

SPRING 2017 CURRICULUM SURVEY

SUMMARY OF RESULTS

Prepared by
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Alberta Education



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Introduction and Methodology

From May to June 2017, Albertans were invited to participate in the 2017 Provincial Kindergarten to Grade 12 Curriculum Survey. Participants were asked to provide feedback on the nature and purpose of each subject, what students will learn (scope), and when they will learn it (sequence).

This report is based on feedback on the draft subject introduction and draft scope and sequence for the following twelve Kindergarten to Grade 12 (K–12) subjects:

- Arts Education (Art, Dance, Drama, Music)
- English Language Arts
- French Language Arts (French Immersion)
- Français (Francophone)
- Mathematics
- Science
- Social Studies
- Wellness Education (High School Life Planning)
- Wellness Education (Health and Physical Education)

For each subject, respondents were invited to complete a two-part survey in either English or French. For Part A, respondents were asked to agree or disagree with a series of statements regarding what students will learn and when they will learn it in each of these subjects (Part A – Scope and Sequence) and then were given an opportunity to provide open-ended feedback on the subject. For Part B, respondents were asked to agree or disagree with three statements regarding the draft subject introduction and were given an opportunity to provide open-ended feedback on this introduction. As well, in Part B respondents were asked to agree

or disagree with a series of statements regarding the draft scope and sequence. They were also invited to provide open-ended comments on what they liked about the draft scope and sequence, as well as offer open-ended feedback on what could be improved. Respondents had the option to answer the entire survey, certain sections or specific questions. Respondents were able to respond to as many subjects as they chose. Therefore, the sample sizes and results reflect the feedback of those who responded to each question.

This survey was available in two formats: an online survey, which was available on the Alberta Education website, and a paper survey that could be submitted via fax, email or regular mail. Further opportunities for Albertans to participate in the survey were made available through the Alberta Regional Professional Development Consortia (ARPDC), which hosted regional face-to-face conversations to help people respond to the survey.

Responses were received from 9,692 respondents who were residents of Alberta, or the Northwest Territories or Nunavut; who identified themselves as an educator, student, parent or member of the public; and who completed at least one closedended or one open-ended response. There were also instances where a respondent from an Accredited International School was included in the dataset, despite being out of province.

The detailed specifics of what students will learn will be part of the learning outcomes, which is the next step in curriculum development process.

Note: The draft subject introductions and draft scope and sequence provided the high-level overview of what students will learn and when they will learn it.

The following is a breakdown of the number of participants within each category who completed the online survey: K–12 teacher/educator/administrator (5,085), parent/guardian (2,875), member of the public (617), K–12 student (426), post-secondary student (166), post-secondary educator/professor (179), education stakeholder organization (187), other (non-specific) (148), and those affiliated with an accredited international school (9).

This survey was a non-scientific exercise to gather public feedback. Because the survey was open to the general public via self-selection, the sample cannot be considered random or representative of Albertans, and a margin of error is not reported.

Alberta Education contracted Environics Research to analyze the results of the survey. Environics used text analytics to analyze the large volume of openended survey responses for this consultation. Text analytics involves the use of automated algorithms to count and sort words used in qualitative responses. These techniques assist in identifying themes when analyzing a large volume of

unstructured survey responses. The text analytics application used for this project was KH Coder. The output from KH Coder assists the analyst in summarizing themes and displaying results as data visualizations. These outputs were reviewed by analysts to gain an understanding of the themes and trends that emerge from the data, which were then used to develop this summary.

Subject-Specific Feedback

Arts Education – Art

Respondents agreed the draft Art scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- promote learning where students explore multiple perspectives (84% agreed)
- allow students to develop greater depth in the study of the subject (83% agreed)
- provide students with the necessary core, fundamental and basic subject skills (82% agreed)
- promote learning that is equitable, inclusive and accessible (81%)
- enable opportunities for students to think critically, reason and problem solve (80%)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (76% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (75%).

Those respondents who provided additional feedback regarding what students will learn in Arts Education – Art expressed a general appreciation for art as a subject, viewing it as providing students with a method to express themselves creatively. Some respondents felt there is not enough focus on developing fundamental skills or increasing understanding of the elements and principles of art and, as a result, they suggested more inclusion of the practical application and creation of art. Responses were mixed, with some respondents liking the focus on social justice with art, while others feeling this was better suited to social studies classes. There were also suggestions that more specialized art teachers teach the subject and that there be sufficient budget to ensure adequate

access to the supplies and resources students require for Art.

A majority of those who reviewed the draft Arts Education – Art subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of art for students (82% agreed)
- describes the importance of art for society in general (79% agreed)
- outlines what students will learn in art (75% agreed).

Respondents who provided additional feedback regarding the introduction expressed appreciation for the focus on multiple perspectives, but felt this should be broadened to reflect Canada's wider diverse and multicultural population. They felt there should be a more defined reasoning as to "why" Art is important, and also felt there should be more focus on the specific things students will learn, including skills and techniques.

