students may also be able to select what they read.

Verbatim comments:

"... There are not many explicit opportunities for students to explore reading as a pleasurable activity, as there is a strong focus on strategies for word attack and comprehension - both are important, but a love of reading truly propels both skillsets forward more efficiently than direct how-to instruction..."

"Take out the stuff that is going to make them hate reading & writing - especially literary terms that they will not use for years, because they can't grasp the relevance. It's too much content and is not being phase in gradually. The kids we will try this out on have huge gaps and we are going to try to address those gaps with more-have you heard of the word overwhelm? There is no flexibility within this for kids who lack readiness for reading & writing, as we push higher & higher expectations on lower grades only a few succeed and the rest think they can't learn and begin a lifelong process of giving up. There needs to be room for differentiation, and way more room for play & exploration. This needed nit just to take the pressure off, but because neuroscience tells us this is how brains work best."

"...Grade 6: 'Read for enjoyment outside of familiar forms of writing to enhance vocabulary.' What are teachers supposed to do with this? Enjoyment is in the eye of the reader. Students cannot be forced to enjoy unfamiliar forms of writing or even any writing. Literature is much more enjoyable when a person gets to choose what to read...."

Higher-level thinking and critical thought

At least 45 survey respondents provided specific feedback on higher-level thinking and critical thought. Such comments generally call for the curriculum to include, or focus on, critical thinking as an outcome. Comments about critical thinking sometimes juxtapose general literacy (in terms of grammar and spelling) and twenty-first century information literacy where readers access text in various media other than print. **Verbatim comments:**

- "...Critical thinking I find it highly alarming that all references to critical thinking seem to have been removed from the curriculum. This used to be housed under social studies (with students examining news articles for opinions and bias, etc), and now I see it nowhere in the curriculum at all. In the 21st century, when we rely for most of our information on the internet where anyone can post anything, true or not reading critically is an absolutely integral skill that needs to be taught from an early age. There is no need to remove this from the curriculum for fear of political bias, as there are many ways to teach these skills in an age-appropriate, non-political way (look up the 'Pacific Northwest Tree Octopus', for example)...."
- "...Critical reading and critical thinking are fundamental literacy skills and essential in the 21st century workplace. This curriculum is heavily focused on basics such as phonics, spelling, and grammar, and barely touches on these fundamental skills. If students are not adequately trained in critical thinking, critical reading, and critical writing, they will be unprepared for university and for jobs in the future. This is appalling. I suggest that you look into the voluminous academic research on the topic of teaching critical skills to elementary age children. The Critical Thinking Consortium is a particularly useful resource. You might also consider looking at the concept-based curriculum that was previously in development, or even the antiquated, outdated curriculum that you are working on replacing, for ideas..."
- "...-not enough emphasis on critical and creative thinking -no focus on information and digital literacy in the context of evaluating sources ..."

Creative thought

At least 15 survey respondents provided specific feedback on creative thought. While some feedback generally called for more creative thinking without providing specifics, other feedback focused on creative writing as part of the curriculum. Some respondents suggested more creative writing opportunities for students.

Verbatim comments:

"The opportunities are the inclusion of creative writing, graphic writing and personal, reflective writing/ journaling. Students need the ability to personally express beyond the bounds of basic knowledge."

- "...Students are not being asked to write for a variety of purposes. I see creative writing (stories) and informational writing (research). What about personal narrative writing? How to writing? Opinion or persuasive writing? Writing poems?..."
- "...There's a focus on communication and message, but with such a heavy focus on basic skill of writing, we've missed an opportunity to focus on personal goal setting, purpose of writing and accountability to audience and the creative aspects of fictional writing, basically artistic vs. scientific focus. As an very experienced kindergarten teacher who gets results past these skill expectations, the only way to achieve mastery is to change a child's mindset about communication and develop understanding of personal accountability in drawing and writing. This will become a pile of worksheets rather than in-depth discussion about writing/reading..."

Digital literacy/media

At least 40 survey respondents provided specific feedback on digital literacy/media. Including social media and digital literacy was specifically mentioned by four respondents as a strength of the curriculum.

However, some respondents believe digital literacy is not currently part of the curriculum, or understand it as being optional.

Verbatim comments:

"...I appreciate that there is an acknowledgment of digital and non-digital texts..."

"A complete miss to include digital literacies and digital progressions. Children as young as K are interacting and using technologies to build their literacy skills. This was a complete miss. Any reference to using technology is very vague and could be interpreted as optional. This does not build on the already fine work done on the The Learning Technology Framework. Students need to know how to be ethical and critical consumers and producers of literacy - especially now when much of their world focuses on using technology. This is not a curriculum for the future but the past."

"... There is very little opportunity for students to develop digital literacy skills. There are frequent references to digital texts, but no outcomes relating to evaluating these sources. ..."

Perceived inaccuracies (wave 3a and 3b feedback only):

"This draft curriculum is a mess, poorly thought out and structured. It is based on outdated educational theory and practice and is harmful to the children of Alberta. It is based on falsehoods about student achievement. It is based on a Eurocentric model of what is essential knowledge. Although there have been attempts to correct the numerous factual errors and faulty terminology, the overall structure is deeply flawed. It cannot be improved by the tinkering being done."

Perspectives on resources and implementation (wave 3a and 3b feedback only):

"The outcomes are excessive. disconnect between knowledge and skills. no higher order thinking. No digital Literacy. Indigenous culture not represented until Grade 6. No resources provided for teachers to use to implement this new curriculum. Document is not clear on what to teach and how to assess. Outcomes are way too complex. No Scope and sequence. Not a balanced curriculum"

"... In addition, due to the many concerns of educators and parents, it would be better to put this curriculum on hold until all the issues have been resolved and teachers have time to created effective lesson plans. It should not be rushed into implementation. "

Mathematics

A total of 2,669 surveys with feedback were specifically directed to the Mathematics curriculum, with feedback covering most grades. Compared to the first wave of survey feedback, the final wave of the survey contained a higher proportion feedback on grades 5 and 6.

Table 15: Surveys with feedback (counts)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	2,669	1,615	631	87	336
Kindergarten	111	73	18	13	7
Grade 1	207	132	43	21	11
Grade 2	214	130	49	3	32
Grade 3	306	199	60	6	41
Grade 4	199	117	46	9	27
Grade 5	184	105	42	6	31
Grade 6	261	152	60	6	43
General feedback	1,187	707	313	23	144

Aspects relating to **Numeracy** and **Financial Literacy** were among the perceived strengths of the curriculum.

Table 16: Top 10 "Strength" themes (counts)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	482	292	132	10	48
General: Mathematics	167	101	51	2	13
Numeracy	144	86	40	2	16
Financial literacy	131	92	27	2	10
Back to basics	65	41	21	0	3
Mathematics: Fractions	45	20	16	2	7
Age/developmental appropriateness	42	29	11	0	2
Subject comprehension	28	16	7	1	4
Technology	15	9	4	1	1
Memorization	13	6	6	0	1
Literacy	13	10	3	0	0

Selected verbatim feedback from Wave 3a and Wave 3b

On Numeracy

"It focuses on the basic numeracy skills needed to progress on to the following grades. I like the fact that graphs have been brought back for collecting data."

"Foundational skills are essential to learning math and are the building blocks to problem solving"

On Financial Literacy

"I see nothing too strong but the idea of helping kids understand the concept of money and managing that is important." "I think that the practise financial transactions part of the draft could be beneficial depending on the difficulty of the questions. "

Numeracy, **Age/developmental appropriateness**, and **Fractions** were consistent themes focused on improving the curriculum.

Table 17: Top 10 "Opportunity" themes (counts)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	1,038	661	222	32	123
Mathematics (General)	480	331	98	13	38
Numeracy	418	286	84	13	35
Age/developmental appropriateness	288	209	52	4	23
Fractions	204	147	28	6	23
Subject comprehension	175	125	36	2	12
Memorization	138	95	30	5	8
Financial literacy	64	41	14	2	7
Back to basics	62	43	11	4	4
Measurement system	51	27	13	0	11
Get feedback from teachers/others	49	26	11	4	8

Selected verbatim feedback from Wave 3a and Wave 3b **On Numeracy**

"...The numeracy theme is not developmentally appropriate, too complex and has downloaded content from higher grades. Pushing down concepts to lower grades will create high levels of math anxiety and students will hate math. The draft curriulum numeracy is lacking critical thinking skills, problem-solving skills and communicating about math. Narrow defintion of numeracy. The draft is too focused on standard algorithms and fails to build conceptual understanding. Too much content to learn, practise skills and develop understanding in the time available. ..."

"A rewrite with a broad focus looking at a modern view of math that helps children deal with the necessary abstractions, thinking in multiple dimensions and coping with large numbers and how to manage and interpret them."

On Age/developmental appropriateness

"...Too much is pushed down from grades above, including from grades above grade 6. This is not developmentally appropriate, but also would create some complication as students continue math after Grade 6, as content would have already been covered. Unnecessary shifts from higher grades down to grade 5 include: calculating percent, multiplying fractions, addition and subtraction of fractions, point-grid coordinates, and order of operations. - there is too much emphasis placed on algorithm-based solving when there are much more mathematically sound ways to access problem solving; an algorithm is one option..."

"- Learning times tables up to 12's is not developmentally appropriate (currently they learn times tables up to 5). - I do not think procedural and algebraic thinking will support students in 2023 and beyond. A conceptual knowledge of the relationship between numbers is what is needed. The

new draft does not have that. - Multiplying 3 digit numbers is a skill too advanced for 7, 8, 9 year olds, so is comparing fractions. Comparing fractions should not be a grade 3 outcome."

Additional topics of interest

Fractions

At least 315 survey respondents provided specific feedback on fractions. Common perspectives included:

- Introducing fractions at a young age will benefit students later
- The concept of fractions is too abstract for the age and is not developmentally appropriate, as students are just learning to use whole numbers

Verbatim comments:

"Introducing fraction operations early will be indescribably helpful for students later on."

