The goal of the A•S•K (Applying Skills and Knowledge) is to provide educators with a comprehensive profile of achievement in relation to English Language Arts standards, and a host of personal, thinking and communication competencies. The A•S•K is an engaging and thoughtful way to gain a snapshot of independent achievement – at three points during the year: early fall, mid-year and at year-end. Through the A•S•K educators use the A•S•K Skills & Competencies Continua to assess learning in relation to standards set for learners of a similar age. These continua were derived from the B.C. Performance Standards (1998), and the Early Literacy Continuums for Reading and Viewing (2009). The one-page documents have become invaluable tools for guiding planning, teaching and the communication of achievement. With an eye on the standards & competencies, teachers use the information to personalize, differentiate and extend learning.

The A•S•K-3to5 Skills & Competencies Continuum: descriptors for one category of achievement

<table>
<thead>
<tr>
<th>Reading &amp; Responding</th>
<th>Independently applying with minimal support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activating Knowledge and Making Connections</strong></td>
<td>Uses prior knowledge to make logical connections to the key ideas and/or important information from the prompts, task or text (pictures and words).</td>
</tr>
<tr>
<td><strong>Generating Questions</strong></td>
<td>Generates logical questions that are clearly connected to the ideas, and information in the prompts, task or text.</td>
</tr>
<tr>
<td><strong>Justifying</strong></td>
<td>Offers clearly developed justification with examples and reasons.</td>
</tr>
<tr>
<td><strong>Predicting and Inferring</strong></td>
<td>Uses prompt information (pictures and words) and prior knowledge to make logical predictions and inferences about story events and characters, or about what might unfold given the topic, task and prompt information.</td>
</tr>
<tr>
<td><strong>Justifying</strong></td>
<td>Explanation includes detail and description.</td>
</tr>
<tr>
<td><strong>Imaging</strong></td>
<td>Generates images that demonstrate an accurate and complete understanding of the text.</td>
</tr>
<tr>
<td><strong>Idea development</strong></td>
<td>Ideas are logical and demonstrate a deeper understanding of the text.</td>
</tr>
<tr>
<td><strong>Synthesis</strong></td>
<td><strong>Caption/Tagline:</strong> 5-7 words</td>
</tr>
<tr>
<td><strong>Captions/Taglines:</strong></td>
<td><strong>Keyword summary statement generated after reading a chunk of text</strong></td>
</tr>
<tr>
<td><strong>Justifying</strong></td>
<td><strong>Caption/Tagline</strong> captures an overarching or key idea by combining two or more details.</td>
</tr>
<tr>
<td><strong>Understanding the Big Idea</strong></td>
<td><strong>Caption/Tagline</strong> represents an accurate and complete understanding of the text. Includes some important ideas and descriptive details.</td>
</tr>
<tr>
<td><strong>Summarizing</strong></td>
<td>Captures most key ideas.</td>
</tr>
<tr>
<td><strong>Interpreting the Big Idea</strong></td>
<td>Explains ‘first... next... then finally’ for the entire text.</td>
</tr>
<tr>
<td><strong>Justifying</strong></td>
<td>Goes beyond literal to deeper meaning.</td>
</tr>
<tr>
<td><strong>Responding to Text</strong></td>
<td>Offers justification with clear, logical connections, to the text, own ideas and/or other selections, with examples and details.</td>
</tr>
<tr>
<td><strong>Justifying</strong></td>
<td><strong>Caption/Tagline</strong> captures an overarching or key idea by combining two or more details.</td>
</tr>
<tr>
<td><strong>Goal-setting</strong></td>
<td>Effectively personalizes language from the text to create a caption/tagline.</td>
</tr>
<tr>
<td><strong>for reading and responding</strong></td>
<td><strong>For reading and responding</strong></td>
</tr>
<tr>
<td><strong>self-regulating</strong></td>
<td>Uses class generated criteria and self-knowledge to identify personally relevant stretch goal/s for reading and responding.</td>
</tr>
<tr>
<td><strong>Reflecting on Reading and Responding</strong></td>
<td>Monitors and adjusts focus to achieve goal/s.</td>
</tr>
<tr>
<td><strong>Goal-setting</strong></td>
<td><strong>Reflecting on reading and responding</strong></td>
</tr>
<tr>
<td><strong>for reading and responding</strong></td>
<td>Uses class generated criteria and self-knowledge to identify detailed evidence of meeting stretch goal/s for reading and responding.</td>
</tr>
<tr>
<td><strong>Self-regulating</strong></td>
<td>Identifies relevant new goal for reading and responding; explains why the stretch goal is personally appropriate.</td>
</tr>
</tbody>
</table>
The A•S•K Assessment includes:

- **Protocols** for conducting a baseline assessment in late September/early October, after learners have settled into routines (October for K & 1), a mid-year assessment in mid-February, and a year-end assessment in late May/early June.
- **Student response sheets**
- **Texts** that meet Ministry requirements for assessment (Gr.3-9; K-2 use published levelled texts)
- **Prompt sheets** that streamline preparation
- An A•S•K Skills & Competencies Continuum for each grade
- A Class Summary Sheet and a Class Trends Sheet for tracking achievement by skill or competency