Overall, those respondents who read the Kindergarten to Grade 12 Arts Education – Art scope and sequence document agreed it would likely promote learning where students:

- create, connect or respond to art (75% agreed)
- explore art as a creative way to express ideas, thoughts or emotions (75% agreed)
- strengthen personal and cultural identity through experiences in art (74% agreed)
- explore multiple perspectives (71% agreed)
- build relationships through experiences in art (70% agreed)
- enhance their well-being through experiences in art (69% agreed),
- develop art vocabulary (65% agreed)
- develop art skills and techniques (62% agreed).

Most also felt that the scope and sequence presents a learning progression consistent with the development of art (61% agreed) and that it is appropriate for students from Kindergarten to Grade 12 (61% agreed).

Respondents who provided additional feedback regarding strengths of the scope and sequence document liked how the Guiding Questions are sufficiently broad to allow for flexibility, exploration and choice for students to learn. They also appreciated how the Essential Understandings offer a good framework. They indicated that the inclusion of cultural integration is positive to the subject and students' learnings. However, some felt skills and learnings could be more clearly defined, especially so that generalists can teach the subject effectively.

Respondents who suggested modifications to the scope and sequence suggested putting greater emphasis on skills development, elements and principles, as well as development and creation of art itself. They also suggested more art vocabulary should be included throughout the draft scope and sequence, and some recommended specifying which types of media should be used at each grade level.

Arts Education – Dance

Respondents agreed that the draft Dance scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- allow students to develop greater depth in the study of the subject (77% agreed)
- provide students with the necessary core, fundamental and basic subject skills (76% agreed)
- promote learning where students explore multiple perspectives (75% agreed)
- promote learning that is equitable, inclusive and accessible (69% agreed)

- enable opportunities for students to think critically, reason and problem solve (68% agreed)
- enable opportunities for skills development, such as literacy, numeracy, social, computer and practical life skills (68% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (64%).

Those respondents who provided additional feedback about what students will learn in Arts Education – Dance appreciated the perceived range of benefits to students who take Dance as a subject, such as self-expression, movement, coordination. They felt including Dance as a subject is beneficial. Some respondents expressed concerns about Dance as a school subject and the possibility it could take time away from the teaching of other "core" subjects. Respondents also expressed a desire to have Dance teachers who had experience in teaching dance.

A majority of those who reviewed the draft Arts Education – Dance subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of Dance for students (80% agreed)
- outlines what students will learn in Dance (77% agreed)
- describes the importance of Dance for society in general (75%).

Respondents who provided additional feedback on the draft subject introduction expressed concerns about the logistics of teaching Dance and getting the teachers who will be required to do this. They expressed concerns about the need for a greater emphasis on the importance of Dance and that the description should be enhanced to indicate what specific things students will learn in Dance.

Overall, respondents who read the Kindergarten to Grade 12 Arts Education – Dance scope and

sequence document agreed it would likely promote learning where students:

- create, connect or respond to dance (74% agreed)
- explore dance as a creative way to express ideas, thoughts or emotions (74% agreed)
- explore multiple perspectives (71% agreed)
- strengthen personal and cultural identity through experiences in dance (71% agreed)
- build relationships through experiences in dance (70% agreed)
- enhance well-being through experiences in dance (69% agreed)
- develop dance skills and techniques (67% agreed)
- develop dance vocabulary (66% agreed).

Most also felt that the scope and sequence presents a learning progression consistent with the development of dance (64% agreed) and that the scope and sequence is appropriate for students from Kindergarten to Grade 12 (62% agreed).

Respondents who provided additional feedback regarding strengths of the scope and sequence reacted positively to building sequences throughout grades and also took this opportunity to reiterate previously expressed thoughts regarding the need for teachers to have specific expertise in teaching this subject.

Those who suggested modifications to the scope and sequence proposed having a well-rounded range of dance types/genres included in the draft scope and sequence. They also suggested that the health and wellness benefits of Dance be explicitly indicated and explained in this document, and that the scope and sequence would benefit from additional clarification regarding the specific outcomes and techniques that students will learn.

Arts Education – Drama

Respondents agreed that the draft Drama scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- allow students to develop greater depth in the study of the subject (84% agreed)
- provide students with the necessary core, fundamental and basic subject skills (83% agreed)
- promote learning where students explore multiple perspectives (82% agreed)
- enable opportunities for students to think critically, reason and problem solve (81% agreed)
- promote learning that is equitable, inclusive and accessible (78% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (76% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (74% agreed).

