Essential Components of Educational Programming for Students with Autism Spectrum Disorders
# Table of Contents

## Introduction
Foreword ........................................................................................................................................... 1  
Purpose ........................................................................................................................................... 1  
Links to *Standards for Special Education, Amended June 2004* ............................................. 1  
The Students and Their Unique Educational Needs ................................................................. 2  

## Essential Components
1. Meaningful Parent and Family Involvement ........................................................................ 5  
2. Learning Team ..................................................................................................................... 5  
3. Assessment .......................................................................................................................... 6  
4. Coordinated Specialized Support Services ....................................................................... 6  
5. Individualized Program Plan (IPP) ................................................................................... 7  
6. Knowledgeable Staff .......................................................................................................... 7  
7. ASD-Focused Educational Programming ......................................................................... 8  
   a) Meaningful Social Inclusion ......................................................................................... 8  
   b) Comprehensive Curriculum and Appropriate Instructional Strategies ..................... 9  
   c) Positive Behavioural Support ..................................................................................... 9  
8. Planning for Transition ......................................................................................................... 11  

## Additional Resources ........................................................................................................... 12  

## Glossary of Key Terms .......................................................................................................... 13  

## References ............................................................................................................................ 14
Introduction

Foreword

*Essential Components of Educational Programming for Students with Autism Spectrum Disorders* is intended for classroom teachers, resource personnel, administrators and parents. It is one of a series of documents developed to facilitate programming for students in grades 1 to 12 who have special education needs. Other topics in the series include programming for students who are deaf or hard of hearing, programming for students who are blind or visually impaired, and programming for students with behaviour disabilities.

**Essential Components**
The eight essential components listed in this document are contained in the *Standards for Special Education, Amended June 2004* and are therefore mandated by Alberta Education. Each component is considered essential to the provision of a comprehensive program. However, the manner in which the components are implemented may be affected by such practical considerations as availability of resources and needs of the particular student.

**Sample Indicators of Effective Programming**
The sample indicators are examples of effective practices that illustrate the implementation of the essential component. The indicators will vary because of the unique strengths and needs of individual students. It is not the intent to list all possible indicators or to require all listed indicators for every student.

**Purpose**
The purpose of this document is to:
- identify the essential components of appropriate programming that are mandated by Alberta Education for students with special education needs
- provide examples of effective practices
- establish a common understanding of the terminology associated with this specialized field
- clarify the meaning of *appropriateness*, taking into account what is reasonable for educational programming for students with autism spectrum disorders.

**Links to *Standards for Special Education, Amended June 2004***

*Standards for Special Education, Amended June 2004* requires school boards to identify students with special education needs in grades 1 to 12 and deliver effective programming for them. These standards promote consistent, high quality educational practices within Alberta.

The *Essential Components* series is directly linked to the appropriateness section of *Standards for Special Education, Amended June 2004* in order to ensure appropriate programming related to professional standards, individualized program planning, implementation, evaluation and parent involvement in decision making. *Appropriateness* means that “educational programming and services are designed around the assessed needs of the student and are provided by qualified staff who are knowledgeable and skilled” (*Standards for Special Education, Amended June 2004*, page 2).
Guiding Principles

The essential components of programming for students with autism spectrum disorders (ASD) are guided by the following principles.

- Programming is an active process that is based on the student’s assessed abilities and needs and is continuously monitored and adjusted.
- Students with ASD should participate in the regular curriculum to the fullest extent possible.
- The essential components of educational programming overlap; they are processes that work together.
- Meaningful parent and family involvement is intrinsic to all of the essential components.
- Programming for students with ASD requires a high level of teamwork, collaboration and consistency across settings.
- Staff and students should have access to specialists and resources that support the educational program.
- The educational goals for students with ASD are similar to those for all students: achieving the highest level of personal and academic independence possible while promoting the development of behaviours that will allow the student to function in ways that are responsible, socially responsive and personally satisfying.

The Students and Their Unique Educational Needs

The term autism spectrum disorders, as it is used in this document, refers to students with special education needs related to conditions falling within the pervasive developmental disorders (PDD) as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (American Psychiatric Association, 1994). This definition includes autistic disorder, Asperger’s disorder, childhood disintegrative disorder, Rett’s disorder, and pervasive developmental disorder: not otherwise specified.

