Ed Guide

ED GUIDE

Accommodations for Inclusive Teaching

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Add*Ed Research Group @ https://www.addedrg.ca

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INTRODUCTION

Jordan Shurr and Alexandra Minuk

Welcome to our Ed Guide! Ed Guides are designed to provide critical information in short form for easy access to research and best practice in special and inclusive education. This specific Ed Guide on Accommodations lays out each of the 60+ IEP accommodations listed in the most recent Ontario Ministry of Education Policy document. In this Ed Guide you will find a concrete definition, a description of the tool in action, specific support strategies, a practical case study example, and a list of reliable resources for further information for each of the accommodations. We see these guides as a great starting point to: learn more about the accommodations, plan for inclusive instruction, share ideas with a colleague, help a student understand and engage in their own supports, and much more.

Each accommodation guide is organized by type: instructional, environmental, and assessment. To access the guides, select the Content tab and the + icon next to the type of accommodation and the guide menu will appear.

We hope you enjoy our guides and find them useful. Please reach out to the ADD*Ed team with any comments or questions: added@queensu.ca and feel free to browse our other resources at our webpage: www.addedrg.ca

Best,

Dr. Jordan Shurr and the ADD*Ed (Autism and Developmental Disabilities-Education) Team at Queen's University

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ENVIRONMENTAL ACCOMMODATIONS

1

ALTERNATIVE WORKSPACE

<div style="background:#eee">

Definition

A combination of non-traditional work practices, settings, and locations that can supplement or even replace traditional workspaces.

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In action

Teachers can create access to a variety of working environments within their classroom and/or school to meet individual student needs for distraction-free working spaces.

Support Strategies

- Arrange access for quiet work areas such as in the hallway, a private room, desk with a partner, or study carrel
- Comfortable seating (e.g., bean bag chair, padded office chair, carpet square)
- Encourage mobility and variation during lessons (e.g., body breaks)
- Provide multiple locations for independent work within the classroom (e.g., small group table, extra desk)

Case Study

Student: Grade 10 student in English class.
Content: Students are doing a unit on Shakespeare. Students are reading Hamlet silently in class and independently answering guided questions on a worksheet afterwards.
Problem: The student is having a difficult time focusing on the work while at their desk due to the amount of noise and visual distractions from classmates.
Solution: The student is provided with a quiet study carrel with comfortable sitting, set up at one end of the room, during the independent work period to give the student some space from the distractions of the large group.

Additional Resources

- [Basic description and sample video of flexible classroom space from Edutopia](#)
- [Home and school-work seating ideas from CHADD (see#4)](#)
- [Summary of promising research on flexible seating from Edutopia](#)
- [Description, suggestions, and resources on classroom seating arrangements from Yale](#)

2

ASSISTIVE DEVICES OR
ADAPTIVE EQUIPMENT

Definition

Technology (e.g., a computer), tools (adapted scissors) or a program (e.g., text-to-speech software) to help students complete their work, focus on a task, access an activity, or support their learning.

In action

For students with assistive devices or adapted equipment, ensure that access, maintenance, and continued usefulness across the day in collaboration with the student's educational team (e.g., parents, other teachers, therapists). For students without, assess and discuss potential devices and equipment with educational team to improve access.

Support Strategies

- Communicate with parents/caregivers to ensure technology supports provided at school are compatible with those provided on any devices at home
- Meet with the student to ensure they understand and can access the different functions on a given tool (e.g., all of the features of Google Read & Write)
- Ensure devices are charged and available for whenever students require them across settings
- Teach students how to maintain their technology so they can use it for prolonged periods
- Consider ways to make technology available to other students in the classroom to promote Universal Design for Learning

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Case Study

Student: Grade 8 student in a math class.
Content: Students are working on graphing, by hand, the responses to surveys completed by their classmates.
Problem: The student is unable to grasp coloured pencils tightly enough to colour in the bar graphs
Solution: Provide access to adaptive pencil grip holder.