Those respondents who provided additional feedback on what students will learn in Arts Education - Drama largely felt that Drama helps students develop skills such as collaboration, communication, presentation skills, public speaking, confidence and socialization. They also felt that Drama improves students' life skills. Others, however, questioned whether Drama was really a necessary school subject. Respondents also suggested that more specific and tangible outcomes and expectations regarding Drama be included in the document, so that these objectives are clear to educators, parents and the public. They said it would be beneficial for the draft scope and sequence to incorporate more technical aspects of theatre (such as lighting, costuming and set design) earlier in the draft scope and sequence so students

can develop a deeper understanding of this aspect of the subject.

A majority of those who reviewed the draft Arts Education – Drama subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of drama for students (79% agreed)
- describes the importance of drama for society in general (76% agreed)
- outlines what students will learn in drama (75% agreed).

Respondents who provided additional feedback regarding the draft subject introduction suggested that it include more specific outcomes and descriptions of the draft scope and sequence, and they also expressed a desire for more emphasis on the importance of Drama as a subject.

Overall, respondents who read the Kindergarten to Grade 12 Arts Education – Drama scope and sequence document agreed it would likely promote learning where students:

- create, connect or respond to drama (76% agreed)
- explore drama as a creative way to express ideas, thoughts or emotions (76% agreed)
- build relationships through experiences in drama (76% agreed)
- strengthen personal and cultural identity through experiences in drama (71% agreed)
- explore multiple perspectives (69% agreed)
- develop drama vocabulary (69% agreed)
- develop drama skills and techniques (68% agreed)
- enhance well-being through experiences in drama (68% agreed).

Most also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of drama

(69% agreed) and that is appropriate for students from Kindergarten to Grade 12 (67% agreed).

Respondents who provided additional feedback on the perceived strengths of the scope and sequence felt that the Guiding Questions are helpful for understanding the draft scope and sequence, but suggested including more specific items that students will learn, including vocabulary, skills and techniques.

Respondents who suggested modifications to the scope and sequence proposed developing a fourth Essential Understanding for Drama, because some of the other Arts subjects include four items. They offered a variety of viewpoints regarding the need to balance inclusiveness and learning from different perspectives, while at the same time showing respect for individuals and their own belief systems and backgrounds. They also reiterated how Drama can improve the development of students' skills and knowledge in a range of other subject areas.

Arts Education – Music

Respondents agreed that the draft Music scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (87% agreed)
- develop greater depth in the study of the subject (84% agreed)
- promote learning where students explore multiple perspectives (81% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (80% agreed)
- promote learning that is equitable, inclusive and accessible (79% agreed)
- enable opportunities for students to think critically, reason and problem solve (76% agreed)

 prepare students to be successful in further studies, in the workplace and in their communities (74% agreed).

Those respondents who provided additional feedback on what students will learn in Arts Education – Music expressed support for the role music plays in children's education and development, and indicated learning music supports knowledge and skill development in other subjects. There were questions as to whether reading music and learning to play instruments was part of the scope of the draft scope and sequence. Respondents also felt the Music draft scope and sequence is too broad or vague, and needed to emphasize teaching specific musical skills, techniques and concepts; that music specialists will be required to teach the subject effectively; and that generalist teachers will require specialized training and instruction to be able to teach the subject. Respondents also felt that, while they see value to the emotional and creative focus of the draft scope and sequence, they would like to see more focus on the fundamentals of Music education. It was also felt that social justice was not an appropriate lens through which to view Music and therefore did not belong in the Music draft scope and sequence.

A majority of those who reviewed the draft Arts Education – Music subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of music for students (82% agreed)
- describes the importance of music for society in general (82% agreed)
- outlines what students will learn in music (78% agreed).

Respondents who provided additional feedback regarding the draft subject introduction suggested that the importance and value of Music education should be better explained/emphasized and that the introduction is too vague in terms of explaining specifically what students will learn in Music.

Overall, respondents who read the Kindergarten to Grade 12 Arts Education – Music scope and sequence document agreed it would likely promote learning where students:

- create, connect or respond to music (78% agreed)
- explore music as a creative way to express ideas, thoughts or emotions (77% agreed)
- build relationships through experiences in music (74% agreed)
- enhance well-being through experiences in music (72% agreed)
- strengthen personal and cultural identity through experiences in music (69% agreed)
- explore multiple perspectives (69% agreed)
- develop music vocabulary (68% agreed)
- develop music skills/techniques (66% agreed).

Most also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of music (63% agreed) and that is appropriate for students from Kindergarten to Grade 12 (63% agreed).

Respondents who provided additional feedback on the perceived strengths of the scope and sequence felt it was well-organized, and they were generally in favour of the Guiding Questions. They also liked how the sequences build upon skills between grade levels.

Respondents who suggested modifications to the scope and sequence said that more specific skills and concepts need to be identified and outlined at each grade level and proposed that some Guiding Questions be re-assigned to more appropriate grade levels.