The A•S•K process reflects the principles for classroom assessment:

- Classroom assessment provides information to support personalization of learning, to improve learning, and to communicate with parents.
- Classroom assessment happens in an ongoing fashion and should be seamlessly intertwined with instruction. Assessment is designed to give timely feedback.
- Classroom assessments should be based on clear criteria and examples so that students know what is expected.
- Students should be part of the assessment process and involved in setting criteria, setting their own learning goals and designing demonstrations.
- Classroom assessment should include a wide variety of opportunities for students to demonstrate their learning.
- Performance tasks should be substantial and get at deeper learning and understanding.
- Support materials developed for classroom assessment should provide teachers with a good understanding of how skills or processes develop (to make clear what “is next”).
- Classroom assessment is not an event. Assessment is a natural outflow of the instruction-assessment-evaluation-learning cycle.
- Assessment is tied to learning, not behaviours. It is important to separate out unrelated elements from the learning standards (excerpt from: *Transforming Assessment*, Ministry of Education, 2014)

Standing on the Shoulders of Research

The A•S•K has had over five years of development and field-testing through action research cycles in B.C. and Alberta (2009-2014), and was included in the study of *SmartLearning* (2012-2013). The study involved educators from seven B.C., and one Alberta district. Through the classroom-based work with hundreds of educators, we have come to understand so much more about assessing standards and competencies and about using assessment to advance learning. We see assessment as learning for everyone concerned.

The A•S•K enables the teacher to assess achievement in relation to the reading and responding, thinking and communication competencies - across the curriculum.

The A•S•K assessment has been designed to structure engagement with text in ways that activate and stimulate networks of thinking – critical, creative, and reflective – before, during and after reading/viewing. Metacognitive strategies are built into the process; learners set, monitor and reflect on learning goals as the work unfolds. Through the interactions learners are meaningfully involved in the assessment.

Some features of the A•S•K:

- **Learners are invited to read and respond to open-ended tasks that get at ‘deeper meaning and understanding’ in the text**. Critical literacy goes beyond understanding literacy as a set of skills or practices (Ontario Curriculum, 2009).
  
  In critical literacy readers explicitly analyze the author’s message (Pearson, 2001, in McLaughlin and DeVoogd, 2004).

- **The steps in the process have been designed to guide learners to show their most developed thinking and understanding.** The teacher-talk in each protocol is an example of language teachers might use to scaffold thinking, and to stimulate the widest and deepest responses to text.
During the A•S•K assessment learners are invited to use icons to set personal goals before applying their skills and competencies. The icons invite learners to tailor their focus and adjust their goals to the skills and competencies at hand. As they gather information in different ways, and reflect on the effects of their choices, the work guides them to be mindful of the skills they are using, and how their ideas, connections, questions and predictions change as they gain new information. The overall reading goal of gathering what is important to remember stays the same. Through the work, learners show their skill with self-awareness, self-management, reflective thinking, and metacognition strategies – all important competences.

Icons K/1 and early grade 2 learners use for setting personal goals

Icons grade 2 (mid-year) to grade 9 learners use for setting personal s-t-r-e-t-c-h goals

BASIC versions of the A•S•K have been developed for grades 3-9. In the BASIC versions learners are eased into using the icons for goal-setting, monitoring and reflecting on learning.

The A•S•K process is meant to be flexible and thoughtful. Teachers are encouraged to adjust the process and the timing, to suit their students' needs. Teacher judgment guides the work.

The teacher-talk in the protocol is an example of language a teacher might use. Teachers are encouraged to personalize the wording with language their learners are comfortable with.

The A•S•K Skills & Competencies Continuum has become a powerful tool for guiding, personalizing and differentiating daily work, and for conducting 1:1 coaching conferences with students. The continuum shows the teacher where the learners are in relation to skills and competencies, and shows what to focus on next, to advance the learning. Information from the A•S•K, coupled with daily work, provides teachers with specific information for planning and teaching, discussing achievement with co-workers, and for discussing and communicating achievement with parents or guardians.

The Class Summary has become an invaluable tool for planning. People interested in looking for standards and competency-specific patterns in achievement also find the Class Trends Sheets invaluable.

Notes
1 https://curriculum.gov.bc.ca/curriculum
2 http://www.bced.gov.bc.ca/core_competencies
3 http://education.alberta.ca/departmenpolicy/standards/goals.aspx; info@erlc.ca; http://tiny.cc/05767w
4 www.bced.gov.ca/perf_stands/reading
6 https://curriculum.gov.bc.ca/assessment
7 www.corestandards.org
A few research findings underpinning the A•S•K process:

- **Assessment for learning will be central within the redesigned curriculum and assessment framework.** Assessment is ongoing and inseparable from the instructional, assessment and learning cycle... personalization lends itself to assessment as learning, student involvement in setting criteria and the design of inquiries (B.C. Ministry of Education, 2013).