Additional Resources

- [Overview of assistive technology with hyperlinks to additional resources from Reading Rockets](#)
- [SET Framework for evaluating assistive technology from CEC](#)
- [Assistive device example list from the NIH](#)
- [Broad AT (including devices and equipment) from ATiA](#)

3

MINIMIZING BACKGROUND NOISE

Definition

Intentionally identifying and reducing extraneous auditory input for students who have trouble filtering and selecting important input to increase student focus and engagement.

In action

Teachers can identify both extraneous/ distracting and important auditory input in a particular learning environment & work to reduce the distracting input to help the student to fully take in the important input. This can be achieved at the whole classroom/ school level, the student level, and both.

Support Strategies

- Conduct a sound audit of a specific learning environment in which you write down all noticeable sounds during a set amount of time (this can also be done as a class-wide activity)
- Work with the student to identify important and unimportant/distracting sounds
- Create a plan to reduce distractions sounds (e.g., place tennis balls on the bottom of chairs to reduce squeaking sounds, add rugs and mats to the classroom floor to reduce noise, turn off equipment, such as projector, that produces noise when not in use)
- Allow student to test and use, if desired, noise cancelling headphones or other sound dampening devices.

Case Study

Student: Grade 1 student in a language lesson.
Content: Students are writing journal entries about a story they read as a class.
Problem: Every time a student stands up to ask the teacher a question, the student is distracted by the noise and loses their train of thought.
Solution: The teacher provides students with the option to use noise-cancelling headphones while they complete their work.

Additional Resources

- [Sound sensitivity toolkit for students with communication needs from the Watson Institute](#)
- [Research article on the academic benefits of noise-cancelling headphones](#)
- [Tips on creating a sensory friendly classroom from Edutopia](#)
- [General classroom management tips related to noise control from NEA](#)

4

PROXIMITY TO INSTRUCTOR

> **Definition**
>
> Intentional student placement (e.g., classroom desk) near the teacher to increase quick access to support as well as to increase focus and attention.

In action

Ensure that student placement decisions are based on support needs for each educational context (e.g., classroom, gymnasium).

Support Strategies

- Identify core instructional supports needed (e.g., verbal or visual prompts) for the student and use these to determine appropriate proximity arrangements.
- If using flexible seating, ensure the student with the proximity accommodation is able to retain appropriate closeness to the teacher
- During group work or other times when the student is not in their typical seat, move closer to the student when providing instructions or feedback
- Ask the student for feedback about the seating arrangement
- When using close proximity, be sure to consider ways to decrease teacher reliance while maintaining sufficient student support through self-management, visual supports, peer mediated instruction and other strategies.

Case Study

Student: Grade 8 student in a math class.
Content: The teacher is introducing vocabulary for the algebra unit.
Problem: The student is seated at the back of the class and is mixing up the words "equation" and "expression."

> **Solution:** The teacher seats the student closer to the board, so they have a clear view of the vocabulary, referring to it while they complete their work.

Additional Resources

- [Fact sheet on proximity control from the IRIS Center](#)
- [Exhaustive summary of research and strategies on effective classroom arrangement from the IRIS Center](#)
- [Primer for inclusive education including a description of environmental arrangement from Reading Rockets](#)
- [Article on how proximity to instructor can help students with sensory processing issues from the Child Mind Institute](#)

5

QUIET SETTING

Definition

Intentionally designed environments with reduced auditory input designed for focused work or a break from auditory input.

In action

Teachers can create/ arrange for access to quiet spaces in the classroom and school for occasional use as needed.

Support Strategies

- Arrange access to an alternative room or space within or close to the classroom
- Access to the quiet space should be voluntary and proactive (when possible)
- If the space is shared between student groups, create an accessible signup sheet
- Make sure that space is safe and appropriately monitored by a member of school staff
- Make use of sound dampening materials and provide access to headphones or other sound cancelling devices.
- Minimize background noise by turning off unnecessary sounds (e.g., projector buzzing)
- Make use of outdoor space that students can use as a quiet setting when possible

Case Study

Student: Grade 11 student in a science class.
Content: Students are in partners discussing how to write up an experiment the class recently conducted.
Problem: The student is unable to focus on what their partner is saying due to the background noise.
Solution: The teacher arranges for the pair to work in the resource room and provides them with a timer so they will know when to return.

