High-Ability and Gifted Students

PLANNING YOUR LEARNING JOURNEY

What universal and targeted strategies and supports can be used to address the learning needs of high-ability and gifted learners within an inclusive learning environment?

FIRST STEPS

An inclusive classroom includes students with diverse strengths and needs. Every teacher will encounter students with high potential, and some will have the opportunity to teach a student identified as gifted. Students who are high achieving and those who have high ability are often not working to the best of their abilities because they are not challenged, they are not engaged in the instruction or learning, their talents are masked by other behaviours, or perhaps they don’t want to stand out from their peers.

To me, science is just formalized curiosity.
—Chris Hadfield, astronaut

Students are the artists, scientists, thinkers, innovators and leaders of the future. They will be tasked with solving the problems of today, while imagining and creating a new tomorrow.
—Alberta Education 2016
Students who are gifted and many who have high ability are capable of mastering the program of studies learner outcomes at a faster pace and a much higher level than the majority of students. While some of these students will be identified as gifted, there are also a large number of students who would benefit from curriculum enrichment. The Teaching Quality Standard requires that teachers plan to address the diverse learning needs in their classroom, use instructional strategies that engage all students, and provide challenging, meaningful learning activities appropriate to learners’ capabilities. In an inclusive learning environment where differences are accepted and talents nourished, students are encouraged to achieve their full potential (Alberta Education 2018b). Teachers are also guided by the school jurisdiction’s policy and procedures for gifted education.

GIFTEDNESS

In Alberta, each school authority establishes its own assessment process for identifying giftedness and ensuring appropriate educational programming for identified students (Alberta Education 2019, 10). Some jurisdictions have dedicated sites and/or alternative programs for students who are gifted, while other jurisdictions accommodate these students within an inclusive learning environment. Whether a student is formally identified as gifted or not, teachers are responsible for providing an appropriate classroom curriculum considering the student’s needs.

Alberta Education describes giftedness as exceptional potential and/or performance across a wide range of abilities in one or more of the following areas: general intellect, specific academia, creative thinking, social, music, art and kinesthesia (Alberta Education 2019, 10). Common intellectual characteristics of gifted students include:

- advanced intellectual achievement,
- high motivation and interest,
- verbal proficiency,
- problem-solving ability,
- logical thinking and
- creativity. (Alberta Education 2004b)

In an inclusive learning environment students are encouraged to achieve their full potential.

The child who is bright tends to:
- know the answers
- be interested
- pay attention
- work hard
- answer questions
- enjoy same-age peers
- learn easily
- listen well
- readily take in information
- seek clear, fast solutions
- like to finish a project

The child who is gifted tends to:
- ask the question
- be extremely curious
- get involved physically and mentally
- earn high grades and test scores without apparent effort
- question the answers
- prefer adults or older children
- already know the answers
- show strong feelings and opinions
- process information and apply it more broadly, with greater complexity or in unique ways
- explore problems in depth
- enjoy the process more than the end product (Alberta Learning 2004a, 10)
UNDERSTANDING GIFTEDNESS

Gifted Versus Bright

Children who are bright tend to enjoy and do well in school. These students are often high achieving, crave challenge, and enjoy advanced pace and in-depth exploration of the curriculum. Children who are gifted often have exceptional needs beyond what typical classroom programming offers, and require individualized learning opportunities and special accommodations to reach their full potential. There is a difference between being bright and being gifted, and it has to do with the degree of a child’s ability and talent. The chart at the bottom of page 2, from *The Journey: A Handbook for Parents of Children Who Are Gifted and Talented* (Alberta Education 2004), illustrates these differences.

Psychological Challenges

Gifted learners often struggle with perfectionism. Perfectionism is a pattern of characteristics and behaviours that includes compulsive work habits, over-concern for details, unrealistically high standards and rigid routines. Perfectionism may create problems if the student

- sets unrealistic standards based on advanced reasoning ability;
- feels inferior or defeated when high standards are not met;
- becomes terrified of making an error, refuses to try new things and accomplishes little; and/or
- in extreme cases, develops compulsive behaviours that require professional medical or psychological assistance (Alberta Education 2010, 175–65).

Underachievement

Some gifted students demonstrate underachievement and perform far below their cognitive levels for a variety of reasons, including poor self-image, fear of failure, feelings of anxiety, the desire to fit in with their peer group, classroom work that is meaningless and repetitive, and lacking a future vision or dream to work toward. Underachievement can manifest in various ways in the classroom. Gifted learners may

- be disruptive or withdrawn,
- engage in power struggles with their teachers,
- become apathetic, surrender their passion for learning and not complete tasks, and
- drop out of school (Alberta Education 2010, 175–76).