"I really did like the changes as they are needed in the schools however if you move the curriculum up a grade or two it would be better as grade 1 kids are only learning 1+1=2 and not able to comprehend fractions"

Measurement

At least 220 survey respondents provided specific feedback on measurement. Common perspectives included:

- Canada uses the metric system and hence the curriculum should teach the metric system, as opposed to the Imperial system
- There is a perceived inaccuracy in the curriculum where "Canadian Units" should be correctly referred to as the metric system
- Imperial-metric conversions are either not age appropriate at the age they are introduced and
 may be confusing (due to a lack of mathematical understanding that would be needed to
 facilitate the conversions), or not necessary in a country employing the metric system

Verbatim comments:

"Canada uses the metric system. The United States uses the imperial system. Please teach Canadian children living in Canada the Canadian systems of measurement. It is called the metric system. Call it the metric system."

"Imperial Measurement has no place in the lower elementary classroom. It requires a strong understanding of multiplication, division and fractions, and children this age do not have that depth of understanding yet. If It must be introduced, (and I think it doesn't) then it should be in upper elementary, or, even better, secondary. Using both systems in lower elementary will just confuse children."

Factors

At least 20 survey respondents provided specific feedback on factors. Common perspectives included:

- Factors are often mentioned as the steppingstone to understanding fractions
- While some welcome the inclusion of factoring and fractions earlier in the curriculum, others believe it is not developmentally appropriate
- The curriculum should spend more time on factors to prepare students for manipulating fractions by addition, subtraction, multiplication and division

Verbatim comments:

"The inclusion of factoring and fractions in far earlier grades is a very positive step."

"Adding/Subtracting fractions in grade four is massively problematic. To be successful in any high level math class, students need to be able to consistently reduce fractions based on recognizing factors. 9 year olds will lack the ability to recognize these opportunities when they present themselves. A greater number sense needs to be developed for them to find success."

"After grade 3, the curriculum increases in complexity too quickly. ... Prime factorization, GCF, LCM, multiples and factors are currently taught in grade 6 and this is DIFFICULT for them. Grade 4 is not developmentally appropriate as they have only just started multiply and learn their times tables in grade 3. The same can be said for operations with fractions. Kids need to understand fractions before manipulating them by addition, subtraction, multiplication and division."

Other topics of interest

Verbatim feedback related to the Mathematics curriculum was also reviewed for the following topics:

- Magnitude
- Percent ratio

Less than 10 responses were identified, so it is not possible to determine common themes.

Perceived inaccuracies (wave 3a and 3b feedback only):

No additional perceived inaccuracies appeared in feedback specific to the Mathematics curriculum after October 1, 2021.

Perspectives on resources and implementation (wave 3a and 3b feedback only): Verbatim comments:

"While I applaud the attempt to make the language more accurate throughout the mathematics curriculum, you have made it unapproachable to anyone without specific training in mathematics. Given that elementary teachers are generalists and do not require that specific training, it is easy to see that they may be intimated and overwhelmed. There is a great deal of research on this. Parents may also find this intimidating and unapproachable, thus unable to help their children when they are struggling. For example, you use the term 'commutative property' in grade 1. It is unclear if the child will be required to know that term, or just understand the concept. If you expect them to know the term, I recommend you go ask a 6-year old to pronounce that word. Accurate language is something to applaud, however, I believe this is too convoluted and should be reviewed for more plain language (unless you plan on re-training the province). "

"I am extremely concerned that my grade 5 student next year will be expected to do the new grade 5 content without having been taught the background material. The stress on these students (and teachers) will be tremendous, setting them up for years of negative feelings towards math and science."

Physical Education and Wellness

A total of 1,325 surveys with feedback were specifically directed to the Physical Education and Wellness curriculum. Relative to other grades, the Grade 6 curriculum was the subject of more grade-specific feedback. Compared to the first wave of survey feedback, the final wave of the survey contained a higher proportion feedback on grades 2 and 3.

Table 18: Surveys with feedback

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	1,325	831	283	20	191
Kindergarten	44	29	9	0	6
Grade 1	78	50	15	1	12
Grade 2	92	51	21	5	15
Grade 3	54	30	10	1	13
Grade 4	39	20	18	1	0
Grade 5	46	37	5	1	3
Grade 6	133	104	8	3	18
General feedback	839	510	197	8	124

Wellness, Consent, and Physical Activity were consistently the strengths of the curriculum.

Table 19: Top 10 "Strength" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	253	163	57	2	31
Wellness	90	54	23	0	13
Consent	87	69	14	0	4
Wellness: Physical activity	47	33	8	0	6
Wellness: Diet and nutrition	30	25	4	0	1
Age/developmental appropriateness	17	14	3	0	0
Financial literacy	17	10	4	0	3
Wellness: Mental Health	15	12	2	0	1
Culture	13	8	4	1	0
Sex education	12	6	4	0	2
Subject comprehension	11	4	5	1	1

Selected verbatim feedback from Wave 3a and Wave 3b **On Wellness**

Verbatim comments:

"Wellness topics like self regulation and resiliency are good."

"It does take a look at including 'wellness' as a integrated part of physical education. We applaud its ambition to take Physical Education, Health and Wellness to a potentially higher level in the academic landscape."

Physical Activity was a common area of focus for curriculum improvements, particularly in the final survey wave.

Table 20: Top 10 "Opportunity" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	531	340	109	9	73
Wellness	252	166	50	5	31
Age/developmental appropriateness	111	68	25	2	16
Wellness: Physical activity	110	56	25	0	29
Consent	109	71	23	1	14
Wellness: Diet and nutrition	109	74	23	5	7
Sex education	94	72	12	0	10
Wellness: Mental Health	62	42	9	0	11
Diversity	55	40	10	0	5
Culture	51	38	11	0	2
Wellness: Body image	44	28	8	1	7

Selected verbatim feedback from Wave 3a and Wave 3b **On Physical Activity**

Verbatim comments:

"There is too much time allocated to theory and not enough to physical activity. Studies have shown that students are already too sedentary and this curriculum reduces the number of hours of activity, which is senseless. The information on diet is harmfully out of date and has been shown to increase disordered eating. Much of the theory content is unnecessary. Students are not ready for the financial literacy section as they have not learned any prerequisite info in math."

"More time needs to be spent on PHYSICAL wellness. More movement / less desk time. This includes recess. My biggest disappointment with the school system is how little physical activity there is - it is necessary to regulate brain health and emotions too."

Additional topics of interest

Consent

At least 460 survey respondents provided specific feedback on consent. Often, respondents do not engage with the topic of consent beyond identifying that including consent in the curriculum is positive. However, among those who provided more detailed feedback, common perspectives included:

- Including consent is generally positive
- Consent is a two-way street, where the emphasis should be placed on asking for consent, as
 opposed to only giving consent; focusing on the giving of consent may open children up to
 victim-blaming, and dangerous situations with sexual abuse, especially in the context of
 relationships with a power differential (such as with adults)
- Consent should be exemplified through age-appropriate situations (such as getting consent to play with others' toys, touch, hug, tickle), and discussing consent in a sexual context is

inappropriate both developmentally (many commenters note that pregnancy is not an issue at the age the concepts are discussed) or legally (as children are below the age of consent)

Verbatim comments:

"Consent can be exampled through age appropriate situations. (e.g. consent to play with another's toy vs. consent for touching)."

"Happy to see consent included - however there should be emphasis on asking for consent not just giving consent. I find the inclusion of practices for supporting healthy pregnancies confusing, I don't think this is useful information for grade 6 students."

"the sections in different grades on consent tend toward victim-blaming rather than putting the onus on people to seek and ensure consent is enthusiastically given. There are also nonsensical statements like in the grade 2 "consent is established by clearly communicating refusal and permission". This reads like whether you agree or refuse, you are communicating consent. Even if this were fixed, again, the onus for communicating is on the person agreeing and refusing, but it should be on the person who is seeking permission"

"Talking to kids aged 11 and 12 about sexual consent, opens up their minds to so much more than they may be ready for. It invites them to grow up before they are ready. I do not think that the sexual activity needs to be addressed, but having healthy relationships, with clear boundaries and expectations. Parents need to have lots of time before this part of the curriculum is taught, so they can choose whether or not they want their child to attend."

Nutrition & body image

At least 230 survey respondents provided specific feedback on nutrition and body image. Common perspectives included:

- Discussions of nutrition habits combined with emphasis on tracking weight at a young age may lead to bullying, mental health issues, and eating disorders
- Children do not have power over the choice of foods at home, which is likely to be influenced by socioeconomic status, cultural or religious background of the family, thus increasing the risk of underlining differences among students
- Avoid the use of dichotomous language in describing food choices, such as healthy vs. unhealthy, good vs. bad
- Nutrition experts (Registered Dietitians) and psychologists should be consulted to develop ageappropriate nutrition topics

Verbatim comments:

"As a working dietitian and mother of two daughters, foods should not be taught as 'unhealthy'it categorizes good vs bad and can lead to feelings of guilt. Children are not responsible for their
food choices at this age; their parents are. Children should not be weighed/measured in a group
ever."

"... Also, please do not teach elementary students to contrast good and bad foods. Children this age need a good relationship with food (building healthy habits and good food relationships is critical at this age, see precision nutrition for the psychological impact of food and the long-lasting effects). Teaching children to place the judgement of food, how to read food labels and worry

about prices is not only ineffective (most kids do not make their food choice) but also detrimental to their understanding of what food is and how this relates to their body image."

"Foods are not all good or all bad and should not be labelled as such. Kids can take this to mean they themselves are bad if they eat a bad food. Instead, foods should be all the time foods, or sometimes foods. Weight is not an indication of health or fitness. Teach healthy eating and a physically active lifestyle. Do not promote body shaming based on weight, size, shape, etc."

"The curriculum perpetuates diet culture and increases the risk of negatively impacting children's mental health and relationship with food. This includes labelling foods, connecting weight to health, tracking exercise, centring nutrition over foods, limiting food engagement while relying on external vs internal cues."

"As a registered dietitian, I am very concerned about the proposed changes regarding to nutrition. Kids need to learn about food in general (where comes from, taste, culture etc) not start a negative relationship with food by learning good and bad. Please don't make teachers plant the seeds for future disordered eating patterns and poor mental health. Talked to Registered Dietitians about making appropriate changes to your proposed curriculum."

