

Resource Considerations for Students with Special Needs

The following contains information on learning resource considerations and instructional practice. This information is based on the original Ministry of Education guide, with updates in 2008. Further updates may be advisable.

These considerations will aid students with special needs, whether in inclusive classrooms or specialized settings. Five types of special needs are looked at: students with intellectual disabilities, students with learning disabilities, students with visual impairments, students with hearing impairments and language difficulties, and students who have special gifts and talents.

Many of the same considerations may be relevant to other special needs populations, such as students with chronic health impairments, students with autism, or students with general learning difficulties that are not considered special needs.

Students with Intellectual Disabilities

Students with intellectual disabilities have intellectual development functional behaviours that are significantly below the norm for students of same age. Learning characteristics often include significant deficits in language and concept development, a concrete learning style and difficulty with abstractions, the need for direct instruction with frequent review or over-learning, difficulties generalizing, problems focusing on what is important, and difficulties with independent learning.

Language and Text Organization

- avoid complex sentences
- use simplified vocabulary, avoid dialect or idioms
- express concepts at a literal level
- ensure each sentence contains only one main concept
- provide clear, simple instructions that can be broken down into component steps
- highlight important information for easy recognition
- provide advance organizers, definitions of key vocabulary with illustrations
- provide clear structure and appearance, focusing student attention to key ideas

Visuals

- include illustrative material (pictures, graphs, etc.) that supports text

General

- provide multi-sensory instruction
- avoid unnecessary complexity in activities
- provide opportunities for approaching concepts at various levels of complexity
illustrate concepts by real-life examples connected to students' experiences
- include explicit aids for remembering and review, "how-to" instructions
- offer group work and paired peer activities
- provide summaries of important information

- be appropriate to age level, even if adapted in language, conceptual complexity, and structure to meet intellectual ability

Students with Learning Disabilities

Students with learning disabilities have normal cognitive potential with disorders in their learning: significant difficulties in perception and the acquisition and use of listening, speaking, reading, writing, reasoning, and mathematical abilities. These difficulties often impact memory, problem-solving abilities, and attention span. Students with learning disabilities may have trouble processing, generalizing, or expressing their ideas in writing even when they understand the content.

Language and Text Organization

- avoid dialect or idioms
- define new vocabulary in text
- highlight key information
- vary font styles for concept purposes, not just for variety
- provide clear structure and appearance, focusing student attention to key ideas
- provide simple, clear instructions that are broken down into component steps

Visuals

- use clear, uncluttered illustrative material (pictures, graphs, etc.)
- illustrate main idea with action that is central and attention grabbing
- show single actions that focus attention
- illustrate important concepts both visually and through sound

General

- provide alternative means to access information besides print (e.g., support materials in audio or video format)
- express concepts and provide opportunities for approaching them at various levels of complexity
- provide explicit aids for remembering and review, "how-to" instructions
- provide multi-sensory instruction
- provide organizers that structure the learning task for the student
- provide opportunities for group work and paired peer activities
- allow for processing time and time to use compensatory strategies
- suggest various means students may use to demonstrate understanding of concepts (oral, written, video, demonstration or performance, portfolio, etc.)
- use advance organizers to support information on video
- review and summarize key concepts
- illustrate concepts by real-life examples connected to students' experiences

Students with Visual Impairments

Students may have a range of difficulties with vision including being blind, partially sighted, or having low vision. These students have visual acuity problems that interfere with optimal learning such that they need learning materials that are very clear and often adapted in size, complexity, or format.

Language and Text Organization

- use clear pronoun referents that do not require visual supports for clarity
- use large type
- use well-spaced text
- avoid hyphenated text
- have wide margins
- use simple fonts with no overlap or running together of letters
- avoid random shifting of print sizes
- avoid columnar presentation
- separate print from visuals
- provide strong contrast between print and background, use white or pastel backgrounds
- provide predictable, consistent placement of print on the page or screen
- consider clarity of print quality as many materials will require enlargement by a factor of up to six

Visuals

- use clearly shaped illustrations; avoid shadows
- use photographs that show single-focus events
- do not rely on colour between letters, numbers, or objects for comprehension; colour differences may not be perceivable
- use less, rather than more, image detail
- avoid clutter and glare
- use illustrations that are directly relevant to text rather than peripheral
- portray action centre/front with characters in foreground
- allow viewer to be able to see what is happening by focusing on one part of the screen at a time

General

- use one or two deliberate actions rather than several simultaneous ones
- use dialogue/narration to accompany and explain the action
- use distinctly different and contrasting voices to allow distinction of characters
- avoid background sound that competes with significant aspects
- avoid distortion of sound, especially speech

Students with Hearing Impairments or Language Difficulties

Students may have a range of difficulties with hearing, from deafness to being hard of hearing. They require similar considerations with regard to resource use as students with language disorders. These groups have similar difficulties in language development, both receptive and productive.

Language and Text Organization

- use clear pronoun referents or antecedents
- avoid too many synonyms for the same word
- include words such as "that" where they might clarify a sentence connection
- connect thoughts using simple coordinating conjunctions (and, so, but) rather than less common connectors (nevertheless, as a consequence, etc.)
- avoid or use minimally: passive voice verbs, expressions of negation, too many modifying phrases in one sentence, colloquial or idiomatic expressions
- make careful, limited use of conditional expressions (such as, assuming that, etc.)
- ensure questions avoid long, involved grammatical structure
- use cause and effect expressions in simple form
- use footnotes or explanatory notations for difficult words or complex concepts

Visuals

- place illustrations as close as possible to relevant text
- ensure clarity of video images such that room lighting will allow for sign language interpretation of dialogue

General

- ensure context increases rather than decreases clarity
- caption all dialogue; capture major concepts in visual representations without the dialogue being accessed

Students with Special Gifts and Talents

Students are considered gifted when they possess demonstrated or potential high capability with respect to intellect, creativity, or skills associated with specific disciplines (e.g., music). They may need instruction with approaches that allow for faster pace, greater scope and complexity, more variety, or opportunities for more independent learning. They can engage in analysis, synthesis, and evaluation at a greater depth than age peers.

General

- include jumping off points for independent study
- provide opportunities for open-ended and divergent thinking
- use a discovery learning approach
- encourage flexibility and creative problem-solving