Autism spectrum disorders are complex, lifelong neurological disorders that impact how individuals understand what they see and hear and how they make sense of the world. Significant difficulties with communication, a limited range of interests and activities, reduced flexibility in behaviour, and problems with reciprocal relationships and social interaction, relative to the student’s developmental level, are the defining characteristics of ASD. Individuals with ASD may also demonstrate difficulties with:

- processing verbal and abstract information
- regulating attention
- generalizing
- motor planning
- transitioning between activities, settings and individuals
- accommodating some forms of sensory experience
- organizing and self-regulating.

These difficulties can have a profound impact on the student’s functioning in the school setting, requiring curricular adaptations and modifications, environmental and instructional supports, systematic instruction, and a focus on the development of communication and social skills. In addition, many students with ASD demonstrate challenging behaviours that may be, at least partly, related to differences in neurological functioning.
The term *autism spectrum disorders* describes the developmental continuum and the broad range of abilities and challenges demonstrated by these students. Although students with ASD may share common features, no two individuals share an identical profile. For example, while most students have some level of intellectual delay, others have average or above average intelligence. Similarly, some students with ASD may be withdrawn, while others may be overly active and approach people in socially awkward ways. Additionally, the pattern and extent of difficulties may change as students grow and develop. Thus the term *spectrum disorder* conveys the idea that, while there are some commonalities among these disorders, each student is unique.

Students with ASD require a program that takes into account not only the characteristics associated with the disorder, but equally important, the strengths, interests, developmental needs, personality and learning style that define the student as an individual. Accordingly, the impact on school performance and the extent of accommodations and supports required will vary significantly from student to student.

ASD has a significant impact on the student's support systems, in particular the student’s family. This document recognizes that appropriate programming for students with ASD requires ongoing involvement of the student’s parents along with community agencies supporting the student outside the school setting. The family has intimate knowledge of the student’s developmental history, experiences, learning opportunities and involvement with outside agencies. As a result, parents may be in the best position to support the effectiveness and continuity of programs outside of school, as well as across the life span. Meaningful parental involvement is intrinsic to all the components included in this document.
Essential Components

1. Meaningful Parent and Family Involvement

(Standards for Special Education, Amended June 2004, pages 3, 5, 6–10, 12, 14)

Parents are valued and contributing members of the learning team and their input influences all aspects of their child’s education.

Sample Indicators of Effective Programming

• Under the direction of the teacher, learning team members engage in ongoing, frequent communications with parents and use a variety of communication vehicles depending on the strengths and needs of a particular family.
• Parents have the opportunity to contribute to program planning, development and implementation.
• Parents and, when appropriate, students are given the opportunity to meet with and receive information from the individual who conducted the specialized assessment.
• A process is in place to ensure that parents have the opportunity to communicate with multi-disciplinary consultants who provide services to the school regarding their child.
• Parents receive information about opportunities to access information and training that would help them meet their child’s needs in the home and community.
• Where appropriate, parents are invited to participate in training activities with other members of the learning team.

2. Learning Team

(Standards for Special Education, Amended June 2004, pages 4, 8, 10)

All students with autism spectrum disorder should have learning teams who work together to plan, implement, monitor and evaluate programming and services. A certificated teacher must direct and lead the learning team in developing goals and objectives that are educationally relevant.

Sample Indicators of Effective Programming

• The learning team includes the teacher, parent and administrator, and may also include the student, educational assistants, multidisciplinary consultants and other individuals with expertise in ASD.
• Opportunity is provided for regularly scheduled meetings and frequent, meaningful communication among home, school and other supports.
• Members of the learning team share information relevant to the effect of ASD on learning and development and share strategies to address each student’s unique learning and behavioural needs in the educational setting.
• As members of the learning team, parents share information about factors that might affect the student’s behaviour, learning and development, including interventions (e.g., medical, behavioural, therapeutic) that occur outside the educational setting.
• Verbal or written input provided by members of the learning team is considered in the development of goals, objectives and strategies that are relevant to and can be implemented in a school or educational setting.
3. **Assessment**  
*Standards for Special Education, Amended June 2004, pages 3, 5, 7–8*

The primary purposes of assessment are to assist in the planning and development of programming and to evaluate outcomes to ensure that programming is appropriate and effective. Assessments are conducted with knowledge of and sensitivity toward the impact of ASD on the student’s performance. Assessment identifies the student’s strengths and needs and results in the identification of educationally relevant goals, objectives and implementation strategies.

**Sample Indicators of Effective Programming**

- All assessments completed under the direction of the school authority:
  - are carried out for the purposes defined above and result in recommendations that can be implemented in an educational setting
  - may involve a variety of assessment processes and instruments, including informal assessments, systematic observations and standardized assessments
  - involve gathering information from all relevant members of the learning team
  - take into consideration such aspects of the instructional environment as setting, instructional context and interpersonal factors that may affect the student’s performance, as well as the strengths and needs of the individual student
  - take place, to the greatest extent possible, in the setting and under the conditions where the performance of the skill would normally be required.