Additional Resources

- Article explaining how to utilize and create a quiet space, highlighting its importance from Edutopia
- Examples of different types of setting accommodations from the IRIS Center
- Information about creating sensory-friendly spaces from Reading Rockets
- Steps for creating a relaxation station from Dr. Kimberly Maich
- Details and tips for creating sensory safe spaces for students in crisis from ASCD

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REDUCTION OF AUDIO/
VISUAL STIMULI

> **Definition**
>
> Decreasing unnecessary stimuli from the classroom/ environment for students who struggle to process audio/visual stimuli.

In action

Depending on the student needs, consider ways to identify and reduce audio and visual "clutter" in learning environments and tools (e,g,. classroom displays, worksheet graphics, squeaky chairs).

Support Strategies

- Learn about specific needs of the student (e.g., IEP review, speak with student, parents, past teachers)
- Work with student (when appropriate) to identify specific visual/audio problem, areas and potential solutions
- Consider conducting a classroom audit of regular, non-instructional, noises (e.g., loud pencil sharpener, chair scooting, chatter) and extra visual (e.g., cluttered front whiteboard, location and prominence of key information displays) to identify potential clutter or problems
- Ensure students have access to a quiet space when working independently or in groups
- Use texts and/or images to reduce the amount of verbal instructions necessary for students to complete a task

Case Study

> **Student:** Grade 4 student in a science class.

> **Content:** The teacher is showing a video on the rain forest.
> **Problem:** The student is distracted by the frequent squeaking noise of students shifting in old classroom chairs
> **Solution:** The teacher works with the school caretaker to put a little oil on the squeaking part of the classroom chairs to remove the noise when students shift.

Additional Resources

- [Considerations and ideas for creating an in-class quiet space from Edutopia](#)
- [Tips for de-cluttering a classroom from Edutopia](#)
- [Rationale and strategies for creating an organized classroom environment for students with Autism from IIDC](#)
- [Description and strategies to address classroom acoustics from ASHA](#)
- [Tips and tricks for dealing with a loud classroom from NEA](#)
- [Considerations on classroom noise for students with hearing impairments from CID](#)

7

SPECIAL LIGHTING

Definition

Conscious decisions about lighting use in the classroom to affect the student experience

In action

Familiarize yourself with students' sensory needs, level of vision, and general preferences and work with them to determine the type of lighting needed for a task.

Support Strategies

- Work with relevant school personnel to obtain appropriate tools (e.g., desk lights) to keep in the classroom
- Work with IT department to manage glare and screen brightness when the student is using technology
- Ensure student is seated within appropriate proximity to ceiling lighting, windows, etc.
- Use daytime or equivalent lighting for engagement-required tasks
- Consider alternatives to fluorescent lighting

Case Study

Student: Grade 6 student with low vision in a homeroom class.
Content: The class has an occasional teacher for the day who assigns a group task.
Problem: When the class gets into groups, the student with low vision is unable to see as well as they could from their original seat.
Solution: The classroom teacher communicates with the occasional teacher ahead of time about maintaining the original seating arrangement for access to optimal lighting.

Additional Resources

- [Information package on supporting students with blindness or low vision from CNIB](#)
- [Description of effective learning spaces, including lighting suggestions](#)
- [Research article describing some limits on blue light covers](#)
- [Tips to improve the physical environment (including lighting) for inclusion from Reading Rockets](#)
- [Description of potential sensory impacts on learning from the Child Mind Institute](#)

8

STRATEGIC SEATING

<div>

Definition

Intentional selection of a seat or place in the classroom based on a student's individual needs and the classroom context.

</div>

In action

Consult with the student, their IEP, family, previous teachers to identify previous seating related considerations, needs, and supports to determine the most appropriate space(s) for their learning and engagement in the classroom.

Support Strategies

- Seat the student near peers that support their learning (e.g., social bonds, behaviour model)
- Minimize background noise when students are working in groups
- If the student requires frequent breaks, seat them near the door or the designated area they can go to relax
- Ensure students with audio or visual needs are seated near the necessary equipment or key areas
- Allow for both fixed and flexible seating arrangements
- Describe and model strategic seating choices for students (e.g., "when I need to focus, I sit in a quiet space")
- Encourage students to self-monitor and self-assess their work skills in various seating arrangements and contexts to increase self-awareness of their own needs.

