

CALGARY BOARD OF EDUCATION
REASONABLE INTERPRETATION FOR ENDS 2: *ACADEMIC SUCCESS*

The Calgary Board of Education Ends 2: *Academic Success* states:

Each student will possess the knowledge, skills and attitudes required for academic success and be effectively prepared for life, work and further learning.

Accordingly each student will meet or exceed provincial grade-level standards of achievement in the following areas, with priority attention being focused on the attainment of literacy and numeracy skills:

1. Language Arts
 - (a) Read for information, understanding and enjoyment.
 - (b) Write and speak clearly, accurately and appropriately for the context.
 - (c) Understand and appreciate literature.
 - (d) Have the opportunity to learn languages other than English, and to attain second language levels of proficiency and cultural awareness to prepare them for participation in the global environment.
2. Mathematics
 - (a) Understand and use knowledge of mathematics to solve problems in business, science and daily life.
3. Science
 - (a) Understand the physical world, ecology, and the diversity of life.
 - (b) Understand the scientific method, the nature of science and technology, and their application to daily life.
4. Social Studies
 - (a) Know the history and geography of Alberta and Canada and have a general understanding of world history and geography.
 - (b) Understand Canada's political, legal, economic and social systems within a global context.
5. Arts
 - (a) Understand and appreciate the arts and the creative process.
6. Information Technologies

Understand and demonstrate competence in using information technologies.

In examining what determines academic success, it is natural to think of intellectual growth. But in a broader sense, for a student to achieve academic success we must build a context for learning in which individuals can develop their intellectual, social and emotional potentials. In a positive learning context, each of these potentials can be explored and developed, with students gaining critical character traits to support the acquisition of skills, knowledge and attitudes enabling them to contribute to the greater community. In addition to producing good citizens, an effective learning climate will serve to develop the whole student; providing a foundation for each student to reach personal highest potential. In turn, each student is provided with opportunities to prepare for life, work and future learning successfully – the goal of Ends 2: *Academic Success*.

Striving for academic success must include opportunities for students to personalize their learning. No longer is it acceptable to take a “cookie-cutter” approach to education by having all students learning the same material at the same time. There is a growing conviction that with the rapidity of change, the relentless advance of technology and the far-reaching effects of globalization, students must develop skills in how to find and use knowledge; making connections between their learnings and their world. Perhaps the best thing students can learn is how to learn.¹ This conviction could serve as the cornerstone for personalization. Educators must take into account each student’s strengths and areas for growth, in all areas of development. This approach is evidenced, within the Calgary Board of Education, through the interconnectedness between and among the qualities demonstrated by the five Ends statements created by the Board of Trustees.

Just as we examine the development of the whole student in light of the interconnectedness between all of the five Ends, we must look at a student’s academic learning across curricular boundaries. Although many school timetables are organized by subject area, students do not simply “learn math” for an hour and then switch to “learn science” for the next hour. In reality, the Program of Studies for each curriculum area is not an entity unto itself, as each one is related to others in a myriad of ways. For instance, it would be difficult for a student to complete many science experiments without the literacy skills to read directions, math skills requiring measurement, and a basic understanding of the scientific process. Focusing on the interdisciplinary nature of learning helps students see essential connections between bodies of knowledge and their own lives.

Language, in particular, is difficult to examine in isolation from other learnings. As well as being a defining feature of culture, language is essential for forming interpersonal relationships, extending experiences, reflecting on thought and action, contributing to society and building community. The ability to use language effectively enhances student opportunities to experience personal satisfaction and to become responsible and contributing citizens and lifelong learners.

Each of the policy provisions developed for Ends 2: *Academic Success* is a key component of the whole of a student’s learning. Although each may be monitored and

¹ <http://www.campaign-for-learning.org.uk/cfl/learninginschools/121/5rs.asp>

evaluated as a seemingly separate subject areas in relative isolation from one another, it is important to remember that none stand alone. The Chief Superintendent believes that the strength of academic success is built upon the synergy created from the interplay amongst all areas of learning in addition to the relevance of that learning to a student's life outside the formal learning environment, and as such, has formed this definition of Ends 2 without separately addressing individual subject matter policy provisions.

