



**St. Albert**  
PUBLIC SCHOOLS

# DRAFT CURRICULUM REVIEW 2021

## Introduction

The Curricular Services team reviewed each of the five core subject areas in the 2021 draft curricula. The team analyzed each subject using the originally released documents to determine:

- To what extent is the content age- and developmentally-appropriate for every learner?
- To what extent do the Knowledge and the Skills and Procedures support the development of the conceptual understandings of the discipline?
- To what extent do the verbs (what students are being asked to do) represent a range of activities and cognitive levels?
- To what extent is there a logical scope and sequence and scaffolded complexity between grade levels?

This document represents an overview of the analysis. In the fall, Curricular Services will bring together committees of division teachers to provide a more detailed, grade by grade review with the intention of using the information to provide feedback to Alberta Education and to plan for implementation.

## Elements of the draft curriculum that support student learning

Computational thinking has been added more explicitly to the draft curriculum. This is an excellent addition, particularly in that it is structured to be approached as low tech and with technology, which provides appropriate scaffolding opportunities for the skill development.

The English Language Arts curriculum provides a logical progression between grades in phonological awareness and phonics, particularly in the primary grades.

## Elements of the draft curriculum that are concerning

### **Lack of subject introduction**

The subject introductions in the current draft curriculum lay the foundation for the importance of the subject matter, as well as the essential skills and processes for each discipline. It is in the subject introductions that bridge discipline expertise and teaching and learning. The subject introductions provide valuable information for teachers with considerations for instruction and assessment, as well as connections to other subject areas. The draft curriculum subject introductions have been stripped to the bare essence and are remarkably similar, regardless of the subject.

The lack of subject introductions also allow inaccurate representations of the research base to emerge in the learning outcomes. For example, in English and French Immersion Language Arts and Literature curricula, oral language is used to represent speeches and presentations. However, oral language is an important element in the development of literacy, and encompasses the skills and strategies of speaking and listening. Oral language is multi-faceted and students use oral language to construct meaning and communicate information. The nuances and complexities, as well as the importance of oral language, are not captured in the learning outcomes or the subject introduction.

The French Immersion Language Arts and Literature curriculum draws heavily on the English Language Arts and Literature curriculum. This is problematic in that there is very little that addresses the unique challenges of learning an additional language in an immersive context. There are cursory references to the importance of blending language learning and cultures from various local, national and international Francophone communities. As such, subject introduction does little to marry the “how” and “why” of French Immersion with the “what” of curriculum.

In the mathematics curriculum, the learning outcomes focus almost exclusively on teaching students standard algorithms. Standard algorithms have a role to play in the development of mathematical understanding, but if standard algorithms are used to the exclusion of developing a deep understanding of number sense, students will not be able to think flexibly. With the emphasis on standard algorithms in the learning outcomes, the mathematical processes that underpin the discipline are not captured. Without the mathematical process evident, the spiralling of concepts that connect learning outcomes across the grades is limited.

The richness of discipline specific information is missing and as a result, the fundamental underpinnings of each subject have been lost. More robust, meaningful subject introductions need to be developed.

### **Lack of spiralling scope and sequence and disconnected knowledge**

In conjunction with the lack of spiralling scope and sequence, the draft curriculum provides students with a series of experiences that are not connected. As students encounter new knowledge, they need to be able to relate it to their own experiences and to their previous learning. When there are not clear connections between previous, current and future learning, opportunities for students to transfer their understanding of the larger conceptual organizing structures of learning are lost. As we examine the draft curriculum, we notice that in Grade 2 Social Studies, students tackle Ancient Greece and Rome, the Middle Ages, and the origins of ancient civilizations, among other topics. In Grade 3, emphasis in Social Studies has switched to colonization in North America, with an emphasis on New France. The Science curriculum is structured as a series of topics to be studied but without the explicit interconnections that help students learn to think in a scientific manner. In Grade 2 Social Studies students are asked to use pie charts to find information; pie charts are not included in Grade 2 math (or anywhere in the K-6 math curriculum explicitly). Part of a strong numeracy program shows students that their mathematical learning can be applied to different contexts. This is a lost opportunity to build a rich numeracy curriculum.