<div>

Case Study

Student: Grade 5 student completing group work.
Content: The student is preparing for a group presentation with their classmates

</div>

Problem: The student cannot hear their group member because of the background noise from other groups

Solution: The teacher utilizes a seating arrangement that minimizes background noise so that the students will be able to hear one another more clearly

Additional Resources

- [Steps for implementing a strategic seating plan from Accommodation Central](#)
- [List of environmental accommodations, including preferential seating, and common barriers to implementing them from the IRIS Center](#)
- [Overview of research focused on the use of preferential seating from NCEO](#)
- [Classroom seating considerations from EducationWeek](#)

9

STUDY CARREL

Definition

A workspace surrounded by a physical barrier (permeant or temporary) to enable students to study/ work with fewer visual distractions.

In action

Create portable study carrels that students can choose to use when they are having trouble focusing on a task. Study carrels can be stigmatizing; it is important to describe the purpose and benefits of this tool and to normalize it's use by allowing all students to have access to study carrels.

Support Strategies

- Describe benefits and purpose of study carrels and similar distraction-reducing strategies
- Allow students to test out study carrels and other related supports and describe their experience before using one on a regular basis
- Set up a study carrel in the classroom that students can request to use as part of flexible seating
- Equip the study carrel with tools and resources that students will need to complete their work
- Use sticky notes on the study carrel to remind students of success criteria or provide words of encouragement

Case Study

Student: Grade 3 student in a math lesson.
Content: Students are writing an assessment on addition and subtraction.
Problem: The student asks to work in a different room because they are feeling distracted by the other students around them, but no one is available to supervise them elsewhere.
Solution: The teacher sets up a study carrel for the student to reduce distractions.

Additional Resources

- [Article outlining the benefits of having an organized classroom for students with autism spectrum disorder, including the use of study carrels with an example from Reading Rockets](#)
- [List of common attention-related learning barriers and setting accommodations- including study carrels from the IRIS Center](#)
- [Case study and sample video on the use of a study carrel from the Watson Institute](#)

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USE OF HEADPHONES

<table>
<tr><td>
Definition

Allowing students to use headphones, either to cancel out any noise or to add specific sound (e.g., music), to support calming or focus during an activity or transition
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</table>

In action

Depending on specific needs and preferences, provide access to noise-cancelling or reducing headphones or audio-connected headphones for white/ ambient noise or music while during a difficult or stressful activity an activity or transition.

Support Strategies

- Keep different types of headphones in the classroom, including noise-cancelling headphones
- Establish and model guidelines as a class around respectful use of headphones (e.g., keeping music at a quiet volume)
- Encourage students to bring headphones from home with parent/caregiver permission
- Help students to self-assess the effect of music/ noise cancelling on their work to determine when and how it can be most effective.
- Work with students to create a playlist that students can listen to through the headphones while doing their work

<table>
<tr><td>
Case Study

Student: Grade 12 student in an art class.
Content: The class is drawing self-portraits as part of their final assignment.
Problem: The class is working quietly and extremely focused, but the student is having trouble focusing on their work due to the quiet.
Solution: The teacher provides headphones with a pre-approved playlist loaded for student to support completing their work.
</td></tr>
</table>

Additional Resources

- [Description of setting accommodations and tips for use, including headphones, from the IRIS Center](#)
- [List and description of common barriers and related setting accommodations, including audio-related, from the IRIS Center](#)
- [Review of literature related to noise-cancelling headphones use from Cogent Education](#)

PART II

INSTRUCTIONAL ACCOMMODATIONS

11

ABILITY GROUPING

<div>

Definition

Purposefully grouping a student with those who have a slightly higher level of ability on a specific skill with the purpose of embedded peer support.

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In action

The teacher creates small groups of students for group work based on achievement levels or abilities with a specific skill and tailors the expectations according to each group's abilities.