- Specialized assessments (e.g., psycho-educational, speech and language, motor) are conducted by qualified personnel who take into consideration:
  - the validity and limitations of specific assessment instruments and processes for students with ASD
  - the impact of the student’s behaviour and developmental level when selecting instruments and interpreting results.

4. **Coordinated Specialized Support Services**  
*Standards for Special Education, Amended June 2004, pages 9–10*

Appropriate programming for students with ASD provides access to support services as required. School jurisdictions coordinate available services to provide a comprehensive educational program. The model of service delivery is based on the learning team’s determination of the optimal match between the assessed needs of the student and the availability of local resources (e.g., Regional Educational Consulting Services, Student Health Initiative Partnership, Regional Health Authorities, private service providers).

**Sample Indicators of Effective Programming**

- Support services are accessed (e.g., behaviour management, occupational therapy, physical therapy, speech and language pathology) to enhance the learning team in areas that are outside the team’s expertise.

- The school coordinates available support services based on the student’s needs and functioning within a school environment.

- Support services accessed by the school authority are linked directly to the achievement of clearly defined, educationally relevant goals as outlined in the student’s individualized program plan (IPP).
• To the greatest extent possible, support services and therapeutic interventions are delivered in the context of normal school and classroom settings and routines and in a manner that enhances the student’s participation in educational programming.
• Criteria have been established for the selection and role of paraprofessionals in supporting educational programs for students with ASD.

5. Individualized Program Plan (IPP)
(Standards for Special Education, Amended June 2004, pages 4, 7, 10–11, 12)

An IPP is required for each student coded for special education needs. The IPP includes essential information for planning, implementing, monitoring and evaluating the student’s educational program. IPPs are working documents for learning teams to use throughout the year.

Sample Indicators of Effective Programming
• The IPP is used to guide program planning and delivery.
  – Formal review, based on frequent, planned collection of meaningful programming data, is carried out by the learning team at least three times a year.
  – The IPP is updated as needed based on data indicating progress or lack of progress or a change in the student’s life circumstances that significantly impacts the relevance of the original goals.
• Measurable goals and objectives are consistent with the student’s developmental level and address disability-related needs in areas that may include:
  – academic and/or cognitive development
  – communication (including augmentative and alternative communication systems where appropriate)
  – social interaction with a variety of peers
  – behaviour and emotional development
  – play and/or recreational and vocational skills
  – organizational and self-management skills.
• A reasonable number of goals are selected from priority areas. Consideration is given to the relevance of the goal to functioning and/or participation in current and future settings.
• The IPP identifies the level, format and type of support services in areas that might include communication, behaviour, motor functioning and management of sensory input.
• The IPP identifies program modifications, including environmental and instructional accommodations and assistive technology, required in key areas of functioning.

6. Knowledgeable Staff
(Standards for Special Education, Amended June 2004, pages 9, 10)

Educational programming and services are designed around the assessed strengths and needs of the student with ASD. To provide appropriate programming, teaching staff require access to professional development and specialists in the delivery of educational programming for students with ASD in school settings.
Sample Indicators of Effective Programming

- The learning team shares resources and provides information regarding in-services, conferences, resources and opportunities for increasing their knowledge of ASD.
- Professional development opportunities are provided, at a level consistent with the degree of responsibility and contact the individual has for the student with ASD, in areas relevant to programming (e.g., impact of ASD on learning, appropriate assessment methods, IPP development, curricular and environmental adaptations and accommodations, effective instructional methods, strategies to improve communication and social interaction skills, behavioural support).
- Relevant members of the learning team are provided with the training and support necessary to implement programming suggestions arising from coordinated support services.
- Where appropriate and necessary, the professional development plans of members of the student’s learning team include the acquisition of knowledge, skills and attitudes appropriate for developing best practices for students with ASD.

7. ASD-Focused Educational Programming

(Standards for Special Education, Amended June 2004, page 9)

The following components are particularly relevant for the development of appropriate programming for students with ASD.

a) Meaningful Social Inclusion

Appropriate programming for students with ASD provides both planned and spontaneous opportunities for meaningful and mutually respectful interaction with peers, including students without disabilities. These opportunities can vary from full participation in all classroom activities to the targeting of specific activities and settings.