"Foods should not be described as good or bad. It needs to consider that not everyone has access to the variety of 'healthy' foods recommended due to finances. It should be weight inclusive (health at every size). Activity should not be monitored and the joy of daily physical activity promoted. Label reading is an advanced skill and not needed in elementary."

Mental health

At least 110 survey respondents provided specific feedback on mental health. Common perspectives included:

- Including mental health and wellness outcomes is generally positive, and important to include given the rising mental health awareness post-COVID
- Some respondents believe wellness should be its own subject, rather than be integrated with physical education. This would allow for increased learning opportunities and increased wellness
- Some respondents would welcome an increased focus on mental health and wellbeing, with more topics and coping strategies covered

Verbatim comments:

"Love the addition of mental health and wellness into the areas of physical health as they work hand in hand."

"There seems to be a positive focus on mental health including competencies such as self-regulation, managing emotions, building resiliency, and healthy relationships."

"... These last few years have been brutal and the affects will be long term. This is a perfect opportunity to normalize mental health. We have physical and nutritional but the mental component to our health needs to have more and should be it's own general outcome. Let's be proactive!"

"Although there are associations that can be made many in between health (wellness) and physical education, They cannot be merge into one document. They need to stay divided to assure that the students get as many learning opportunities as possible and acquire as much knowledge as possible on the two subjects that will influence and shape their wellness heading into the

teenage years where mental health problems continue to rise every year! Also both subjects require a totally different setting and should not be blended. ..."

"I think there could be more focus on mental health and well-being. Learning coping strategies, setting healthy boundaries in relationships (even family relationships!), dealing with stress appropriately, becoming familiar with concepts of therapy being normalized, not shameful or weak. Learning how to ask for help, but also learning how to think for yourself."

Physical Literacy

At least 20 survey respondents provided specific feedback on physical literacy. Common perspectives included:

- Including physical literacy is generally positive, particularly combined with health outcomes
- Physical literacy should not be introduced at the expense of physical activity: a focus on health and life skills may take away from physical activity
- Health and life skills should remain separate from Physical Education classes: quality implementation of the more theoretical literacy topics may be logistically complicated for physical education teachers

Verbatim comments:

"In the Physical Education and Wellness draft curriculum, you have described the development of physical literacy very well for K-6 by addressing Knowledge, Understanding, and Skills & Procedures. You also address Motivation and Confidence (described as Courage in the draft curriculum), which are two of the most important aspects of physical literacy."

"You CAN NOT expect Health & Life Skills to be combined with a Physical Education class. By combining curriculums, it eludes to the fact that Health & Life Skills will be taught in a gymnasium. How, I ask, is an educator syupposed to deliver quality learning based on Life Learning Choices, Wellness Choices, and Relationship Choices in a P.E. class that is being taught in a gymnasium or outdoors? These 2 curriculums MUST remain separate from one another."

"We need more focus on physical literacy and physical activity. PE class should not be transformed into a health class. Obesity and inactivity rates are skyrocketing. Kids need more activity, not less. Save the financial literacy for math or health class."

"There is too much of a focus on health outcomes, especially financial literacy. I am an elementary PE teacher, and I see how little opportunity students have to be active. This draft curriculum does not focus enough on physical activity/physical literacy. There will be too much time spent on teaching health outcomes rather than being active. The health outcomes should be taught in health class, and financial literacy should be taught in math class. Keep some of the wellness outcomes, but focusing too much on these outcomes will only diminish the amount of time students have to be active in PE class."

Physical fitness

At least 130 survey respondents provided specific feedback on physical activity. Common perspectives included:

• Including physical activity and fitness outcomes is generally positive

- If instructional time is not increased the extra "pen and paper" and "desk" outcomes (such as health and financial literacy) come at the expense of physical activity and exercise—for the already too-sedentary student
- Increased opportunities to engage in various types of physical activity (particularly in a playful manner and taking into consideration students not interested in team sports) would be beneficial to life-long fitness outcomes

Verbatim comments:

"There is too much time allocated to theory and not enough to physical activity. Studies have shown that students are already too sedentary and this curriculum reduces the number of hours of activity, which is senseless. The information on diet is harmfully out of date and has been shown to increase disordered eating. Much of the theory content is unnecessary. Students are not ready for the financial literacy section as they have not learned any prerequisite info in math.

The previous curriculum used words like demonstrate, act, show. The new curriculum uses non physical words like describe, explain, which takes the entire point of PHYSICAL ACTIVITY out of the curriculum."

"When I was a kid I played a lot of sports and ran around outside. This is what got me into physical activity and being healthy. This seems like there is no joy or self understanding. It's not holistic. There's just a bunch of random themes put together."

"There are mentally damaging aspects to this curriculum. ... Grade 1 children shouldn't be doing physical activities "to change their bodies" they should be learning how fun it is to be active."

"While there has been some move to increase the variety of activities presented in the course, I also think there is a lot of room to broaden the scope to include more activities that students can learn to love and thus want to continue in their daily lives as they grow up. While some people finish school and continue to love basketball, volleyball and floor hockey, most people don't. Including more activities that an average person could realistically engage in throughout life would help to increase the chances of building a healthier population. This would be particularly important for children who are not athletic in the traditional sense and for whom team sports are not a good fit."

Perceived inaccuracies (wave 3a and 3b feedback only):

There were no additional perceived inaccuracies in feedback specific to the Physical Education and Wellness curriculum after October 1, 2021.

Perspectives on resources and implementation (wave 3a and 3b feedback only):

There were no additional perspectives on resources and implementation in feedback specific to the Physical Education and Wellness curriculum after October 1, 2021.

Phase 2: Subjects continuing to pilot

Fine Arts

A total of 1,556 surveys with feedback were specifically directed to the Fine Arts curriculum. Through most waves of the survey, grade-specific feedback tended to focus on Grade 6. Compared to the first wave of survey feedback, the final wave of the survey contained a higher proportion of general feedback (61%).

Table 21: Surveys with feedback

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	1,556	1,224	230	26	76
Kindergarten	67	58	9	0	0
Grade 1	80	58	19	0	3
Grade 2	70	53	13	1	3
Grade 3	46	38	8	0	0
Grade 4	44	30	8	0	6
Grade 5	71	48	11	6	6
Grade 6	370	331	27	0	12
General feedback	808	608	135	19	46

Respondents have identified very few strengths since October 1, 2021. Earlier in the surveying period, respondents frequently mentioned Music examples when highlighting curriculum strengths.

Table 22: Top 10 "Strength" themes

S. S	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	217	174	30	5	8
Music examples	107	99	5	1	2
First Nations, Métis and Inuit	21	20	0	0	1
Culture	17	15	2	0	0
General: History	17	17	0	0	0
Diversity	13	11	0	2	0
Age/developmental appropriateness	12	11	1	0	0
Structure	12	8	3	0	1
Diverse topics	8	6	2	0	0
Subject comprehension	7	4	3	0	0
Clarity	5	5	0	0	0

Selected verbatim feedback from Wave 3a and Wave 3b **On Music examples**

Verbatim comments:

[&]quot;It seems fairly comprehensive. There is not a large facet of music missing."

[&]quot;It has a lot of the same rhythmic principals from the past curriculum. Emphasis on singing and playing instruments. Included music maps to assist with students learning the form and structure

of music (although it would be more useful with classical music rather than how you have it listed). New focus on narratives with music to tell a story. Inclusion of First Nations, Metis and Inuit music."

Music was also an area of focus for many when considering curriculum improvements. Respondents identified aspects relating to **History** as an area for improvement.

Table 23: Top 10 "Opportunity" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	606	490	81	9	26
Music examples	366	326	23	4	13
General: History	134	109	16	0	9
Age/developmental appropriateness	110	78	27	1	4
Culture	78	66	9	2	1
First Nations, Métis and Inuit	57	46	8	0	3
Racism/inclusion	53	49	4	0	0
U.S. content	49	37	10	0	2
Subject comprehension	49	39	8	1	1
Get feedback from teachers/others	40	29	9	0	2
Inaccuracies	37	36	1	0	0

Selected verbatim feedback from Wave 3a and Wave 3b **On Music examples**

Verbatim comments:

"Gregorian chants, monophonic music, polyphonic music and medieval music are not musical styles appropriate for this age group. Medieval folk dances can be engaging but to do them correct would be difficult for some students. I'm not sue how you could use a Gregorian chant for inspiration.... This age group would be better suited to classical music and Canadian folk dances rather than medieval music and folk dances."

"This curriculum is incredibly too much focused on historical, white knowledges of music. All of the examples listed proceed from focus on what HAS happened. This creates an impression of music as something that is fossilized, old, irrelevant. You can't START with 'ancient Greece' - an area of musical history that most graduate students have only vague understanding of! - you need to start from music that is close to what students know. The first job is to help students continue to love music (as most children do naturally). Just as in science, our job is to preserve their sense of questioning and curiousity about the world, we have to preserve their joy in music!".

Additional topics of interest

Diversity

At least 210 survey respondents provided specific feedback on diversity (of the art and artists discussed in the curriculum). Common perspectives included:

 Focus should be on art that is geographically and historically Albertan and Canadian—focus should be shifted from ancient and medieval cultures and the United States

- Music and dance content that is covered in the curriculum should be more contemporary, and relevant to the children, partly to encourage participation in the creation of the medium
- Diversity of the artists covered is currently overly Eurocentric and should match the diversity of the student population

Verbatim comments:

"Same as I stated above is needed. Not out of date, white people dances that someone decided we're necessary. Diversity and inclusion of all people's needs to be reflected in our new curriculum. ..."

"I did appreciate musical examples being given, although they definitely should be diversified and double checked to make sure they actually cover the topic they are given in relation too. I appreciate how kindergarten now has a curriculum. I liked the inclusion of First Nations/Metis/Inuit music in grade 2, although it was quite vague, and I hope more information and resources will be shared with teachers. I feel FNMI Music should be included across all the grades. I liked the inclusion of Francophone music in grade 4. I feel Francophone music should be included across all the grades. I also appreciated that more information was given in the knowledge section to help out teachers who might not have music as their specialty."