*Important note: Overuse or misapplication of ability groups can be problematic. Teachers should avoid creating low and high achieving sub groups within a classroom and instead ensure that all students' strengths are appreciated and highlighted through use of ability groups across content and other beneficial accommodations.

Support Strategies

- The teacher can use within-class grouping (i.e., making groups of students from the same class) when all students can be grouped with those who are working at a similar level.
- The teacher can use between-class grouping (i.e., making groups of students from more than one class) when students will benefit from working with those in a different class or grade level.
- The teacher can differentiate the task expectations so that groups are working on tasks based on their abilities.
- The teacher can create groups of different sizes when necessary, prioritizing ability grouping over uniform grouping.
- The teacher can conference with each group throughout class to determine the level of support required, as well as to assess whether groups are suitable for future use.
- The teacher should ensure that work activities in each group are equally stimulating and enjoyable.

Case Study

Student: Grade 3 student in a math class.
Content: Students are working in random groups to solve addition and subtraction problems using math manipulatives.
Problem: The student is having difficulty understanding how the manipulatives relate to the problems their peers are solving.
Solution: Students with similar math proficiency are placed into groups with one another. The teacher conferences with groups according to need to ensure all group members understand the task and how the manipulatives represent the numbers used in the problems. The teacher provides groups who need additional support with other resources, such as counting blocks, visual cues, and strategies (e.g., counting up on their fingers). The teacher checks in with this group more frequently to ensure they are on the right track.

Additional Resources

- [Article on using reciprocal teaching and co-operative grouping to support literacy instruction for students with intellectual disability](#)
- [Article outlining different strategies for using group work in the classroom, including peer tutoring and combined grouping formats](#)
- [The *Learning for All* document details how ability grouping can be used in the creation of a class profile](#)
- [An introduction to the Multi-tiered Systems of Support (MTSS) from PBIS](#)
- [Video describing typical instructional supports in Tier 2 & 3 (RTI/ MTSS) from McGraw Hill](#)
- [Guide for implementing tiered supports from Edutopia- including important section on reducing stigma](#)

12

ASSISTIVE TECHNOLOGY

> **Definition**
>
> Refers to any device or system that helps students perform functions that they may find difficult or impossible. Assistive technology includes a wide variety of tools ranging from simple (low tech)to very complex (high tech).

In action

Teachers support students in using assistive technology (AT) by collaborating with students, families, and other school staff to identify areas of student support need and potentially helpful AT tools. Once tools are identified, teachers work collaboratively to find the best AT tool, assist in student training to use the tool, and provide ongoing support to ensure the tool is ready for use and remains a good match for both the student and their support need.

Support Strategies

- Learning about different technologies available
- Asking students and guardians what they need
- Having students do their own research on what might work for them

<u>AT Examples</u>

High Tech AT

- Power wheelchairs/ scooters
- Computers with specialized software such as eye gaze
- Digital hearing aids

Mid Tech AT

- Alternate mouse or keyboard
- Closed captioned television
- Talking spell checkers

Low Tech AT

- Highlighted text
- Large print text
- Paper-based communication book

Case Study

Student: Grade 2 student in language class.

Content: Students are asked to rewrite a story in their own words.

Problem: The student is having a hard time getting his ideas down quickly enough using the pencil and paper and keeps losing his train of thought.

Solution: The student can use a computer with text to speech (e.g., google voice) to construct the paper verbally and have it automatically converted to text

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Additional Resources

- [Basic AT information from the OTC](#)
- [AT assessment process steps from SNOW](#)
- [AT informational module for teachers from the IRIS Center](#)
- [Low Tech AT for students with ASD from the Vanderbilt Kennedy Center](#)
- [AT Facts and links from ATiA](#)
- [Video example of text-to-speech in the classroom from Edmonton Regional Learning Consortium](#)
- [Video example of word prediction in the classroom from Edmonton Regional Learning Consortium](#)

13

AUGMENTATIVE AND ALTERNATIVE COMMUNICATIONS (AAC) SYSTEMS

Definition

Communication systems that are used alongside (augmentative) or in place of (alternative) spoken and/or written communication, particularly for students with difficulties in speech-language production and/or comprehension.