Developmental Differences

Typical development may be complicated by the exceptional learning needs and characteristics of the gifted learner. *Asynchrony* is uneven development in the rates of intellectual, emotional and physical development and can be a characteristic of giftedness. Asynchrony can increase with the degree of giftedness, making students vulnerable to feelings of frustration and social isolation. These students may feel out of sync with their same-age peers and age-appropriate learning and/or demonstrate varying maturity levels in different situations, thus causing difficulties in social and emotional engagement (Alberta Education 2010, 175–76).

Twice Exceptional

Some gifted students can also have learning challenges. The most common learning challenges experienced by gifted children are learning disabilities, attention deficit/hyperactivity disorder and autism spectrum disorder. Twice-exceptional students may have difficulty reaching an academic level that matches their measured potential. As well, dual exceptionalities often mask each other and may be more challenging to diagnose (Alberta Education 2010, 175–76).
PLANNING FOR INSTRUCTION

Programming for students who have high ability and/or who are gifted starts with the provincial program of studies. Teachers can design a classroom curriculum that is challenging and responsive to students’ strengths and learning needs by using the response to intervention (RTI) framework (Alberta Education 2018a) and collaborating with parents. Parents/guardians, in many instances, are the first people who identify giftedness and may approach teachers and school leaders early in the term.

Parents, as partners in learning, can provide information about academic, social, emotional and psychological needs affecting the student’s learning experience. They can also provide ongoing support and encouragement outside of school. As much as possible, involve the student in the planning process so they can identify and understand their own strengths and interests. Consider the following questions:

• When did you become aware that the student has high aptitude?
• What kind of data may give a fuller picture of their learning?
• What led to this student being identified as gifted?
• How can information about the student’s abilities, interests and motivation inform differentiated instruction?
• How can the school and parents work together to support the student’s learning?

INSTRUCTIONAL STRATEGIES AND SUPPORTS

Universal Strategies (Tier 1)

Learner profiles are a useful tool for teachers to learn about all their students’ background, interests, learning styles and needs. Five areas that help teachers to understand their high-ability learners are their past academic achievement, learning styles and strengths, personal interests, special abilities and talents, and their vision and goals for the future. Teachers may wish to interview their students to further explore these areas. The information from learner profiles is useful for designing a differentiated curriculum for an inclusive classroom. Teachers also help the gifted learner to understand the connection between effort and results; how to set realistic, meaningful goals and timelines for learning; and to develop an awareness and understanding of perfectionism.

Differentiated instruction is a flexible approach to adapting the curriculum elements of content (what is taught), process (how students learn) and product (how students demonstrate their learning) to accommodate diverse learning needs. Many common instructional and learning strategies were originally designed for students who are gifted and are now being used to improve learning opportunities for all students. These strategies can be differentiated and include offering student choice, project-based learning, cross-curricular projects and inquiry learning.

Content: Students who demonstrate that they know some of the content or can learn the content in much less time than their classmates will benefit from differentiation.

• Provide more advanced texts and resource materials that go beyond the specific learner outcomes in the curriculum, to introduce new concepts and explore the topic in more depth and breadth.
• Challenge students to transfer knowledge, skills and processes in cross-curricular projects and real-life situations.

Process: Differentiated process focuses on high-order thinking strategies, problem solving, research and learning at more complex levels.

• Allow students to make choices about their learning by offering different types of learning strategies and activities.
• Offer levelled activities with different complexities, high-level resources and open-ended questions.
• Allow students to work independently and in different group configurations. These flexible groupings can be based on achievement, learning style and interests.

Product: Differentiated product allows students to demonstrate their learning in different ways and develop their talents, interests and curiosities.

• Provide opportunities for student to produce real-life products, projects and performances for authentic audiences.
• Many textbooks and teachers’ guides provide follow-up or extension activities to elaborate on core concepts. When students finish early or they already know the content, extension activities can challenge and deepen their understanding. Teachers can design their own extension activities that build on the learner outcomes in the program of studies.
Targeted Interventions (Tier 2)

Teachers can analyze classroom assessment data to identify students in different learning groups in their classroom. This information assists teachers to adapt their instructional approach and learning activities to match the learning needs of groups of students and to provide an enriched and more challenging curriculum for high-achieving students.

Preassessment

Teachers can administer a short preassessment to determine students’ learning needs. Some students may already have the knowledge, or have skills that are developed beyond the grade-level curriculum content. In these cases, it may be appropriate to use curriculum compacting, an instructional strategy that eliminates some or all practice learning activities and moves on to learning what is not known, or to provide enrichment activities consistent with the program of studies. Teachers should not move the student on to learner outcomes in the next grade level without an approved individualized learning plan (IPP/SLP).