French Immersion is a well-documented and internationally recognized program where students typically spend the majority of their day attending to curricular outcomes of all core subjects and other electives in French. In this draft, French Immersion is only mentioned in relation to language and literature, which does not serve to identify this course as a part of the immersion program as a whole. It is also clear that the developers did not take into account the most recent research on additional language frameworks such as the Common European Framework of Reference (CEFR) or the American Council of Teachers of Foreign Languages' (ACTFL) Performance Descriptors for Language Learners. This lack of attention to the nature of the French Immersion program and subsequent pedagogy will create a disconnect for both teachers and learners.

### **Taxonomical Limitations: an overabundance of low-level verbs**

Curriculum is often regarded as a teacher's document, however it really belongs to the students. Learning outcomes are structured to be what students will know and be able to do, and until students demonstrate their knowledge and understanding, it remains an unfulfilled document. Given that knowing and doing are central to the curriculum, the verbs of the learning outcomes are of the utmost importance. Optimally, the verbs of a curriculum will represent outcomes of knowledge and comprehension, application, and analysis, synthesis and evaluation. Students of all ages can engage with all levels of cognitive processes, from low-level knowledge to sophisticated evaluation, in an age-appropriate manner. Indeed, to become critical and flexible thinkers, students need to work at a variety of cognitive levels.

The verbs of the draft curriculum are overwhelmingly low-level verbs. In the five core subjects (ELAL, FILAL, Math, Science and Social Studies) students are asked to identify, describe and explain, which are all at the knowledge and comprehension levels. Students are rarely asked to apply their knowledge, or analyze and evaluate it. Indeed, students are more often asked to analyze and evaluate in the math curriculum, than they are in the social studies curriculum. Currently, Alberta's curricular documents

have a healthy mix of all levels of cognition, and from Kindergarten onwards, students are expected to acquire knowledge, apply it, and think deeply about it.

Embedded within the Alberta curriculum is a series of competencies for students that are intended to traverse their entire education, including critical thinking, problem solving, cultural and global citizenship, managing information, creativity and innovation, communication, collaboration, and personal growth and wellbeing. These are sophisticated expectations for students and often involve abstract and complex skills. If students do not have the opportunity to engage with high-level thinking skills such as analysis, evaluation and justification, they will not be able to bring the competencies to life in their academic work, or more importantly, in their lives as citizens. It is imperative that students be able to use their higher-level reasoning skills throughout their educational career.

### **Misalignment among components**

The verbs of the learning outcomes not only drive student engagement in their learning, they are also crucial factors in instruction and assessment. The verbs used by the curriculum developers will guide how teachers structure learning experiences for students, and the extent to which teachers can assess that learning outcome. For example, in Grade 1 English Language Arts and Literature students are asked to “discuss ways that information can be organized to support learning”. In this instance, teachers will highlight ways that information can be organized and have a discussion with students about times when they might use different organizational structures. The way this outcome is structured, students are not asked to use any of the organizational structures in the curriculum document. The verb creates an appropriate boundary for how students are expected to engage with this particular learning. The challenge comes when the verbs are ambiguous, such as explore, experience and consider. These verbs are experiential, situations where teachers create opportunities for students to explore, experience and consider. However, they do not lead to observable behaviours that can be assessed.

This becomes even more complicated when the learning outcomes ask students to demonstrate learning that is not aligned to the verbs. For example, in the Grade 4 Social Studies draft curriculum, the learning outcome states: “Ask a question: Was the takeover of Rupert’s Land a good deal for the Canadian government?”. The question has been asked for the students by curriculum, and the question itself does not lend itself to further questions. Further, the question being asked with this particular outcome is a low-level yes/no question. This type of misalignment is evident throughout all subjects and will make teaching and assessing appropriately challenging.

### **Inappropriate age progressions**

The strength of the current curriculum is a well-developed, spiralling curriculum that introduces knowledge and skills at a certain grade when it is age appropriate, and then students encounter increasingly sophisticated iterations of the skills as they progress. This allows students to continually practice using the knowledge and skills as they move along the learning continuum. This also provides opportunities for students who are not ready for a particular skill or bit of knowledge to encounter it again, when it is more appropriate for their personal learning journey. This also models the learning process, where a learner goes from surface understanding, to deeper understanding, and finally to a place where they are able to transfer their understanding to new or novel situations.