"It is ridiculous to teach jazz and exclude all Black musicians, as Black people originated the genre. The inclusion of Glen Miller and Jason Kenney's utterly irrelevant to jazz music and never even lived in Alberta grandfather is a slap in the face to much more appropriate and notable musicians, such as Duke Ellington, Tommy Banks, Oscar Peterson - just to name a few. ..."

"Most music referenced is 'dead white guy' music. This curriculum is not diverse like a student population is. There are token references to French music, Indigenous music, and music from world cultures, but no listening references or real outcomes or skills. This is partially why modes, meters, and harmonic structures need to be introduced earlier (to LISTEN to, not read and write) so that children develop their ears. - Too much emphasis on 'ancient' music, and not enough emphasis on modern music (which is what gets kids excited about learning to play, perform, and make their own music). - movement pieces- I don't even know where to begin. Children should be moving to music on a DAILY basis, and it doesn't need to be organized movement- that can come later. The dances that are referenced here, again, very Euro-centric, made for white-bread America. Canada has lots of culture too, you know."

Perceived inaccuracies (wave 3a and 3b feedback only):

Verbatim comments:

"Please have actual arts educators write this curriculum. There are so many gaps and errors in this document."

Perspectives on resources and implementation (wave 3a and 3b feedback only):

There were no additional perspectives on resources and implementation in feedback specific to the Fine Arts curriculum after October 1, 2021.

French First Language and Literature

A total of 173 surveys with feedback were specifically directed to the French First Language and Literature curriculum. There has been very little feedback provided since October 1, 2021.

Table 24: Surveys with feedback

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	173	115	41	2	15
Kindergarten	6	3	3	0	0
Grade 1	17	15	2	0	0
Grade 2	11	8	0	0	3
Grade 3	9	6	3	0	0
Grade 4	11	6	3	0	2
Grade 5	7	7	0	0	0
Grade 6	7	7	0	0	0
General feedback	105	63	30	2	10

Table 25: Top 10 "Strength" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	22	13	6	1	2
Francophone perspectives	5	1	3	0	1
Literacy	3	2	0	1	0
General: History	3	1	2	0	0
First Nations, Métis and Inuit	2	1	1	0	0
General: Science	2	0	1	0	1
Canadian history	1	1	0	0	0
Alberta content	1	0	1	0	0
Financial literacy	1	1	0	0	0
General: Mathematics	1	0	1	0	0
Back to basics	1	1	0	0	0

Table 26: Top 10 "Opportunity" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	58	40	12	1	5
Francophone perspectives	22	15	5	1	1
Religion	8	7	1	0	0
Culture	8	4	2	1	1
Literacy	8	4	2	1	1
General: Mathematics	7	7	0	0	0
Music examples	7	7	0	0	0
General: Science	7	7	0	0	0
Inaccuracies	7	7	0	0	0
Technology	7	7	0	0	0
Get feedback from teachers/others	6	6	0	0	0

Additional topics of interest

Francophone perspectives

At least 35 survey respondents provided specific feedback on Francophone perspectives. Common perspectives included:

- Francophones should contribute to the creation of the curriculum via local French-speaking organizations, as opposed to having the existing English curriculum translated
- When included, Francophone content should ideally include texts and content related to Franco-Albertans
- Other French-speaking perspectives may also include content related to Quebec and Acadian
 French Canadians, and Francophone content from elsewhere in the French-speaking world—as
 opposed to translations from English texts
- French instruction is not necessary (excluded from examples below)

Verbatim comments:

"Consulted" does not mean contribution. Francophones must be involved in the creation of the program. The fact that the draft has been translated shows lack of care and attention to this program."

"There are virtually no references to Francophone culture and, particularly that of the rich Alberta francophone culture of our province. There are no redeeming qualities of the program for Francophone education"

"Replace the English translated curriculum with founded French-based facts, songs, teachings by both co-creating the curriculum with French scholars in Alberta, and borrowing from other francophone provinces such as Quebec."

[Translated from French] "The curriculum used by French schools, should not be a simple translation of the general curriculum as is the case in the proposed draft. The curriculum for Francophone schools should have been developed simultaneously but written with a Francophone lens, aimed at enabling Francophone students to develop their identity and belonging to the Francophone community through a variety of subjects."

[Translated from French] "For the general curriculum: the lack of inclusion of Francophone perspectives is concerning. These should not only be limited to the perspectives of the past and the east of the country; they should also reflect the current perspectives of the Alberta Francophonie, including the place of diversity within the Francophone community.

Other topics of interest

Verbatim feedback related to the French First Language and Literature curriculum was also reviewed for the following topics:

Mother tongue identity

Less than 10 responses were identified, so it is not possible to determine common themes.

Perceived inaccuracies (wave 3a and 3b feedback only):

There were no additional perceived inaccuracies in feedback specific to the French First Language and Literature curriculum after October 1, 2021.

Perspectives on resources and implementation (wave 3a and 3b feedback only):

There were no additional perspectives on resources and implementation in feedback specific to the French First Language and Literature curriculum after October 1, 2021.

French Immersion Language Arts and Literature

A total of 204 surveys with feedback were specifically directed to the French Immersion Language Arts and Literature curriculum. Except for Grade 5, most grades have received a modest volume of feedback throughout the survey period, though there has been very little feedback provided since October 1, 2021.

Table 27: Surveys with feedback

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	204	132	41	6	25
Kindergarten	19	14	1	0	4
Grade 1	13	6	7	0	0
Grade 2	28	20	2	3	3
Grade 3	12	12	0	0	0
Grade 4	26	9	15	0	2
Grade 5	3	3	0	0	0
Grade 6	16	13	3	0	0
General feedback	87	55	13	3	16

Table 28: Top 10 "Strength" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	28	14	10	0	4
Francophone perspectives	9	5	4	0	0
Literacy	6	4	2	0	0
Phonics	5	4	1	0	0
Clarity	3	1	2	0	0
Age/developmental appropriateness	2	2	0	0	0
Scaffolding	2	2	0	0	0
Structure	2	2	0	0	0
Canadian history	1	1	0	0	0
Financial literacy	1	0	1	0	0
Life skills	1	1	0	0	0

Selected verbatim Feedback from Wave 3a and Wave 3b

"Useful for students to become accustomed to learning additional languages."

[Translated from French] "Easy to understand. Everything is linked. Not many changes from the existing one which is by the way very good."

Table 29: Top 10 "Opportunity" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	74	49	15	2	8
Francophone perspectives	29	21	5	1	2
Literacy	18	10	5	1	2
Age/developmental appropriateness	10	7	2	1	0
Religion	8	8	0	0	0
Get feedback from teachers/others	8	6	2	0	0
General: Mathematics	8	6	2	0	0
Technology	8	7	1	0	0
General: Science	7	6	1	0	0
Music examples	6	6	0	0	0
Inaccuracies	6	6	0	0	0

Selected verbatim Feedback from Wave 3a and Wave 3b

"Use a different structure or format. The layout of this draft does not capture the richness or essence of any discipline. It does not include identification of literacy/numeracy aspects or competencies so this does not align with the Guiding Framework. The knowledge and understanding columns create a lot of repetition and take up more space making it seem like there is more content than there actually is. The format makes it very hard to see what is the content for one grade."

"- There has been no attempt to include or use the well-developed research around second language acquisition in this proposed curriculum. - the layout for the early elementary years is a flashback to FSL/core French courses that were more focussed on verb conjugation and all of the trappings that have not worked. - the curriculum totally ignores the work that the Common European Framework of Reference for Languages. This was started more than 30 years ago, has solid research behind it, is internationally recognized, is used across Canada by many provinces in their curriculum and lays out one of the best methods of language acquisition. Why does this province continue to ignore this resource that would benefit Alberta's students? - This curriculum mirrors the English Language Arts & Literature proposed curriculum with extremely similar outcomes. As stated above, it does not take into account second language acquisition and instruction practices and research. Why are you insisting that FILAL be a mirror image and requiring French immersion students to repeat what they are doing in their ELAL classes? - It is obvious that individuals with no education background have been the ones put in charge of developing this proposed curriculum. You cannot improve on a foundation that is not solid - you have to tear it back down to the ground and re-build it on a foundation that better addresses the outcomes of French immersion, and presents the learning outcomes in a manner that show that current, well-developed research has been used in its development. A curriculum is supposed to be student-focused with more 'can do' statements that will not only lead, but keep, students on a path that ensures not only their academic success, but also their future success while keeping French part of their lives."

[Translated from French] "There is no curriculum in FLA Immersion. It's not the same course as FSL or the same group of people."

Additional topics of interest

Francophone perspectives

At least 35 survey respondents provided specific feedback on Francophone perspectives. Generally, the responses to this topic are from the standpoint of families whose children are learning French as a second language.

Common perspectives include:

- Reading and writing expectations for kindergarten students may be excessive and not developmentally appropriate, and are not in line with the expectations in English
- Teachers may have trouble implementing the outcomes which appear ambitious, and parents may not be able to help their children learn at home, as not all are French speakers
- French instruction is not necessary (excluded from examples below)

Verbatim comments:

"We should not expect KINDERGARTEN students to be able to compile SENTENCES in French. French as a second language should start in grade one with basic skills like the alphabet, numbers, and common words and phrases. Sentence building should not start until Grade 3 or 4."

"I think thats great that you want the French Immersion programs to be more intense but you also have to know that these kids are mostly from homes where one or both parents don't speak French. I'm heavily relying on that teacher to do their best but they need support and not just additional pressure and expectations for the same pay."

"As someone that has a student in french immersion kindergarten I'm interested to see how getting children from a English speaking home to be able to properly use all french and expected to read and write in french at that level. We are still just leaning colors and shapes. There is no way my son that had just learnt the french alphabet to be able to read or write what he is just learning. My sons class has 23 students. 1 teacher. Thats asking a lot of a teacher managing 23 5 year olds by themselves."

"It is impossible for parents of French immersion students to fully review and comment on this without being fully fluent themselves. While I understand the teachers of the curriculum certainly need to be fluent, parents are not necessarily fluent. We have chosen the French Immersion program for our child over a Francophone school precisely because we don't possess the fluency required to participate as fully with a fully Francophone school. It would be nice to see this curriculum posted in both French and English."