English Language Arts

Respondents agreed that the draft English Language Arts scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (86% agreed)
- enable opportunities for students to think critically, reason and problem solve (85% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (85% agreed)
- develop greater depth in the study of the subject (84% agreed)
- promote learning where students explore multiple perspectives (84% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (79% agreed)
- promote learning that is equitable, inclusive and accessible (78% agreed).

Respondents provided additional feedback regarding what students will learn in English Language Arts. Respondents generally liked the continuity and sequencing of the scope and sequence. There were respondents who felt that the scope and sequence is too vague or broad, and that adjustments need to be made to specify what students will learn at each grade level. Respondents felt that incorporating specific learning objectives would ensure consistency between teachers across the province. There were also respondents who felt that there should be a stronger emphasis on basic skills and fundamentals including reading, writing, spelling, grammar, comprehension and communication.

A majority of those who reviewed the draft English Language Arts subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of English language arts for students (86% agreed)
- describes the importance of English language arts for society in general (84% agreed)

• outlines what students will learn in English language arts (80% agreed).

Respondents provided additional feedback regarding the introduction. Respondents offered general support for the layout and content, while others felt it was too wordy and vague and should specify outcomes and activities more clearly. There were also respondents who indicated that writing skills (e.g., those related to creative and essay writing) should be a core component of the introduction. Finally, there were respondents who appreciated the cultural integration and focus on First Nations, Métis and Inuit and Francophone subject matter, but were concerned that a wider scope is missing. Others felt that Canada's full multicultural and diverse population and heritage is being overlooked in the draft subject introduction.

Overall, those respondents who read the Kindergarten to Grade 12 English Language Arts scope and sequence document agreed it would likely promote learning where students:

- create and make meaning of texts (77% agreed)
- communicate for a variety of purposes with a variety of audiences (74% agreed)
- explore multiple perspectives (74% agreed)
- evaluate and use information appropriately (74% agreed)
- develop their oral communication skills (72% agreed)
- develop the necessary basic skills to support literacy (72% agreed)
- develop their written communication skills (72% agreed).

Most also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of English Language Arts (71% agreed) and that is appropriate for students from Kindergarten to Grade 12 (66% agreed).

Respondents provided additional feedback regarding strengths of the scope and sequence document. Respondents liked the sequencing and continuity of the scope and sequence through the grade levels. They felt the scope and sequence was well-organized and comprehensive. Other respondents reiterated the need to ensure that students obtain basic reading and writing skills.

Respondents also suggested modifications to the scope and sequence, indicating a lack of understanding about the purpose of the scope and sequence. Suggested modifications included the addition of specific, explicit learning outcomes for each grade level so that teachers can understand expectations and know what is required to be taught. Respondents felt the current structure leaves too much room for interpretation and would create variation across teachers, schools and the province. Others reiterated a need to focus on basic skills and fundamentals to ensure students have a solid foundation. There were respondents who commented that including more user-friendly terms in this document would make it easier to interpret and less complex, particularly for those who are not educators. Others felt it would be helpful to include labels to clarify Guiding Questions for easier interpretation (e.g., text, literacy, language, form).

Français (Francophone)

Respondents agreed that the draft Français (Francophone) scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (78% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (77% agreed)
- allow students to develop greater depth in the study of the subject (75% agreed)

- prepare students to be successful in further studies, in the workplace and in their communities (74% agreed)
- promote learning where students explore multiple perspectives (73% agreed)
- enable opportunities for students to think critically, reason and problem solve (72% agreed)
- promote learning that is equitable, inclusive and accessible (70% agreed).

Respondents provided additional feedback regarding what students will learn in Français. Respondents may not have understood that Français is a First Language program specifically intended for Francophone students enrolled in a Francophone school governed by a Francophone Regional authority only. Instead, they may have mistakenly understood it as a French Immersion Second Language program of studies offered as an alternative program in many schools across Alberta. Therefore, to varying degrees, respondents commented that Français, as one of Canada's official languages, should be available for any student to learn, while others did not feel it is necessary for Alberta students to learn the language. Other respondents expressed a need to simplify the program and to focus on core language skills so that students can master the basics. Others felt that all schools should have a strong Français program available for students who wish to pursue the language. There were respondents who felt that the course loads appear to be too dense and that there will not be enough time for educators to teach the essentials. There were respondents who felt that there are not enough bilingual teachers currently available to teach Français and that this is preventing students from learning the language well.

A majority of those who reviewed the draft Français (Francophone) subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of Français for students (80% agreed)
- outlines what students will learn in Français (79% agreed)
- describes the importance of Français for society in general (79% agreed).

Respondents provided additional feedback regarding the introduction. There were respondents who felt it was too vague and should be re-worked to be more specific. Others wanted to see more clarity regarding what Francophone culture specifically entails.