The draft curriculum does not take age-appropriateness of skill development or content into consideration. In the K-6 math curriculum, many outcomes have been pushed into younger grades, and students are being asked to tackle more abstract concepts at an earlier age, without appropriate scaffolding. In Grade 2 math, students are introduced to Pascal’s triangle, which is abstract algebraic thinking. The curriculum documents do not provide appropriate scaffolding or pre-learning for this concept. In the current curriculum, students practice increasingly complex patterning concepts, then move onto learning about pre-algebraic thinking and then finally are introduced to algebraic thinking.

In English Language Arts and Literature, specific authors and genres are mandated in the learning outcomes. As a result, in Grades 3 and 4, students will be reading Shakespearean sonnets and epic poems by Homer, with challenging language and abstract, nuanced themes.

### **Lack of diversity and representation**

A curriculum should represent the students and communities that engage with the curriculum. The draft curriculum lacks diversity and the representation that exists is tokenistic. Many Indigenous stakeholders have expressed their dismay at the oftentimes inaccurate and generalized portrayal of Indigenous Albertans. In addition, less than 10% of historical figures listed in the draft are women, and even fewer are women of colour. These are only a few examples of the imbalanced knowledge and understandings presented in this draft document. In addition, diversity in ethnicity, socio-economics, religion, sexual orientation and ability are lacking from the draft curriculum.

Throughout the English Language Arts and Literature and Social Studies curricula references are made to “great works” and “great cultural achievements”. However, the specific learning outcomes related to these references are focused on Western, European, male, and often centuries-old representations of perceived greatness. Notions of what is significant is not explored and no explanation is provided as to why something might be considered “great”.

The lack of diversity represented in the draft curriculum will make it challenging to attend to our commitment to the Calls to Action, our work with SOGI (Sexual Orientation and Gender Identity) and anti-racism. A balanced representation of history, experiences and perspectives is necessary within any curriculum documents.

### **Misinformation and Errors**

There are numerous errors and misinformation contained in the draft document. These range from blatant historical inaccuracies, linguistic errors and inconsistencies in listed Knowledge and Understanding categories.

### **Tasks are labelled as skills**

Curriculum is intended to be the learning outcomes of what students should know and be able to do. The role of teachers is to translate the learning outcomes into instructional experiences, opportunities for students to practice using the knowledge and skills, and to assess those learning outcomes based on their students’ needs. Pedagogy, which involves decisions about how learning outcomes are taught and assessed, has no place in curriculum. Pedagogical matter has been embedded throughout the draft curriculum in the language arts and Social Studies, ostensibly labelled as Skills and Procedures. However, these skills and procedures are actually not skills but are test questions, assignments or students tasks. Some examples include:

#### **Grade 2 Social Studies**

Draw a diagram illustrating democracy in ancient Athens.

#### **Grade 2 Social Studies**

Draw a sketch of a barter exchange in the Silk Trade with China.

#### **Grade 4 Social Studies**

Practice shopping at a supermarket and the grocery store. Make up a shopping list, set a limit for spending, and then purchase items. How wise have you been in making your decisions?

#### **Grade 5 ELA**

Recite a poem from memory, showing evidence of voice modulation.

#### **Grade 6 ELA**

Identify the message shared in 3-5 great speeches to persuade or engage an audience.

These skills and procedures need to be more general so that they can be transferred to other situations. For example, the learning outcomes could be re-written as: use voice modulation strategies to communicate meaning to an audience.

## Implications

The draft curriculum documents do not provide a foundation for educational professionals to meet the Teaching Quality Standard, Leadership Quality Standard or Superintendent Quality Standard. Teachers and leaders will not be able to appropriately honour cultural diversity and promote intercultural understanding, as the draft curriculum does not provide learning outcomes to support culturally-appropriate learning opportunities. Teachers and leaders will not be able to assess the full range of understanding with the emphasis on a knowledge-based curriculum that looks to assess what is easy to observe, not what is important to the learning process. Teachers and leaders will not be able to establish inclusive learning environments as diversity is not celebrated within this curriculum. Additionally, teachers and leaders will struggle to meet the needs of students with a lock step curriculum that does not provide teachers with the flexibility and professional judgement to provide differentiated, scaffolded learning experiences.

### RECOMMENDATION

St. Albert Public Schools recommends that Alberta Education pauses the pilot and rewrites significant portions of the draft curriculum to meet the needs of students.