"Why are you forcing kindergarten teachers to try and get French immersion kids to start reading? That is ridiculous. Most of these children start the first day of school not speaking a word of French. While their progress is impressive throughout the year for a group of 5 year olds whose primary purpose is learning to speak the language and learning how to be students, anything beyond basic letter names and sounds is beyond their ability until maybe the very end of the year. Forcing it on the children sets them up to feel incapable and frustrated which is detrimental to learning to read. The most important literacy skill at this age is being read to and learning to enjoy stories."

Other topics of interest

Verbatim feedback related to the French First Language and Literature curriculum was also reviewed for the following topics:

Bilingualism

Less than 10 responses were identified, so it is not possible to determine common themes.

Perceived inaccuracies (wave 3a and 3b feedback only):

There were no additional perceived inaccuracies in feedback specific to the French Immersion Language Arts and Literature curriculum after October 1, 2021.

Perspectives on resources and implementation (wave 3a and 3b feedback only):

There were no additional perspectives on resources and implementation in feedback specific to the French Immersion Language Arts and Literature curriculum after October 1, 2021.

Science

A total of 1,549 surveys with feedback were specifically directed to the Science curriculum, with the Grade 6 curriculum the most common focus of grade-specific feedback. Compared to the first wave of survey feedback, the final wave of the survey contained a higher proportion feedback on grade 4.

Table 30: Surveys with feedback

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	1,549	1,073	324	52	100
Kindergarten	65	48	12	3	2
Grade 1	67	47	14	0	6
Grade 2	118	80	30	3	5
Grade 3	113	85	22	3	3
Grade 4	100	65	14	5	16
Grade 5	96	73	19	1	3
Grade 6	257	206	31	8	12
General feedback	733	469	182	29	53

Though respondents highlighted relatively few strengths in the most recent wave of feedback, early feedback highlighted **Technology**, **First Nations**, **Métis and Inuit content**, and **Climate change** among the most common curriculum strengths.

Table 31: Top 10 "Strength" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	304	207	71	9	17
General: Science	100	73	23	1	3
Technology	69	49	17	1	2
First Nations, Métis and Inuit	47	34	11	1	1
Climate change	33	19	13	1	0
Structure	23	17	4	1	1
Age/developmental appropriateness	18	12	4	0	2
Subject comprehension	15	11	3	1	0
Diversity	14	10	4	0	0
Diverse topics	10	7	2	0	1
General: Mathematics	9	8	1	0	0

Selected verbatim feedback from Wave 3a and Wave 3b

[&]quot;The format is very easy to read. I like many of the scaffolds chosen for objectives. The flow through the objectives makes sense and are thoughtfully paired with skills and procedures."

[&]quot;I think the idea of bringing in programming and other modern sciences is good."

[&]quot;-it is more broad and realistic -this is much better, but still not quite right -the simple machines will be fantastic"

[&]quot;Indigenous perspectives included. Love this."

Table 32: Top 10 "Opportunity" themes

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	605	435	114	19	37
General: Science	292	219	46	11	16
Climate change	120	95	14	4	7
Technology	87	73	7	0	7
Age/developmental appropriateness	73	47	13	1	12
First Nations, Métis and Inuit	61	45	10	2	4
Resources	57	42	12	1	2
Subject comprehension	52	41	8	1	2
Get feedback from teachers/others	39	28	7	3	1
Geography	34	27	5	0	2
Diverse topics	33	19	10	3	1

Selected verbatim feedback from Wave 3a and Wave 3b

On Age/developmental appropriateness

"Topics that have been previously introduced in grades 3 and 4- material that was challenging enough for this age group- are now introduced in grade 2. Sound, light and knowledge content such as 'slope' are too complex for 7 year olds."

"-science needs to be very hands on, kids making observations and learning from what they see and experience -there are a lot of physics principles in Grade 1, 2 and 3- those concepts may be too much for students this age"

On Technology

"Technology, mathematics and the scientific method are dealt with in isolated and superficial ways instead of being the core of the discipline, the way science is done."

Additional topics of interest

Scientific method

At least 85 survey respondents provided specific feedback on the scientific method. Common perspectives included:

- Some respondents have understood the curriculum to have an increased focus on the scientific method, inquiry-based learning, with emphasis placed on investigation and validation, reliability of evidence, honesty, trustworthiness, and collaboration.
- Other respondents have found the curriculum to lack an emphasis on the scientific method, inquiry and investigation, and call for more.
- The scientific method should not be a stand-alone topic, but rather contextualized where the method can be applied to interpret and analyze through writing hypotheses, designing experiments, controlling variables.

Verbatim comments:

"The strengths of the elementary science curriculum are based on those areas that have focused on general and universal scientific principles of the scientific method, etc. and not ideology, politics or religion."

"Lacks an emphasis on the scientific method, inquiry and investigation. The emphasis on Energy and transforming energy and matter seems quite obviously driven by a political agenda and ideological philosophy."

"I think that teaching the scientific method explicitly is good, but I think it needs to be contextualized in order for students to understand it deeply. I can understand an introduction unit at the beginning of the year coming back to 'what is science and what is the scientific method' but I think it needs to be embedded within other topics in Science that students can apply the scientific method in every unit."

"They curriculum is very knowledge rich. Where is the higher order thinking? Where is the Scientific literacy? Why does the scientific knowledge include bias? ... The curriculum focuses on foundational knowledge, where is the curiosity and the learning of the scientific method."

"Remove all 'cultural' and 'First Nation Knowledge' from science. These concepts should be left in Social Studies as they do not have any bearing on the scientific method."

"The scientific method is only one 'Way of Knowing' that is utilized in the world. Other ways of knowing (especially Indigenous) should also be taught."

Climate change

At least 190 survey respondents provided specific feedback on climate change. Common perspectives included:

- Feedback on the topic of climate change generally conflicts on whether it is covered in the
 curriculum, as there are respondents who welcome climate change/global warming topics in the
 curriculum and believe it is sufficient, and those who believe climate change is not addressed in
 the curriculum.
- Respondents are divided further on the importance of anthropogenic causes. Both groups
 perceive the other point of view as politicizing the discussion, with those arguing for more
 coverage of anthropogenic causes often referring to the oil industry as a benefactor of the way
 the curriculum presents the topic.
- Others believe there is too much emphasis on climate change in the curriculum.

Verbatim comments:

"Looks like some really great topics about climate change - both how we are causing it, and how it will impact all aspects of our lives. Great job!"

"Strengths: Inclusion of respect and care for the environment and the perspectives of indigenous peoples. Reference to climate change and global warming. Maintaining the outcomes from the current curriculum on building simple structures, heat and temperature needs of animals."

"I think there is absolutely nothing, as climate change is real and this curriculum does not address it or how we can be environmentally conscious."

"It appears that the bullet point 'The Earth is warming up due to a range of causes' is highly political, and entirely missing the critical message that has to be taught. While it is important to

identify multiple causes, they cannot be made equal. Human climate change has to be identified for what it is."

"Global warming is not caused by 'a variety of factors' it is caused because of increase of greenhouse gases due to human consumption. Stop trying to revive the oil and gas sector, it is dead and has been dying for many years"

"The Science curriculum appears well thought out regarding the 'climate change' conversation. The left-wing ideologic narrative must be corrected, which I believe you have done here. You appear to have thoughtfully and logically provided a solid outline for teaching."

"Climate change has been going on for hundreds millions of years before humans inhabited the Earth therefore there are many factors that affect climate change and not necessarily human related. Water vapor has the biggest affect on Earth temperature and needs to be taught to students"

"Too much emphasis on climate change. There should be a variety of science topics addressed with experimentation and things that will make kids interested in science."

Biased language, Eurocentrism

At least 20 responses mention bias in the context of climate change. At least 15 survey respondents provided other feedback on bias related to science.

Common perspectives included:

- Bias appears most often where climate change is concerned.
- There are some rare mentions of Eurocentric and/or Christian bias; however, respondents generally do not explain what that means or how to address it.

Verbatim comments:

"addressing bias in science is a positive. ..."

"They curriculum is very knowledge rich. Where is the higher order thinking? Where is the Scientific literacy? Why does the scientific knowledge include bias?"

"Please revisit the anti-science slant of this curriculum, especially that parts that refer to the way that scientists communicate with the public and with other scientists. As it is worded currently, there is a bias that suggests science and scientists are not to be trusted. This is unacceptable, political, and infuriating."

"Use best practice, use approved research and don't discuss just the European and Christian perspective"

[Truncated verbatim, first sentences shown due to extreme length] "...On the issue of climate change, the draft curriculum recycles industry talking points. It minimizes the human contribution to climate change, minimizes its consequences, and minimizes the role of industry, and especially fossil fuel industries like Alberta's, in any solution. "Fossil fuels" are not mentioned anywhere in the curriculum in the context of the environment or climate change, even though they are one of the largest contributors of greenhouse gases. ..."

"The rhetoric of responsibility for the environment that is placed on First Nations, Métis, and Inuit communities needs to be removed. While these are values held by Indigenous communities, they are not responsible for the environmental impacts and challenges that they experience. Canadian political and economic factors need to be accounted for in the discussion as well as the systemic

racism that has created these challenges. Then and only then can you begin to discuss what Indigenous groups are doing for the environment. There needs to be acute awareness that science is a Eurocentric idea. Language such as data, evidence, and scientific method are all biased. Without explicitly stating that other ways of knowing are valid and reliable sources of scientific knowledge, we continue to exclude them from science."

Other topics of interest

Verbatim feedback related to the Science curriculum was also reviewed for the following topics:

- Genetics heredity
- Digital literacy and media
- Francophone perspectives

Less than 10 responses were identified, so it is not possible to determine common themes.

Perceived inaccuracies (wave 3a and 3b feedback only):

Verbatim comments:

"Why does it say scientific methods? Why is it plural? There is one scientific method that we largely accept in our academia. This is confusing for students and somewhat incorrect. In science, when you search scientific method it is hard to find because you call it a bunch of different things. very unclear."