Overall, those respondents who read the Kindergarten to Grade 12 Français (Francophone) scope and sequence document agreed it would likely promote learning where students:

- develop their oral communication skills (74% agreed)
- develop the necessary basic skills to support literacy (73% agreed)
- develop their written communication skills (71% agreed)
- create and make meaning of texts (71% agreed)
- communicate for a variety of purposes with a variety of audiences (68% agreed)
- develop their cultural identity through the French language (68% agreed)
- evaluate and use information appropriately (65% agreed)
- explore multiple perspectives (60% agreed).

Respondents also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of Français (Francophone) (66% agreed) and that is appropriate for students from Kindergarten to Grade 12 (65% agreed).

Respondents provided additional feedback regarding strengths of the scope and sequence document. The key theme to emerge was that

respondents felt that the scope and sequence was thorough and that there was a logical sequencing of skills or progress between grade levels.

Respondents also suggested modifications to the scope and sequence, including making it more concise and precise by providing examples of concepts and outcomes, as they felt that there is currently too much room for interpretation by teachers. Other respondents felt that the course load should be reduced for students in early years.

French Language Arts (French Immersion)

Respondents agreed that the draft French Language Arts (French Immersion) scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (81% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (80% agreed)
- enable opportunities for students to think critically, reason and problem solve (79% agreed)
- promote learning where students explore multiple perspectives (78% agreed)
- allow students to develop greater depth in the study of the subject (78% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (75% agreed)
- promote learning that is equitable, inclusive and accessible (75% agreed).

Respondents provided additional feedback regarding what students will learn in French Language Arts. There was mixed feedback regarding the availability of French Immersion as an alternative program for students across Alberta,

with some respondents who felt that French Immersion should be widely available, while expressing less support for this. Other respondents touched on the importance of students learning the required skills each year to be adequately prepared for the following year. Respondents mentioned that students require the necessary resources and focus in order to learn French at an adequate level and to build a continued desire to pursue the subject. There were parents who indicated it will be necessary to include the scope and sequence content in English for those who cannot read French.

A majority of those who reviewed the French Language Arts (French Immersion) subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of French Language Arts for students (83% agreed)
- describes the importance of French Language Arts for society in general (79% agreed)
- outlines what students will learn in French Language Arts (71% agreed).

Respondents provided additional feedback regarding the introduction. There were respondents who liked the focus on bilingualism, rather than just learning French as a language. Respondents felt that the introduction should be clearer and more succinct to identify the purpose of the subject, often because they felt there was too much technical language and use of jargon. Others mentioned a need to provide students with varying needs with access to resources and additional help to learn the language.

Overall, those respondents who read the Kindergarten to Grade 12 French Language Arts scope and sequence document agreed it would likely promote learning where students:

- explore multiple perspectives (72% agreed)
- create and make meaning of texts (71% agreed)

- develop their written communication skills (71% agreed)
- communicate for a variety of purposes with a variety of audiences (70% agreed)
- develop the necessary basic skills to support literacy (69% agreed)
- develop their cultural identity as speakers of Canada's two official languages (68% agreed)
- evaluate and use information appropriately (68% agreed)
- develop their oral communication skills (67% agreed).

A majority also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of French as a second language in a French Immersion context (60% agreed) and that is appropriate for students from Kindergarten to Grade 12 (56% agreed).

Respondents provided additional feedback regarding strengths of the scope and sequence document. Respondents liked its progression and felt it was laid out logically. Others said it was easy to navigate the document and content.

Respondents also suggested modifications to the scope and sequence, including (to varying degrees) more specific outcomes being required, while others said there are currently too many specific concepts and procedures that will deter students from being able to master the language. Some respondents said there is a great deal (or too much) content to be learned at each grade level and that this should be scaled back. There were respondents who said the development of oral language skills should be emphasized. There was support for having components of the scope and sequence better align with components in the English Language Arts scope and sequence.

Mathematics

Respondents agreed that the draft Mathematics scope and sequence is likely to accomplish all seven objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (87% agreed)
- enable opportunities for students to think critically, reason and problem solve (86% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (85% agreed)
- allow students to develop greater depth in the study of the subject (81% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (79% agreed)
- promote learning that is equitable, inclusive and accessible (72% agreed)
- promote learning where students explore multiple perspectives (72% agreed).

Of respondents who provided additional feedback regarding what students will learn in Mathematics, many put a focus on teaching "basic" mathematics skills at the early years to ensure a solid foundation of knowledge, but were split between "traditional" methods involving memorization and teaching mathematics without relying on rote learning techniques. There were suggestions that recent pedagogical approaches have made it challenging for students to learn core skills and knowledge, and for parents to understand what their children are being taught. Problem solving was also perceived to be an essential component, regarded as helping students learn to think critically and apply math skills to real-world situations. There were suggestions to teach financial literacy, perceived as a critical skill, and that students should learn more about other consumer financial issues.