Tiered Assignments

Teachers may choose to plan lessons or units of instruction with different tiers of difficulty. The different tiers, for example, could be standard with the learner outcomes; entry level for students who require additional instruction or scaffolding, and above standard for students who can master the content at a faster pace and require more challenge.

The Taxonomy for Teaching, Learning and Assessment is a revision of Bloom’s classification system for the cognitive skills required for different levels of learning. Teachers can use the taxonomy to establish more advanced, well-defined learning goals for students who require additional challenge.
The cognitive skills at the bottom of the taxonomy pyramid are considered lower-level thinking skills and are easier to master. Moving up the pyramid, the cognitive skills become more complex and are considered higher-level thinking skills. When developing learning goals for gifted learners, the pyramid should be inverted. Gifted children need to spend less time with the lower-level skills (Iowa State University nd).

For more information:
- “50 Tips, Tricks and Ideas for Teaching Gifted Students.” www.weareteachers.com/teaching-gifted-students/
- “Revised Bloom’s Taxonomy.” Iowa State University Centre for Excellence in Learning and Teaching. www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/

**Independent Study/Learning Contracts**

The purpose of an independent study or learning contract is for the student to deeply explore an area of interest important to them. Before the start of the project, the student and teacher work out parameters regarding the process, product and timeline. Independent studies are successful when the teacher regularly monitors the progress and helps the student to set goals, manage their time, organize their learning and investigate the topic.

**Individualized Interventions (Tier 3)**

Students who are identified as gifted learners will require an individualized program plan (IPP/SLP) to address their unique learning needs. Compared to IPPs for students with other learning needs, the IPP for students who are gifted typically
- has fewer goals,
- focuses on strengths and interests,
- uses accommodations and differentiation to accelerate learning, and
- demonstrates a greater degree of student involvement. (Alberta Education 2006, 1)

Basic components of an effective program for gifted students typically include individualized instruction of basic curriculum outcomes, appropriate enrichment, effective acceleration, independence and self-direction, and values and personal development (Alberta Learning 2000, 73).

Some school jurisdictions offer alternative programs, generally at the secondary level, to address the needs of high-ability and/or gifted learners. The International Baccalaureate (IB) and Advanced Placement (AP) courses provide students with the opportunity to achieve a high school diploma and earn advanced placement in some postsecondary programs. In addition to these programs and/or where these programs are not available, teachers will work with the student’s learning team to identify individualized learning opportunities.
Enrichment Clusters

This strategy involves organizing a small group of students with similar interests and aptitudes who are brought together for a set period of time each week to pursue a topic of study under the guidance of a teacher or mentor. The topic may change frequently or develop into a long-term exploration, but it should be open ended and have real-world application. This strategy gives the student an opportunity to collaborate and learn with others of similar aptitude.

Mentorship

A student with high-level knowledge in a specific academic area may benefit from contact with a specialist in the field. This is particularly useful when the teacher cannot keep up with the student’s capacity to learn the subject. A mentor may be a teacher of a higher grade, an expert in the field or local community or a postsecondary instructor. Mentorships may involve face-to-face or online conversations and visits to the workplace. Care must be taken to ensure that the student and mentor are compatible and that the arrangements are agreeable to the mentor and the student and the student’s parent/guardian (McAulay nd).

NEXT STEPS

Teachers need to ensure that students with high ability and those who are gifted feel a sense of belonging in their classrooms and schools. Establishing an inclusive learning environment that values diversity and is welcoming, caring, safe and respectful is necessary for all students. Students with high ability and those who are gifted benefit from opportunities and experiences to develop all aspects of their being. These opportunities may include leadership development, building social networks, physical activities and team sports, exploring the arts, and community service. By collaborating with parents and other members of the student learning team, teachers will ensure that these students are supported to reach their full potential.

It begins with the premise that each child should come to school to stretch and grow daily. It includes the expectation that the measure of progress and growth is competition with oneself rather than competition against others.

—Carol Ann Tomlinson

CONTINUING YOUR LEARNING

How do you use assessment data to identify students who need a more challenging program?

Use the taxonomy of teaching and learning to differentiate your teaching and learning strategies for students with high ability. Ask a colleague to join you.

How do you demonstrate your understanding of the intellectual, emotional, imaginative, sensual and psychomotor dimensions of students who are gifted?

Who are the other staff and students in the learning community who can help support the student with high ability or who is gifted to feel welcomed, cared for, respected and safe?

Editor’s note: all URLs in this text were checked and verified on April 8, 2020.

For more information:


• National Association for Gifted Children. “Myths About Gifted Students.” www.nagc.org/myths-about-gifted-students
REFERENCES