"There are inaccuracies evident in the draft in certain areas that can lead to misconceptions. For example: • Energy - term energy is used inconsistently, sometimes used in a scientific sense or sometimes electrical generation. • Gr. 1 - Speed is poorly explained. • Force - When force is formally introduced in grade 3 is the formal definition of Newton's first law of motion. There are real-life ways to understand force without memorizing 'laws.' • Grade 5 buoyant forces should include fluids not just liquids."

"There is too much focus on global warming, and seems one sided. There is no need for 'First Nations, Métis, and Inuit community actions that illustrate a responsibility to care for the natural world' should be in the science world. this is a ideology not a science. Where is the fact and data. Science is about process to prove a theory. I see so teachings of process. The school system is missing other areas of science, like chem, animal, people, energy. Very disappointed. The globe has been warming for 10,000 years. There use to be 2 km of ice over Alberta, if your going to teach about global warming you better go back 100's millions of years, not 50."

"... The discussion of the effects of climate change in the Grade 6 curriculum is brief and glosses over or ignores some of the most significant ones. "Extreme weather events" and "water resources" are mentioned but heatwaves, drought, expanded habitat for infectious disease vectors, floods, and sea-level rise are not. Strangely in the context of global warming (a phrase that tellingly occurs only once in the Science curriculum, immediately followed by "or cooling"), "glacier formation" is mentioned but "glacial melting" is not. "Length of growing seasons" is mentioned, a hint at positive effects in places like Alberta with short growing seasons; what is not mentioned is that the growing of crops will be severely reduced or outright ended by rising temperatures in parts of the globe with large populations that already experience food scarcity. The Grade 6 curriculum claims that "Energy resources can be managed responsibly." Just how "responsibly" they are being managed, in Alberta or anywhere else, is a subjective question that is open to debate. The draft's few details on this topic address it only in optimistic theoretical terms and ignore the actual environmental record of resource extraction, in Alberta and elsewhere. The

problem of orphan wells, to take just one example ignored in the curriculum, suggests that resources are hardly being managed responsibly in Alberta. The record of frequent First Nations opposition to resource projects is ignored. The word "Amazon" appears nowhere in the draft, despite it being the site of a deforestation crisis with global consequences. Also completely ignored is the threat of ocean acidification. The discussion of the scientific process is mostly good but understates two things: (1) the inherent uncertainty of nearly all scientific statements; (2) the lingering effects of bias despite attempts to remove them."

Perspectives on resources and implementation (wave 3a and 3b feedback only):

There were no additional perspectives on resources and implementation in feedback specific to the Science curriculum after October 1, 2021.

Phase 3: Social Studies Blueprint

A total of 719 surveys with feedback were specifically directed to the Social Studies Blueprint since December 13, 2021, with almost half of this feedback directed to specific grades.

Table 33: Surveys with feedback

	Wave 3b
n:	719
Kindergarten	33
Grade 1	54
Grade 2	74
Grade 3	46
Grade 4	34
Grade 5	27
Grade 6	55
General feedback	396

First Nations, Métis and Inuit content and History are common perceived strengths of the Blueprint.

Table 34: Top 10 "Strength" themes

	Wave 3b
n=	107
First Nations, Métis and Inuit	29
General: History	24
Age/developmental appropriateness	13
Culture	11
Diversity	10
Canadian history	9
Financial literacy	9
Community	7
Geography	6
Racism/inclusion	4

Selected verbatim feedback from Wave 3b

On First Nations, Métis and Inuit content

"Incorporating a lot of focus on the Indigenous history and stories as well as the vitality of Indigenous culture today. Sharing and celebrating Indigenous ways of knowing and culture is an integral part of moving forward to becoming a country that is open, accepting, and appreciative of all that our country and it's citizens have to offer."

"The content that is slated to be added, the learning about immigration and impact of colonization on First Nations peoples. Addition of residential school history is important."

On History

"It appears to be striving to bring lessons from history and/or other cultures to compare to present times, and trying to deeply engage children."

"Logical approach; greater emphasis on Canada's place in the world; increased Canadian history."

There are still some concerns about **Age/developmental appropriateness**, as well as suggestions for improvement around **History** and **First Nations**, **Métis and Inuit content**.

Table 35: Top 10 "Opportunity" themes

	Wave 3b
n=	250
General: History	85
Age/developmental appropriateness	68
First Nations, Métis and Inuit	56
Canadian history	40
Culture	33
Subject comprehension	31
Community	30
U.S. content	25
Religion	21
Memorization	20

Selected verbatim feedback from Wave 3b

On Age/developmental appropriateness

"The grade 1 curriculum is very broad in both content and history. Students at this age are not developmentally ready to understand the timelines, events, and details that are presented in the blueprint. There is a large focus on religion in the grade 1 blueprint and it is not a balanced approach. Students at this age are more ready for learning about their own selves and their own families. To incorporate ideas from other religions and cultures, I think it would be better suited for students at this age to focus on celebrations and traditions from a various cultures in comparison with their own celebrations and transitions. The historic details and timelines are too much for this age."

"Most of these topics are not relevant to developing learners who will need to think creatively, engage collaboratively, and understand the world they live in. The topics are also not age appropriate. The existing curriculum is actually a really great curriculum that really only needed to be tweaked or refined. The existing curriculum (even though it needed some small changes) engages students, is relevant, and prepares them to become engaged citizens. The existing curriculum also was very age appropriate. This social studies blueprint is so far off from what students really need in social studies education that it feels like we are going backwards in what we know about a sound education."

On History

"Pare it down. Too heavy and detailed in places. For example, is it necessary to go beyond the War of 1812 right through to the American Civil War and beyond? So much content to cover. Teachers are not equipped with the subject matter and students will suffer from overload and be turned off to history. Choose 3 or 4 topics only. For example: Colonial America, Revolution, War of 1812 and treatment of Indigenous people in both Canada and U.S.."

"There is no learning anywhere about anything past 1871. Learning about modern Canada is more important and relevant than learning about ancient or historical civilizations. An entire year devoted to ancient civilizations, at that grade 5 level, will not be beneficial for their future learning. A lack of any current focus on the higher elementary grades does our student a disservice and does not adequately prepare them for future learning or for playing an active role in society. Given the broad scope of the curriculum, I worry about there being too many specific knowledge outcomes and not enough deeper thinking or critical thinking outcomes. Memorizing facts is not really learning. Facts can be looked up in a matter of seconds. We need to begin teaching students to think critically about the information they read/hear and to question history, not as pure fact, but as multiple viewpoints of events throughout time."

Additional topics of interest

Francophone perspectives

At least 15 survey respondents provided specific feedback on Francophone perspectives. Common perspectives included:

- Including Francophone perspectives is generally positive.
- However, some respondents believe the Francophone-related content is excessive, and today's students may not find it relatable.

Verbatim comments:

"This is an improvement. The inclusion of Francophone and Indigenous cultures is better."

"Whitewashing history does nothing to develop emotional literacy, critical literacy, or empathy. Francophone input as well as francophone voices should also be centred. Not to forget black Albertans and Asian Albertans."

"After reading through the grades 1 - 4 curriculum, I felt there was way too much focus on First Nations and Francophones. I am from a Francophone ancestry and although it would have been nice to spend a week or so on the subject in grade five or six when I was in school, it's totally unnecessary to have it so prevalent in all the grades. Same with First Nations people it should only be in high school or even college."

"I don't know how children can relate to Learning History of New France and government of New France in grade 3. When children cannot relate to what they learn, they can profit from it."

Alberta content

At least 10 survey respondents provided specific feedback on Alberta-related content in the last wave of the survey. Common perspectives included:

- A focus on Albertan history is preferred, including perspectives related to First Nations, as well as Francophone and other settler immigrants
- Albertan content should precede Canadian content

Verbatim comments:

"I appreciate the attempt to tell Alberta history including First Nations and Francophones as well as other immigrants that came to settle Alberta."

"student should learn about where they are from first (Alberta then Canada) and then expand their knowledge to other cultures."

"Remove ALL America comparisons. Teach Canada's history/institutions or add 'Alberta' focus if you want to add to the Canada focus"

Community

At least 10 survey respondents provided specific feedback on community, primarily centered around the "me and my community" aspect of the curriculum.

The common opinion expressed suggests that early education should start from understanding your community locally, and the topic is developmentally appropriate for Kindergarten level as well as, potentially, up to Grade 2.

Verbatim comments:

"Chronological study has its place but that does not mean students should necessarily study the most ancient times in Kindergarten and grade 1. They are just starting to make sense of their world and their local community. Origins of democracy in Grade 2 and foundations of modern civilisation. Seriously? "

"The Me and My Community aspect has been taken out of Grade 1 and put into Kindergarten. I would argue that Grade 1 still needs more time to explore their community and social aspects that impact them directly."

"The Kindergarten 'time period' of me, my family, and community is age-appropriate"

Other topics of interest

Verbatim feedback related to the Social Studies Blueprint was also reviewed for the following topics:

Pluralism

Less than 10 responses were identified, so it is not possible to determine common themes.

Perceived inaccuracies (wave 3b feedback only):

"In addition, some of the other concerns that have been raised by others include: *Is developmentally inappropriate and not conducive to deep engagement with ideas and concepts *Depicts Francophone and First Nations and Métis perspectives in a limited way, and as only existing in the past *Does not respond to the Truth and Reconciliation Commission's Calls to Action with regard to teaching about Residential Schools *Includes plagiarized content *Includes multiple factual errors"

Perspectives on resources and implementation (wave 3b feedback only):

"Do not implement any of this. It is completely wrong minded and backward looking, when what students need in social studies are skills and perspectives that I've them a global outlook and viewpoints that bring people together not isolate us as Albertans who learned some trivial 1950s nostalgia curriculum because of political hacks having the reigns on the curriculum."

"I feel like the current curriculum is fine, and without major changes that I have yet to see in this draft (besides Indigenous education), there's no point in drafting a curriculum based on loose structure, similar concepts, and minor changes. There can be major improvements, and Alberta is praised for having a pretty good education system, so this draft along with all the other drafts, can be better, I'm sure of it. I was born and raised in Alberta, and I've learnt all these concepts when I was in grades K to 6, simply because educators had loose structures, which allowed them to implement similar concepts without changing a whole curriculum."