A majority of those who reviewed the draft Mathematics subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of mathematics for students (85% agreed)
- describes the importance of mathematics for society in general (83% agreed)
- outlines what students will learn in mathematics (79% agreed).

Of those respondents who provided additional feedback regarding the introduction, some expressed varying degrees of concern about how diverse cultural perspectives will be incorporated, while others expressed the view that mathematics does not require this type of cross-cultural approach. There were also suggestions that the introduction does not provide enough information about the specific topics covered within the scope and sequence and that these need to be described in more detail.

Overall, those respondents who read the Kindergarten to Grade 12 Mathematics scope and sequence document agreed it would likely promote learning where students:

- develop reasoning needed to apply addition, subtraction, multiplication and division, including number facts (79% agreed)
- develop and apply algebraic reasoning (77% agreed)
- develop and apply spatial reasoning (76% agreed)
- apply mathematical understandings to solve problems in a variety of meaningful contexts (74% agreed)
- develop mathematical understandings that support financial literacy (71% agreed)
- develop mathematical understandings that support computational thinking and coding (67% agreed)
- explore multiple perspectives (61% agreed).

Most felt that the scope and sequence presents a learning progression consistent with the development of mathematics (74% agreed) and that is appropriate for students from Kindergarten to Grade 12 (69% agreed).

Additional feedback was provided regarding strengths of the scope and sequence document. Respondents supported the fact that essential skills such as coding and financial literacy have been included in the scope and sequence, and others supported what they described as a strong focus on logic and reasoning. The scope and sequence was described as laid out logically and showing how students will build skills and knowledge based upon what they have learned previously.

Of those respondents who suggested modifications to the scope and sequence, some wanted more emphasis on teaching "math facts" throughout primary school, and others wanted additional focus on algebraic skills throughout junior and senior high. Some placed a great deal of emphasis on teaching the "basics" of math in primary school. Some respondents advocated for better streaming of mathematics students in junior high, with others indicating that the skills that all students may require should be taught to all students.

Science

Respondents agreed that the draft Science scope and sequence is likely to accomplish all seven of the listed objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (89% agreed)
- enable opportunities for students to think critically, reason and problem solve (88% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (86% agreed)
- allow students to develop greater depth in the study of the subject (84% agreed)

- prepare students to be successful in further studies, in the workplace and in their communities (81% agreed)
- promote learning where students explore multiple perspectives (77% agreed)
- promote learning that is equitable, inclusive and accessible (75% agreed).

Of those respondents who provided additional feedback, some stressed the importance of strong numeracy skills to succeed, aligning closely with corresponding skills taught in mathematics. Respondents expressed a desire for a crossdisciplinary approach, particularly with mathematics but also subjects such as social studies. Respondents felt that problem solving and critical thinking are essential to teach, and responses differed regarding the incorporation of multiple perspectives. Some felt that scientific education reflects the biases of its culture and that other perspectives should be explored, while others felt that the only approach should be using a universal scientific method of developing and testing hypotheses. Some felt that the draft scope and sequence is disjointed and that there are gaps in some components being taught to students at different grade levels. Others suggested that the draft science scope and sequence in middle years and early high school should remain broad. Some commented this approach means later grades become very "content heavy." Some respondents felt that there is not enough emphasis on scientific fields that have increased in importance recently, including computer science and life sciences.

A majority of those who reviewed the draft Science subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of science for students (84% agreed)
- describes the importance of science for society in general (82% agreed)
- outlines what students will learn in science (76% agreed).

Of those who provided additional feedback regarding the introduction, some felt that it is too vague and does not provide a thorough understanding of what specifically students will learn. They commented that it may not be that helpful to educators, or clear and concise enough for parents and students to understand what will be taught. Some questioned how Francophone and First Nations, Métis and Inuit perspectives would fit with science specifically. Although there was more understanding around First Nations, Métis and Inuit perspectives related to traditional knowledge, they wondered how Francophone perspectives differ. They indicated that the introduction should discuss the importance of the scientific method, with some stressing this must be at the heart of all science education, and others saying students need to learn about the flaws and limitations of this approach.

Overall, respondents who read the Kindergarten to Grade 12 Science scope and sequence document agreed it will likely promote learning where students:

- learn about the life sciences such as biology and ecology (83% agreed)
- develop and learn about science processes such as applying scientific methods (81% agreed)
- develop and learn about the earth and space sciences such as climatology and astronomy (81% agreed)
- learn about the physical sciences such as chemistry and physics (80% agreed)
- learn about the relationships among the nature of science, technology, society and the environment (78% agreed)
- explore multiple perspectives (68% agreed).

Most felt that the scope and sequence presents a learning progression consistent with the development of science (72% agreed) and that is appropriate for students from Kindergarten to Grade 12 (68% agreed).