Much of the current educational research focused on how to best serve our students now and in the future refers to relevance in learning. Place-based learning,² inquiry-based learning,³ and Universal Design for Learning⁴ all are pedagogical practices or philosophical approaches⁵ that support the integration of curriculum in building relevance for increased student understandings. When students are presented with real world problems drawing on multiple forms of expertise, they will be less likely to ask “Why do I need to know this?”⁶

Relevancies in learning, built in part through cross-curricular connections, are key to increased student engagement in the learning process. The evolution of schools towards a more integrated curriculum is supported by the Coalition of Essential Schools (CES)⁷. CES believes a school's goals should be simple: “Each student should master a limited number of essential skills and areas of knowledge. While these skills and areas will, to varying degrees, reflect the traditional academic disciplines, the program's design should be shaped by the intellectual and imaginative powers and competencies that the students need, rather than by ‘subjects’ as conventionally defined. The aphorism ‘less is more’ should dominate: curricular decisions should be guided by the aim of thorough student mastery and achievement rather than by an effort to merely cover content.”⁸

In a personalized learning environment, educators structure activities to help students make connections between their formal learning and their lives outside of the learning environment. As students recognize the relevance in their learning they are lifted to higher levels of learning engagement. By engaging deeply in the learning process students develop greater confidence in their own abilities, achieve higher levels of skill development, moving towards greater learning autonomy – all of which lead to an increased desire for life-long learning and improved opportunities for academic success.

² <http://www.placebasedlearning.co.uk/philosophy.asp>

³ <http://www.galileo.org/>

⁴ <http://www.udlcenter.org/aboutudl>

⁵ Developing curriculum intent to provide multiple opportunities for students to engage in intellectually challenging and real-world learning experiences

⁶ According to researchers Ackerman and Perkins, interdisciplinary work can increase student motivation and, thus, enhance learning. These interdisciplinary themes have practical value, too, according to Ackerman, in helping students develop the “flexible thinking” they need to be effective in their personal, civic, and professional lives.

Ackerman, D. and Perkins, D. *Integrating Thinking and Learning Skills Across the Curriculum*, in Jacobs, H.H. (1989)

⁷ The Coalition of Essential Schools (CES) is a network of schools, organizations, and individuals whose mandate is to lead the movement to transform public education.

⁸ http://www.essentialschools.org/pub/ces_docs/about/phil/10cps/10cps.html

Just as learning is most effective when it is personalized, the term “academic success” must also be put into a personalized context for each student. “Academic success” is a term that can mean different things for different students as a broad range of student abilities, interests and readiness for new learning is found in every classroom and learning environment. For students with identified exceptional needs or who are English language learners, curriculum must be differentiated to accommodate their unique learning needs, language levels and readiness to learn. Many of our students have their specific academic goals set out in Individual Program Plans (IPPs) that reflect their unique learning needs.

In terms of high school completion, most Albertans equate academic success with acquiring a high school diploma. Academic success means the completion of a registered apprenticeship program, certificated and non-certificated programs, or continuing their learning as adult learners. For many of our most complex students, academic success is the acquisition of basic life skills that prepare them to function with dignity and integrity as autonomous individuals.

With these thoughts in mind, what would a student who demonstrates academic success look like? No longer is it adequate for students to learn the 3 R’s (reading, writing and ‘rithmetic), but rather students are now required to display characteristics of the 5 R’s and the 3 E’s – demonstrating readiness, resourcefulness, resiliency, responsibility and reflectiveness⁹, in addition to developing as ethical, entrepreneurial and engaged learners. Sir Kenneth Robinson, a leading thinker and speaker on creativity, states that we must place creativity and innovation at the forefront of our educational systems. Robinson believes that humanity’s future requires the development of innovative capacity and creative spirit to achieve personal and professional success.¹⁰ Howard Gardner, another well-respected educator, cites “the creating mind” as one of the five minds we will need in the future. To cultivate such a mind, he says, we need an education that features “exploration, challenging problems, and the tolerance, if not active encouragement, of productive mistakes.” He goes on to state the need for adaptability, leadership, teamwork, and interpersonal skills.¹¹ In today’s world, educators are agreeing on the critical need for all of these essential elements to achieve academic success; characteristics necessary in preparation for life, work and further learning.