"Please do not put religion into the curriculum. Separation of church and state is a fundamental principle of the social contract. You know this will only create animosity. Either teachers will not do into great enough depth, or say something that will get misconstrued between the classroom and the home, or spend too much time talking about one religion over another and parents will get angry. Religion has no place in a secular public education curriculum. Also, forcing a financial element with each grade? Why not implement it with more thought and purpose, for instance, incorporate it in your Gr. 4 section about trade. When a topic is added in with no thought or purpose, it will most likely be glazed over or omitted. Finally - consult with educators! They know the kids and what they need and can handle at each level. I can only imagine what their reaction has been to this train-wreck of a curriculum rewrite has been. Curriculum rewriting should be a carefully thought out and well crafted endeavor, AND it should be the responsibility of a non-partisan organization that has the trust of the public (in the same way we have Elections Canada run elections)."

"I'm surprised with all the negative feedback you have received on this curriculum (I have sent 6 feedback emails alone) that you would feel confident to go ahead and immpliment this. It definitely shows your disconnect with the current teachers and what is happening with our young learners in the classroom. I hope you will reconsider the implementation of this curriculum as I will not be teaching any concepts that I feel are not age appropriate and will cause stress to my students."

"I am deeply concerned that the seven schools piloting the new Social Studies curriculum are all private schools, as recently uncovered in a FOIP request, and that one kindergarten classroom in the entire province is piloting it. Based on this information alone, all results are invalid, and it is irresponsible for this curriculum to move towards implementation."

"Rely on professionals, not an ideological mess that, if implemented, will hinder the future workforce of this province for decades."

"You can't seriously implement this curriculum in good conscience. This curriculum cannot be salvaged. You need to start again"

Appendix I: Respondent profile

The detailed tables below are included for reference, and show all response options presented in the online survey. A summary of selected demographic trends is also included in Participation: Respondent profiles.

Table 36: Surveys with feedback by respondent age

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
Age n=	32,690	23,798	7,296	513	1,083
Between 18 and 24	11%	13%	4% -9	3% -1	2% -1
Between 25 and 34	25%	27%	19% -8	17% -2	19% +2
Between 35 and 44	37%	35%	41% +6	43% +2	41% -2
Between 45 and 54	17%	15%	21% +6	21%	26% +5
Between 55 and 64	7%	6%	9% +3	10% +1	8% -2
65 or older	4%	3%	6% +3	6%	4% -2

Table 37: Surveys with feedback by respondent type

	Total	Wave 1	Wave 2		Wave	3a	Wave	3b
n=	29,511	23,753	4,178	3	497		1,083	
High school student	1%	1%	1%		0%	-1	0%	
Post-secondary student	9%	11%	3%	-8	2%	-1	2%	
Parent/guardian of school-aged (K-12) children	41%	39%	46%	+7	51%	+5	43%	-8
Employee in a K-12 school	15%	16%	12%	-4	13%	+1	19%	+6
Employee in a post-secondary institution	2%	2%	2%		1%	-1	1%	
Member of a school board	1%	1%	1%		1%		1%	
Member of a school council and/or parent association	1%	1%	2%	+1	1%	-1	2%	+1
Member of the general public	23%	22%	26%	+4	23%	-3	24%	+1
Other	7%	7%	8%	+1	7%	-1	7%	

Table 38: Surveys with feedback by respondent gender identity

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	25,511	20,607	3,604	423	877
Female	73%	74%	66% -8	67% +1	66% -1
Male	25%	24%	32% +8	33% +1	34% +1
Non-binary/third gender	1%	1%	1%	0% -1	0%
Prefer to self-identify	1%	1%	1%	0% -1	0%

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report.

Table 39: Surveys with feedback by region of residence

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	27,649	22,298	3,884	468	999
Calgary region	35%	34%	38 % +4	50% +12	38% -12
Central Alberta	11%	11%	11%	10% -1	12% +2
Edmonton region	37%	38%	33% -5	24% -9	31% +7
Northern Alberta	8%	8%	8%	5% -3	11% +6
Southern Alberta	8%	8%	9% +1	9%	9%
I do not live in Alberta	1%	1%	1%	1%	0% -1

Table 40: Surveys with feedback by respondent identity (First Nations, Métis, and Inuit)

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
Do you identify as a First Nations, Métis, and Inuit person?	= 25,771	20,853	3,585	433	900
Yes	5%	5%	4% -1	4%	6% +2
No	95%	95%	96% +1	96%	94% -2

Table 41: Surveys with feedback by respondent identity (Francophone)

		Total	Wave 1	Wave 2	Wave 3a	Wave 3b	
Do you identify as a Francophone n= person?		26,052	21,078	3,626	434	914	
Yes		4%	4%	4%	5% +1	5%	
No		96%	96%	96%	95% -1	95%	

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report.

Table 42: Surveys with feedback by respondent highest level of education

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	27,651	22,333	3,856	465	997
Between kindergarten and grade 9	0%	0%	0%	0%	0%
Some high school	1%	1%	1%	0% -1	0%
High school diploma	5%	5%	4% -1	3% -1	2% -1
Some university or college	9%	10%	6% -4	5% -1	4% -1
Certificate or diploma from college or trade school	15%	15%	16% +1	15% -1	12% -3
Bachelor's degree	46%	46%	46%	50% +4	47% -3
Master's or doctoral degree	24%	23%	27% +4	27%	35% +8

Table 43: Surveys with feedback by respondent gross household income

	Total	Wave 1	Wave 2	Wave 3a	Wave 3b
n=	20,957	16,887	2,938	379	753
Under \$20,000	3%	3%	1% -2	1%	1%
\$20,001 to just under \$40,000	5%	5%	3% -2	3%	2% -1
\$40,001 to just under \$60,000	6%	7%	5% -2	6% +1	6%
\$60,001 to just under \$80,000	10%	11%	10% -1	9% -1	8% -1
\$80,001 to just under \$100,000	16%	15%	17% +2	16% -1	16%
\$100,001 to just under \$150,000	27%	27%	29% +2	27% -2	29% +2
\$150,001 and above	33%	32%	35% +3	38% +3	39% +1

<u>Note</u>: This is a non-probability sample and as such, statistical testing is not applied. Differences are calculated using unrounded percentages, hence some numbers may differ by ± 1 when compared to calculations using the rounded percentages stated in this report.

Appendix II: Questionnaire

Page

Draft K-6 Curriculum - Public Feedback Survey

1 Thank you for your commitment to supporting education in Alberta. We appreciate your feedback on draft K-6 curriculum.

2 Confidentiality Notice

Your participation in this survey is voluntary. Please note that your responses will remain confidential. The personal information collected in this survey is collected pursuant to section 33(c) of the Freedom of Information and Protection of Privacy Act (RSA 2000, c. F-25).

How old are you? (Select one)*

17 or younger; Between 18 and 24; Between 25 and 34; Between 35 and 44; Between 45 and 54; Between 55 and 64; 65 or older; Prefer not to say

3 1. Which subject would you like to provide comments on? (Select one)*

English Language Arts and Literature; Fine Arts; French First Language and Literature; French Immersion Language Arts and Literature; Mathematics; Physical Education and Wellness; Science; [Social Studies / Social Studies Blueprint]; General feedback

2. Which grade would you like to provide comments on? (Select one)*

Kindergarten; Grade 1; Grade 2; Grade 3; Grade 4; Grade 5; Grade 6; General feedback

- 4 3. Describe what you believe are the strengths of the [draft curriculum / social studies blueprint].
 - 4. Describe what you believe are the opportunities for improvement in the [draft curriculum / social studies blueprint].
 - 5. General comments Please provide any additional feedback you believe will be helpful.

5 6. Which best describes you? (Select one)*

High school student; Post-secondary student; Parent/guardian of school-aged (K–12) children; Employee in a K–12 school; Employee in a post-secondary institution; Member of a school board; Member of a school council and/or parent association; Member of the general public; Other (Please specify)

7. What is your gender? (Select one)*

Female; Male; Non-Binary/Third Gender; Prefer not to say; Prefer to self identify (Please identify)

8. Which best describes the area of Alberta where you live? (Select one)*

Calgary region; Central Alberta; Edmonton region; Northern Alberta; Southern Alberta; Prefer not to say; I do not live in Alberta

9. Do you identify as a First Nations, Métis, and Inuit person? (Select one)*

Yes; No; Prefer not to say

10. Do you identify as a Francophone person as described in Section 23 of the Canadian Charter of Rights and Freedoms (1982) that gives Francophones who live in a minority setting the right to a primary and secondary education in their official language? (Select one)*

Yes; No; Prefer not to say

11. What is the highest level of education you have completed? (Select one)*

Between Kindergarten and Grade 9; Some high school; High school diploma; Some university or college; Certificate or diploma from college or trade school; Bachelor's degree; Master's or Doctoral degree; Prefer not to say

12. Which of the following best describes your household income before taxes or other deductions ("gross" household income)? (Select one)*

Under \$20,000; \$20,001 to just under \$40,000; \$40,001 to just under \$60,000; \$60,001 to just under \$80,000; \$80,001 to just under \$150,000; \$150,001 and above; Prefer not to say

Thank you for taking the time to complete the feedback survey on the draft K–6 curriculum. Alberta Education appreciates your contributions and insights. If you wish to provide feedback on a different subject or grade, please submit this completed survey and fill out the survey again. More information on the curriculum development process is available at https://www.alberta.ca/curriculum-development.aspx.

^{*} denotes mandatory fields.

Appendix III: Data collection and reporting periods

Analysts defined three waves of data collection and analysis to provide insight on prevalent and emerging themes. Analysts further divided data collected in Wave 3 to reflect announcements made regarding the draft curriculum on December 13, 2021.

	Feedback received	Analysis and reporting
Wave 1	March 29 - April 18, 2021	May 2021
Wave 2	April 19 - September 30, 2021	October 2021
Wave 3a	October 1 - December 12, 2021	Fohrwary 2022
Wave 3b	December 13, 2021 - February 28, 2022	February 2022

The Ministry of Education contracted Advanis, an independent market research vendor, to complete analyses and reporting in Waves 2 and 3 of this survey, including comparisons to feedback collected in Wave 1.