Sample Indicators of Effective Programming

- With the consent of parents and the student (where appropriate), peers and the broader school community receive respectful and relevant information about the individual student, which may include:
  - information/instruction on how to respond to, initiate and/or sustain interaction with the student
  - the student’s interests and needs
  - positive support strategies.
- There is evidence of clear goals and objectives related to social interactions with peers.
- Expectations for interaction are appropriate to the student’s needs and developmental level and may range from tolerance of proximity to peers to age-appropriate interaction.
- Where necessary, strategies (e.g., peer modelling, direct instruction, role-play, social stories, scripted responses, reinforcement strategies, visual charts, comic book conversations) are used to support interaction between students with ASD and students without disabilities.
- Planned opportunities are provided to include students with ASD in non-academic aspects of school life, including, where appropriate, extracurricular activities.
b) Comprehensive Curriculum and Appropriate Instructional Strategies

Programming decisions begin with general classroom activities based on the Alberta programs of study as the first choice. Appropriate instructional strategies establish a high level of structure, break complex tasks into more manageable component skills, enhance correct responding, promote active engagement, and wherever possible, are used to teach skills in the context they are needed. Alternative activities are only considered when ongoing classroom activities are unsuitable or provide insufficient learning opportunities.

Sample Indicators of Effective Programming

- Consideration is given to the student’s age and the functionality and developmental appropriateness of the task when selecting learning activities.
- Programming provides multiple opportunities to teach, practise and generalize:
  - academic skills
  - social skills (e.g., attending to social cues, imitation, development of social relationships, self-regulation)
  - functional communication (e.g., understanding language, initiating requests, expressing choices, indicating rejection, using social conventions, engaging in communicative exchanges)
  - skills necessary for independent functioning (e.g., play and/or recreational skills, task initiation, completion and organizational skills, vocational skills).
- Programming involves a variety of instructional formats including one-to-one, small group and whole classroom instruction adapted for students with ASD.
- Instructional formats are selected to:
  - achieve specific learner outcomes
  - accommodate individual needs and strengths
  - promote generalization and social inclusion.
- Members of the learning team can identify a range of instructional strategies compatible with the student’s strengths, interests and needs.
- Instruction is matched to the student’s level of skill and knowledge. To the greatest extent possible:
  - tasks are structured so that the requirements are clearly understood and are within the student’s capabilities
  - instructional language is modified to the developmental level of the student.
- Instructional and environmental supports are in place to increase the student’s independence and participation. These instructional and environmental supports may include additional adult assistance, adaptive equipment, visual and organizational supports, and adaptation of materials and/or changes to the classroom design and organization.
- Organization and modification of the physical environment is used, when necessary, to facilitate instruction, to promote positive behaviours and engagement in learning activities, and to enhance learning.

c) Positive Behavioural Support

Appropriate programming for students with ASD incorporates positive behavioural support based on needs identified by assessment. Proactive planning is used to identify and prevent challenging behaviours and replace them with appropriate alternative behaviours.
Interventions for significant behavioural challenges are designed with consideration of the learning, communication, socialization and information-processing differences associated with ASD.

Functional behavioural assessment (FBA) is one tool the learning team may use to better understand and respond to particularly challenging behaviours. FBA is based on the premise that challenging behaviours are meaningful, have a purpose and serve a function for students. The FBA cycle involves identifying a behaviour targeted for change, gathering information and hypothesizing about the possible function or purpose of the behaviour. This information is used to develop behaviour support plans and inform programming decisions. Conducting an FBA with students with extremely challenging behaviour usually requires the assistance of a specialist (e.g., psychologist, behaviour specialist) with training and experience in this form of assessment.

Sample Indicators of Effective Programming
- The learning team focuses on teaching social and age-appropriate behaviours throughout the school day.
- The student is provided with a high level of meaningful reinforcement for appropriate and desirable behaviours.
- Formal and informal behavioural management strategies focus on preventing challenging behaviours, making accommodations and teaching appropriate alternative behaviours.
- The learning team is aware of the impact of the environment on student behaviour and makes appropriate modifications to support learning and desirable behaviours.
- Clear communication with school staff and parents is maintained regarding behaviour programming.
- A systematic behaviour support plan has been developed and implemented for students with particularly challenging behaviour. Preventive strategies, alternative behaviours, and supports and adaptations identified in the behavioural support plan are also included on the student’s IPP.
  - The learning team can describe specific behaviours of concern in terms of frequency and intensity.
  - The functions of challenging behaviours are identified through an analysis of environmental, instructional and interpersonal factors that may be contributing to the challenging behaviour.
  - The learning team plans collaboratively and identifies the actions adults will engage in to prompt changes in student behaviour.
  - Ongoing assessment and data-collecting procedures are in place to verify behaviour change and revise programs.
  - Where necessary, the behavioural support plan includes a crisis intervention component that addresses the safety of the student, his or her peers, and school personnel.
8. Planning for Transition  
*(Standards for Special Education, Amended June 2004, pages 4, 5)*