To increasingly guide students in personalizing learning and positively influence student learning outcomes, our system is focused on the instructional core; the relationship between teacher and student in the presence of content. Improving student learning outcomes depends upon the interactions between each of the elements in the instructional

⁹ <http://www.campaign-for-learning.org.uk/cfl/learninginschools/121/5rs.asp>

¹⁰ From a talk by Sir Kenneth Robinson delivered in February 2006 at the TED Conference. Viewed at <http://www.ted.com/index.php/talks/view/id/66>

¹¹ Gardner, H. (2007) *Five Minds for the Future*, Harvard Business School Press, Boston, Massachusetts.

core as all serve to influence the others, just as each of the Ends is influenced and impacted by the other Ends.

Outcomes

Each student demonstrates academic knowledge and skills as identified in the Alberta Program of Studies

Each student possesses attitudes required for academic success

Each student is effectively prepared for life, work and further learning

Measures

- Percentage of students who achieve acceptable standard and standard of excellence on Provincial Achievement and Diploma Exams
- Mean Grade level on Advanced Placement exams
- Number of International Baccalaureate Diplomas awarded.* -
- Difference between actual and predicted Provincial Achievement Test (PAT) results for students enrolled in Grades 6 and 9 (Prior level of achievement report)
- Trend analysis of individual student Grade Level of Achievement Results (GLAR).
- Percentage of students eligible for the Rutherford Scholarship
- Percentage of students participating in 4 or more Diploma Exams within three years of starting high school
- Number of awarded Certificates of School Completion.*
- Number of awarded Certificates of High School Achievement.*
- Number of Knowledge and Employability Certificates earned by students in the Paced Learning Program.*
- Percentage of Grades 7 and 10 students who believe that the opportunities to receive a broad program of studies, including fine arts, health and physical education and are satisfied that the core subjects are useful
- Percentage of Grade 12 students who perceive themselves to be confident in their abilities to read and write
- Percentage of Grade 12 students who perceive themselves as capable of applying their knowledge of math and science in everyday life
- Percentage of Grades 7 and 10 students who are satisfied with having the opportunity to learn another language
- Number of students participating in Language and cultural courses.*
- Number of credits earned in the Registered Apprenticeship Program.*
- Number of students who receive credentials i.e. International Certificate, Career and Technology Credentialing, Fine Arts Certificate, International

Second Language Credential in German, Spanish, Chinese, or French.*
contextualized within the monitoring report.*

- Percentage of parents and teachers who agree that students are taught the attitudes and behaviours that will make them successful at work when they finish school.
- Percentage of Grades 7 and 10 students who are satisfied with the opportunities to access digital learning devices in school.
- Percentage of Grade 12 students who indicate that they use digital technologies in support of their learning.
- Percentage of Grade 12 students satisfied that teachers support them in being able to relate school work to real life
- Percentage of students who complete High School in 3, 4, or 5 years
- Percentage of students who drop out of High School

* Numbers reported will be contextualized within the monitoring report itself.

Data Sources

- Accountability Pillar Survey
- Provincial Achievement Test and Diploma Exam results
- Student Survey
- Grade Level of Achievement Results (GLAR)
- International Baccalaureate and Advanced Placement examinations
- Prior Level of Achievement
- Credit Earned Units (CEUs)
- Rutherford Scholarship eligibility
- Alberta Education awarded certificates
- Calgary Board of Education awarded certificates
- Industry Awarded Certificates
- Pre or Advanced Placement Certificates from a Post Secondary Institution
- International Language Credentials
- Alberta Education high school completion data