Respondents provided additional feedback regarding strengths of the scope and sequence. They supported the Essential Understandings and Guiding Questions, particularly the repetition across grades, and regarded it as strengthening students' understanding of scientific subject matter. Some were concerned about the amount of content included at some grade levels, particularly grades 7 and 8 and later in high school. To varying degrees, there was support for subject matter organization based on Life, Physical and Earth Sciences. However, some felt there should be more "streaming" of subjects in early high school so what students learn better aligns with the academic/vocational path students are most likely to take. There was support for the way skills and knowledge are integrated, as this was perceived to highlight their importance.

Respondents also suggested some modifications to the scope and sequence. Some felt that the amount of subject matter to be covered in early years should be reduced. Some wanted to include more emphasis on computer science, particularly on concepts related to emerging technologies such as artificial intelligence. Respondents wanted more opportunities to learn critical thinking. Differing views were expressed between those wishing to teach an objective set of "facts" and those wishing to have multiple perspectives incorporated. Some took issue with the use of *skepticism* and felt another term should be used to express learning about the scientific method and testing hypotheses.

Social Studies

Respondents agreed that the draft Social Studies scope and sequence is likely to accomplish all seven objectives. They felt it would:

- enable opportunities for students to think critically, reason and problem solve (82% agreed)
- provide students with the necessary core, fundamental and basic subject skills (82% agreed)

- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (82% agreed)
- promote learning where students explore multiple perspectives (80% agreed)
- allow students to develop greater depth in the study of the subject (79%)
- prepare students to be successful in further studies, in the workplace and in their communities (75%)
- promote learning that is equitable, inclusive and accessible (75%).

The social studies draft scope and sequence garnered a higher number of strongly held views compared to other subjects. There were respondents who felt students must learn about their responsibilities as citizens so they develop a stronger degree of social consciousness, whereas others expressed concerns about fostering a certain worldview among students. Respondents felt that it is critical for Alberta students as they progress through school to learn about the histories, perspectives and experiences of First Nations, Métis and Inuit people. Others felt additional and repeated emphasis on this topic will come at the expense of students learning about global history and current events in other parts of the world.

A majority of those who reviewed the draft Social Studies subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of social studies for students (83% agreed)
- describes the importance of social studies for society in general (81% agreed)
- outlines what students will learn in social studies (79% agreed).

Additional feedback regarding the draft subject introduction focused mainly on the central role of First Nations, Métis and Inuit history and perspectives in the draft social studies scope and sequence. Respondents supported the emphasis on

the subject by noting it aligns with Calls to Action by the Truth and Reconciliation Commission (TRC). Some respondents want to ensure that students learn sufficiently about global history, geography and the historical experiences of other Canadian ethnocultural groups.

Those who read the Kindergarten to Grade 12 Social Studies scope and sequence document agreed it will likely promote learning where students:

- develop knowledge, understandings and skills that allow them to be responsible contributors to their communities (74% agreed)
- develop understandings of diverse and multiple perspectives on topics and issues (71% agreed)
- explore multiple perspectives (68% agreed)
- develop knowledge, understandings and skills associated with the disciplines of Social Studies (e.g., history, geography, political science) (68% agreed)
- develop knowledge, understandings and skills in relevant and meaningful contexts (e.g., local, Canadian, global, historical) (67% agreed).

Respondents also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of social studies (68% agreed) and that is appropriate for students from Kindergarten to Grade 12 (62% agreed).

Additional feedback on the strengths of the scope and sequence included mixed views on the description of "active citizenship," with some liking the idea of helping students become more engaged residents of their communities, and others concerned this approach will "indoctrinate" students towards developing a particular worldview.

Suggested modifications to the scope and sequence included broadening the scope of social studies to include global history/issues and geography, and to focus less specifically on Canadian history.

Respondents also indicated that some of the

knowledge and skills to be developed are vague and do not always clearly connect with Essential Understandings and Guiding Questions. Other respondents felt that the proposed possible concepts and procedures for early years students (particularly Kindergarten and Grade 1) are not ageappropriate and will be too abstract for students at this age.

Wellness Education – High School Life Planning

Respondents agreed that the draft Wellness Education – High School Life Planning scope and sequence document is likely to accomplish all seven objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (80% agreed)
- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (79% agreed)
- enable opportunities for students to think critically, reason and problem solve (79% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (78% agreed)
- allow students to develop greater depth in the study of the subject (75% agreed)
- promote learning that is equitable, inclusive and accessible (72% agreed)
- promote learning where students explore multiple perspectives (71% agreed).

Respondents also provided additional feedback regarding what students will learn in Wellness Education – High School Life Planning. There were those who stressed that this subject should teach students about the "real world" and "basic life skills." Others mentioned various topics they feel are important to include, such as: personal financial

management, career preparation, home and auto repair, community involvement, stress management, finding a home and cooking skills, among others. As well, there were respondents who felt that the subject should be executed to a high standard so it is regarded as a valuable and credible subject that imparts critical information.