Difficulties with communication and social interaction and the behavioural rigidity associated with ASD can adversely affect the student’s ability to adapt to change. As a result, transition planning is an ongoing process that requires the learning team to plan for immediate (day-to-day), intermediate (year-to-year) and long-term transitions (elementary to junior high or middle school, junior high or middle school to high school, high school to post-school placement).

Sample Indicators of Effective Programming

- A flexible transition plan is developed at the beginning of the school year and included on the student’s IPP. The level of detail in the transition plan reflects the complexity of the transition.
- Where necessary, the IPP identifies strategies for facilitating smooth transitions between activities, settings and/or persons (e.g., flexible scheduling, verbal warnings, visual supports).
- Consideration is given to the relevance of IPP goals and objectives to the student’s ability to function in future educational, social and/or vocational settings.
- Comprehensive planning for major transitions involves all relevant members of the learning team and includes identification of:
  - the most enabling setting for educational programming
  - supports and adaptations required for the highest level of independent functioning in current and future settings
  - responsibilities of members of the learning team for transition
  - strategies for familiarizing the student with the future setting (e.g., visits to the program, social stories, videotapes of the new setting)
  - timelines for the completion of activities.
- Staff members in the receiving environment are provided with information regarding the unique needs, strengths, behaviours and interests of individual students, as well as general information and resources, prior to the transition of a student with ASD.
Additional Resources

For more information and sample strategies, refer to the following Alberta Education resources. Unless otherwise indicated, you may download resources at no cost from www.education.gov.ab.ca/k_12/specialneeds, or purchase print copies from the Learning Resources Centre at www.lrc.education.gov.ab.ca or telephone (780) 427-5775, toll free in Alberta by first dialing 310-0000.

Essential and Supportive Skills (1995), Book 2 of the Programming for Students with Special Needs series (Order from LRC)

Individualized Program Planning: ECS to Grade 12 (2006), Book 3 of the Programming for Students with Special Needs series


Teaching Students with Autism Spectrum Disorders (2003), Book 9 of the Programming for Students with Special Needs series
Glossary of Key Terms

**Access** – Students with special needs are entitled to have access in a school year to an education program in accordance with the School Act. Students with special needs receive adapted/modified programs that enable and improve learning.

**Adapted program** retains the learning outcomes of the prescribed curriculum and adjustments to the instructional process are made to address the special needs of the student.

**Direct instruction** is a form of systematic teaching involving the establishment of optimum learning conditions, careful definition of the learning outcome and the timely delivery of appropriate consequences (e.g., feedback, social praise, tangible reinforcement). Direct instruction often requires that the learning outcome be analyzed into, and then taught as, component skills or tasks.

**Engagement** refers to the amount of time students spend interacting with adults and peers and/or learning materials in a manner appropriate to their developmental level and the context of activities.

**Functional skills** are skills needed by students to participate in the home, school and community. While some skills, such as those related to communication, are almost always functional, the functionality of others, such as vocational and independent-play skills, will vary depending on the age of the individual and the setting.

**Intervention** means a planned action that is implemented with the expectation that it will influence a specified behaviour or outcome in a predictable and desired manner.

**Learning team** refers to a team that consults and shares information relevant to the individual student’s education, and plans special education programming and services as required. Under the direction of a certificated teacher, the team may consist of parents, the student (where appropriate), other school jurisdiction or program staff, and others as required.

**Meaningful reinforcement** refers to the presentation or removal of an object, activity or interaction that results in an increase in a targeted behavior. Individuals with ASD may react in an atypical manner to events that most people would consider to be reinforcing. For example, some individuals with ASD may not find praise to be a strong motivator. As a result, it is necessary to identify meaningful reinforcement on a student-by-student basis.

**Modified program** has learning outcomes that are significantly different from the provincial curriculum and are specifically selected to meet the student’s special needs.

**Specialized assessment** involves individualized measurement, typically involving standardized instruments, conducted by qualified specialists across a variety of domains and specific learning contexts, for the purpose of providing individualized programming for students.

**Specialized teacher** is a qualified teacher who has additional training in the area of teaching students with a specific disability.
References