- An attention to setting challenging learning intentions, being clear about what success means, and an attention to learning strategies for developing conceptual understanding works best for inspiring learning (Hattie, 2012).

- When a task or problems are presented at higher levels of abstraction, learning can be integrated into larger schemas that enhance memory, learning and cognitive flexibility (Cozolino, 2013; Anderson et al, 1996, in Cozolino, 2013; Biederman & Shiffrar, 1987; Klahr & Carver, 1988; Mayer et al., 1996; Novick & Holyoak, 1991).

- There are several doorways to flow... when we tackle a task that challenges our abilities to the maximum – a ‘just-manageable’ demand on our skills… a keen focus jump-starts flow. This optimal brain state for getting work done is marked by a greater neural harmony... (Esterman et al, 2012).

- For us to pay attention to something for any amount of time the image must be varied... when something is novel; we notice different things about it (Langer, 1997).

- Neuroscientists have concluded that mental operations … are carried out by circuits, networks of related neuron groups… Many networks of neurons are firing, much like a network of telephones simultaneously ringing… when the activity breaks into our attention process… we become aware of it… we are hardwired to enjoy knowledge, in particular knowledge that comes through the senses. And we are hardwired to impose structure on this sensory knowledge, to turn it this way and that, to view it from different angles, and try to fit it into multiple neural frameworks. This is the essence of human learning (Levitin, 2014).

- An interesting finding is that positive emotions are correlated to two things: (a) planning and goal-setting... and (b) achieving planned goals (Hattie & Yates, 2013).

- When students learn to understand their own brains, they are equipped to take responsibility for their own learning. (Siegel, 2013, Dweck, 2006; Winne, 2011).

- Functional MRIs revealed that information retained in working memory activated the prefrontal lobe significantly more if a task included both visual-spatial and verbal activities than if it involved only one or the other (D’Esposito et al, 1995, in Hardiman, 2005).

- Learning involves developing sufficient surface knowledge – an idea or ideas – to form conceptual understanding – by relating ideas and extending ideas. A reader’s mind typically wanders anywhere from 20 to 40 percent of the time while perusing a text… the more wandering, the worse the comprehension (Smallwood, 2011).

- As we read our mind constructs a mental model that lets us make sense of what we are reading and connects it to the universe of such models we already hold that bear on the same topic. When we read a book, our brain constructs a network of pathways that embodies that set of ideas and experiences… Deep thinking demands sustaining a focused mind (Hattie & Yates, 2013).

- A spectacular consequence of the brain’s incessant and dynamic mapping is the mind. The mapped patterns constitute what we have come to know as sights, sounds, touches, smells, tastes, pains, pleasures… in brief, images… Minds are a subtle, flowing, combination of actual images and recalled images… in ever-changing proportions (Bergen, 2012).

- We humans are hardwired to enjoy knowledge, in particular knowledge that comes through the senses. And we are hardwired to impose structure on this sensory knowledge... this is the essence of human learning (Levitin, 2014).
• Given that visual, semantic, sensory, motor, and emotional neural networks all contain their own memory systems, multichannel learning increases the likelihood of both storage and recall (Posner, 1988, 1990; Schacter, 1992).

• By using drawing as a comprehension tool we slow down and allow all students to use their mental constructs to help them develop images of the passage. Drawing may be what allows them to image text (Pressley, 2006; Bell, 1991; Manitone and Smead, 2003; Siegel, 2007).

• Generating a keyword gist (5-7 words) has the power to bump reading comprehension by 50% (OECD, 2010).

• A powerful form of elaboration is to discover a visual image for new material... showing understanding graphically and through key words promotes the learning of concepts and interrelationships... reflection adds layers to learning and strengthening skills... (Brown, Roediger & McDaniel, 2014).

• Deliberate practice is an important term. This is the type of practice that is consciously devoted to the improvement of a skill, as distinct from the exercise of that skill (Hattie & Yates, 2013).

• It is thought that the brain replays daily experiences during sleep to consolidate them into long-term memory systems, (Schacter, 1996, in Hardiman, 2005).

• Meaningful use of information develops conceptual frameworks that become part of long-term memory systems (Hardiman, 2005).

• A cross-curricular competency is an interrelated set of attitudes, skills and knowledge that are drawn upon and applied to a particular context for successful learning and living. They are developed by every student, in every grade and across every subject/discipline area: know how to learn, identify and solve complex problems, manage information, innovate, create opportunities, apply multiple literacies, demonstrate good communication skills and the ability to work cooperatively with others, demonstrate global and cultural understanding, identify and apply career and life skills (Alberta Education, 2013).

References
Http://education.alberta.ca/department/policy/standards/goals.aspx
Alberta Education Curriculum Redesign Http://education.alberta.ca/department/ipr/curriculum.aspx
Common Core State Standards For English Languag Arts & Literacy in History/Social Studies, Science, and Technical Subjects www.corestandards.org