A majority of those who reviewed the draft Wellness Education – High School Life Planning subject introduction agreed it accomplished its three listed objectives:

- outlines what students will learn in High School Life Planning (77% agreed)
- describes the importance of High School Life Planning for students (76% agreed)
- describes the importance of High School Life Planning for society in general (76% agreed).

When asked to provide feedback on the introduction, respondents reiterated the need to teach students "life skills," with a greater emphasis on, and more in-depth coverage of, financial literacy.

Respondents who read the Wellness Education – High School Life Planning scope and sequence document agreed that it is likely to promote learning where students:

- explore career development at the high school level (83% agreed)
- plan for transitions to further studies or the workplace (78% agreed)
- develop understandings about financial wellbeing (77% agreed)
- contribute to their communities in meaningful ways (75% agreed)
- explore multiple perspectives (66% agreed).

Most also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of High School Life Planning (74% agreed) and that is appropriate for high school students (76% agreed).

Additional feedback regarding strengths of the scope and sequence included respondents indicating that this document represents an improvement over what exists currently, with others saying it is more practical in the specific things students will learn and that it includes relevant and applicable topics for life after high school.

Some suggested modifications to the scope and sequence included respondents reiterating the need to teach students "life skills" and others urging that it focus on other topics beyond financial and career planning. There were respondents who said that the subject should include content on healthy relationships and relationship building. Other respondents were unsure of the grade level at which the subject would be offered, the length of the course, and whether it is a mandatory subject.

Wellness Education – Health and Physical Education

Respondents who reviewed the draft Kindergarten to Grade 12 Wellness Education – Health and Physical Education scope and sequence document agreed that it is likely to accomplish all seven objectives. They felt it would:

- provide students with the necessary core, fundamental and basic subject skills (87% agreed)
- allow students to develop greater depth in the study of the subject (81% agreed)
- enable opportunities for students to think critically, reason and problem solve (80% agreed)
- prepare students to be successful in further studies, in the workplace and in their communities (80% agreed)

- enable opportunities for skills development such as literacy, numeracy, social, computer and practical life skills (80% agreed)
- promote learning that is equitable, inclusive and accessible (76% agreed)
- promote learning where students explore multiple perspectives (75% agreed).

Respondents provided a range of additional feedback regarding what students will learn in Wellness Education – Health and Physical Education. There were those who liked that this subject would have a strong focus on the various components of health and wellness. There were respondents who were pleased with the inclusion of mental health, with some advocating that this topic should be expanded to earlier grades, or that more time should be spent on it. Others, however, expressed concern that this subject is limiting the amount of time spent on physical education. There was a wide range of views provided on the topic of sexual education and gender identity(ies), with respondents supporting the inclusion of these topics and others expressing concerns about whether specific topics will be age-appropriate. There were also respondents who felt that some sensitive topics should not be compulsory components of the draft scope and sequence, or that it should be possible for parents to be wellinformed about what is taught so they can decide to have their children opt in or out when these topics are discussed.

A majority of those who reviewed the draft Wellness Education – Health and Physical Education subject introduction agreed it accomplished its three listed objectives. They felt it:

- describes the importance of health and physical education for students (85% agreed)
- describes the importance of health and physical education for society in general (83% agreed)
- outlines what students will learn in health and physical education (82% agreed).

Respondents generally supported the draft subject introduction, with positive feedback offered regarding the "5 Dimensions of Wellness." There were also those who felt that there should be more emphasis on physical education in order to keep children active and healthy.

Those who read the Kindergarten to Grade 12 Wellness Education – Health and Physical Education scope and sequence document agreed it is likely to promote learning where students:

- lead a healthy active lifestyle (83% agreed)
- develop an understanding of social and emotional well-being (81% agreed)
- prepare to contribute to their communities in meaningful ways (76% agreed)
- explore multiple perspectives (69% agreed)
- establish and maintain healthy relationships over their lifespan such as age-appropriate human sexual education (68% agreed).

Respondents also felt that the scope and sequence presents a learning progression (order of learning across grades) consistent with the development of

Health and Physical Education (75% agreed) and that is appropriate for students from Kindergarten to Grade 12 (69% agreed).

Feedback regarding the strengths of the scope and sequence was generally positive. Respondents expressed a great appreciation for the scope and sequence's focus on overall health as it relates to students' development. There were those who liked that a variety of topics and activities are included throughout the scope, and others supported the overall order of the sequence.

When asked to suggest modifications to the scope and sequence, there were respondents who recommended placing a greater emphasis on physical education and activity so children remain physically active. Some respondents felt that the Guiding Questions could be introduced in earlier years, and some felt there were Guiding Questions that could be re-organized to be better aligned with each grade. As well, there was a wide range of viewpoints expressed regarding sexual education, particularly with respect to which topics are included and to what extent parents have a say over how their children are introduced to these topics.