Measures of feedback

Since it is possible to 'submit' a survey without answering all of the questions, analysis in this report is limited to surveys that contain at least one response to the three core questions:

- Q3. Describe what you believe are the strengths of the [draft curriculum / Social Studies blueprint].
- **Q4**. Describe what you believe are the opportunities for improvement in the [draft curriculum / Social Studies blueprint].
- **Q5**. General comments Please provide any additional feedback you believe will be helpful.

Analysis includes partially completed surveys, including those where respondents have not answered (non-mandatory) demographic questions. In the table below, Advanis refers to these as "Surveys with feedback".

Where appropriate, Advanis defines analyses by the number of "Responses" received across the three core questions, or the total number of "Unique comments" that were coded.

		Total
Surveys with feedback	The number of times a survey contained any response to the three core questions posed, regardless of whether the respondent clicked "submit".	34,142
Responses	The number of answers provided to any of the three core questions asked in each survey. Respondents could answer one, two or all three questions in their submission (e.g., if a submission contains answers to all three core questions, we count this as three responses).	70,016
Unique comments	The total number of comments coded into themes, across all responses to core questions. A response to a question could contain multiple unique comments.	153,451

Appendix IV: Methods of Analysis

Data preparation

Prior to analysis, analysts removed the following information from the response set:

- Responses from participants who indicated they are under 18 years of age; and
- Personally identifiable information (email addresses and phone numbers)

Profanity was removed from responses post-analysis to allow for more accurate sentiment classification and replaced with symbols (@@@@) in the data set.

Statistical reliability

Open-link online surveys, such as the one used to collect feedback, are not a reliable way to measure public opinion. Participants are self-selected, and therefore the resulting sample is not random nor representative of the population.

Trended results (wave comparisons)

This is a non-probability sample and as such, statistical testing is not a valid measure of difference. Where appropriate, comparisons have been made between feedback collected from wave-to-wave to indicate directional shifts over time.

Ratio of strengths to opportunities

In lieu of a quantitative question to assess respondents' satisfaction with the draft curriculum, Advanis used the following calculated measure to show areas where there is a higher/lower ratio of strengths to opportunities for improvement identified.

Example:

	Unique comments	Strengths	Ratio of strengths to opportunities	Opportunities
Subject A	200	80	40%	120
Subject B	100	20	20%	80

Text Analysis

The analysis of verbatim responses to questions 3, 4, and 5 utilized a combination of manual review and machine-learning techniques to categorize response by both theme and sentiment.

Theme coding

Alberta Education provided an initial list of 34 themes, based on analysis completed by another external vendor in May 2021. Advanis and Alberta Education discussed new and emerging themes aided by manual coding of random subsets and machine learning methods:

1	Age/developmental appropriateness	32	Subject comprehension
2	Alberta content	33	Too much content
3	Back to basics	34	U.S. content
4	Canadian history	35	Wellness
5	Climate change	36	Get feedback from teachers/others
6	Common sense	37	Clarity
7		38	,
	Community Consent		Measure/assess/demonstration of learning Inaccuracies
9		39	
10	Critical thinking	40	Inclusivity
11	Culture	41	Professional development
12	Diverse topics	42	Research practices
13	Diversity	43	Resources
14	Financial literacy	44	Scaffolding
15	Francophone perspectives	45	Structure
16	General	46	Technology
17	First Nations, Métis and Inuit	47	Implementation
18	Learning disability	48	Literacy
19	Life skills	49	Numeracy
21	General: Mathematics	50	General: History
22	Measurement system	60	Mathematics: Fractions
23	Memorization	61	Wellness: Diet and nutrition
24	Music examples	62	Wellness: Body image
26	Phonics	63	Wellness: Mental health
28	Racism/inclusion	64	Wellness: Physical activity
29	Religion	65	Geography
30	General: Science	66	Dinosaurs
31	Sex education		

Identification of emerging themes

Vectorize, Cluster, Reduce Dimensions and Visualize

Advanis developed a tool that would vectorize the verbatims, cluster the vectors, reduce the dimensions of the vectors and then visualize the results. Analysts vectorized the verbatims using an untrained BERT model and then ran the verbatims through a DBSCAN (https://en.wikipedia.org/wiki/DBSCAN) to cluster them. Analysts tested different clustering algorithms but DBSCAN was most appropriate because it starts at areas of high density thereby allowing it to find the most common themes. Advanis ran the vectors through a t-SNE (t-distributed stochastic neighbor embedding) algorithm to reduce the vectors to two-dimensional space. Analysts visualized the new points and their clusters in a scatterplot.

LDA (Latent Dirichlet Allocation)

LDA is a statistical method that generates a fixed number of Bag of Words (BOWs) which can be used to infer themes across verbatims. In order to train the model, analysts convert the verbatims into BOWs and perform a number of cleaning steps to ensure words are consolidated. For example, analysts stem words to ensure words like "teach", "taught', and "teaching" will produce "teach".

Theme Matching

Advanis used two machine-learning models to classify verbatims into themes, Bidirectional Encoder Representations from Transformers (BERT) and Bag of Words (BOWs).

BERT Models

Bidirectional Encoder Representations from Transformers (BERT) models (https://towardsdatascience.com/bert-explained-state-of-the-art-language-model-for-nlp-f8b21a9b6270) are already pre-trained with millions of articles and are able to predict words that commonly appear together. An additional layer classifies text into themes, and can be trained with different data sets. Advanis implemented BERT models using two different training sets.

1. BERT model trained with wave 1 data

To classify verbatims into existing themes, analysts used the data from wave 1 to train a BERT model with an additional layer. Advanis trained a model for each core question (q3, q4 and q5) and classified each question individually.

2. BERT model trained with manually coded data

To classify verbatims into new themes, Advanis manually coded approximately 3,700 verbatims. Analysts used this data to train a BERT model with an additional layer. Advanis trained one model and used it to classify all three core questions (q3, q4 and q5).

Bag of Words (BOW)

Analysts used a Bag of Words technique to classify verbatims into themes via the following process:

- 1. Natural Language toolkits (NLTK) break a verbatim into sentences
- 2. Key words are associated with each sentence
- 3. Analysts create rules for each theme, to associate combinations of words with each theme. These rules include logic and combinations of words.

There was extensive evaluation of how well the techniques matched verbatims to themes. In the end, Advanis applied the Bag of Words technique. This was an iterative process, and required considerable time reviewing and refining the matching rules.

Sentiment coding

Analysts also tagged individual comments with a sentiment score, indicating where comments are *primarily* framed in a positive, negative, or neutral perspective.

Sentiment	Example
Positive	"Language Arts overhaul is incredible. It would be a good template to follow."
Neutral	"There needs to be a focus on Alberta and Canadian content, and not ancient history."
Negative	"Scrap it completely and start again using the advise and input from pedagogically sound sources and teachers who are in the classroom."

Advanis generated sentiment modes for two purposes:

- 1. To help identify which responses to Question 3 were mentioning strengths; and
- 2. To evaluate general sentiment in Question 5

Advanis investigated several techniques in order to classify sentiment. Rather than classifying sentiment as Positive or Negative only, analysts assigned 'Neutral' values where it was not possible to determine if the overall sentiment was positively or negatively framed (e.g., more objective observations and suggestions).

Word2Vec & K-Means Clustering

The first method operates on the assumption that negative words usually appear close together in a sentence. Analysts generated Word2Vec (https://en.wikipedia.org/wiki/Word2vec) vectors for all words in all verbatims and then ran a K-Means clustering algorithm to cluster the vectors into two clusters. This produced two lists of words, one weighted more to negative verbatims and one to positive verbatims. After manual inspection of the lists, Advanis determined that the two lists did not accurately reflect positive or negative sentiment and this method was abandoned.

VADER

VADER (Valence Aware Dictionary and sEntiment Reasoner, https://towardsdatascience.com/sentimental-analysis-using-vader-a3415fef7664) is a tool that uses a predefined list of words and pre-programmed rules to determine sentiment. Unfortunately, this method achieved poor results due to the tool lacking context.

BERT - Bidirectional Encoder Representations from Transformers

For sentiment analysis, this method combines a Bidirectional Encoder Representations from Transformers (BERT) model (https://towardsdatascience.com/bert-explained-state-of-the-art-language-model-for-nlp-f8b21a9b6270) with an additional layer. BERT models are already pre-trained with millions of articles and are able to predict words that commonly appear together. An additional layer is used to classify text as either positive or negative, and can be trained with different data sets.

Three training data sets were used to help classify sentiment.

- 1. Sentiment classified in Wave 1 analysis
- 2. Sentiment classified by manual coding of a subset of data
- 3. Sentiment classified by a large publicly available data set

The third model (public dataset) performed better than other models, but only with a 78% accuracy score. To improve the accuracy score beyond 90%, a Bag of Words technique was used to overwrite the model for records that matched certain combinations of words.

Displaying verbatim responses in this report

Throughout the report, Advanis analysts selected verbatim responses to illustrate sentiment or themes found in the feedback.

In sections with subject-specific feedback, to reduce the length of this document, analysts selected and displayed relevant verbatims in this report according to the following guidelines:

- Analysts prioritized feedback from Waves 3a and 3b for this report over that from Waves 1 and 2
 of the survey
- Analysts generally limited verbatim responses to no more than 3-5 responses per theme
 - Advanis may have used more than five responses to sufficiently illustrate the themes found in respondent feedback. This was particularly the case for themes where respondent opinions appeared more polarized
- Responses were truncated, indicated by a "..." in the beginning and the end of the response:
 - When a truncated version of the response still conveyed the message of the original, analysts truncated responses to 3 sentences
 - Responses of extreme length (over 1,000 words) are marked with "[Truncated verbatim, first sentences shown due to extreme length]"
- French-speaking analysts translated French responses to English and marked them with "[Translated from French]"
- Analysts rounded counts of responses matching a certain theme to the lowest nearest five
 - For example, if analysts identified 39 responses matching a certain theme within subjectspecific feedback, they rounded the response count to 35