In action

Teacher provides aids for individuals with speech-language difficulties to support their communication abilities, including equipment, technology, training, and ongoing support.

Support Strategies

- If the student does not have AAC, but could use it, work with the student's educational team to conduct an AAC assessment to determine the best fit between AAC and student needs
- Teach necessary school/activity vocabulary to enable student engagement
- Provide ongoing training and learning support to student in the use of their AAC system
- Provide training and support to other school personnel, student's family members, and classmates in use of the AAC system.
- Ensure that the AAC system is equipped to meet the appropriate language needs of school activities for student participation
- Incorporate and encourage AAC use across all school and home activities
- Monitor AAC usage including successes and barriers and work with the educational team to ensure best fit and decide on AAC-related learning goals and support needs.

Case Study

Student: Kindergarten student learning the alphabet.

Content: The teacher is practicing the alphabet song with the class.

Problem: While the student can comprehend verbal communicating, they are having difficulty participating in singing the alphabet due to their speech-language production challenges.

Solution: While teaching the class the alphabet song, the teacher uses sign language for each of the letters to help students with all speaking abilities to participate.

Additional Resources

- [Exhaustive resource describing AAC and considerations for school use from WATI](#)
- [Article on augmentative and alternative communication for young children including sample videos from EBIP](#)
- [American Speech-Language-Hearing Association webpage describing augmentative and alternative communication](#)
- [AAC basics and links to more resources from ISAAC](#)
- [AAC and assessment info from CTNSY](#)
- [ASHS position statement describing the issues with Rapid Prompting and Facilitated Communication systems](#)

14

BUDDY/PEER TUTORING

Definition

Pairing up a student with an exceptionality with another student to enrich their opportunities for social and academic learning.

In action

The teacher can assign students with different abilities to work together such as by completing different components of the same task.

Support Strategies

- Give group work with assigned roles (e.g., note-taker) so that students have a structure for working together
- Students can complete information gap or jigsaw activities whereby they complete the majority of their work independently and collaborate to create the finished product
- Provide and model critical language and skills necessary to work together in a supportive fashion
- Provide sufficient training and guidelines for buddies tutors to ensure supportive and beneficial partnerships
- Ensure that students with exceptionalities have opportunities to serve as buddies/ tutors

Case Study

Student: Grade 3 student in an English class.
Content: Students are working in partners to practice reading new vocabulary words out loud.
Problem: The student is having trouble reading some of the longer words and is reluctant to try them out loud.
Solution: The student is paired with a buddy who is able to read the words fluently. The teacher asks the buddy to read the words first and the other student to repeat them. The teacher also provides the buddy with some strategies to support the student if they get stuck

Additional Resources

- [Benefits of peer-mediated learning for students with learning disabilities from LD@School](#)
- [Detailed instructions for implementing effective peer tutoring models from the CLD](#)
- [Suggestions for using peer support models for students with ASD in schools from Reading Rockets](#)
- [Comparison of peer tutoring approaches from Reading Rockets](#)
- [7 steps to starting a peer buddy program in school from TEC](#)
- [Q&A with Dr. Carolyn Hughes on peer buddy programs](#)

15

CLUSTERING LEARNING

Definition

Grouping students for learning on a specific topic or skill.

In action

Teachers can tailor their instruction to specific student groups clustered on learning needs, interests, or some other commonality.

Important note: Overuse or misapplication of clusters solely on ability can be problematic. Teachers should avoid creating and reinforcing low and high achieving sub-groups within a classroom and instead ensure that all students' strengths are appreciated and highlighted through use of ability groups across content and other beneficial accommodations

Support Strategies

- Include the cluster's specific interests into their independent studies
- Use differentiated instruction to provide students with enriched learning opportunities
- Clusters are flexible based on subjects, interests, and learning needs
- Provide students with options to learn new concepts at a faster pace (e.g., assign homework before didactic instruction to allow gifted students to engage with the textbook)

Case Study

Student: Grade 5 students in English class

Content: Students are beginning a new novel with daily readings and comprehension questions focused on describing key themes.

Problem: There are five students with advanced reading skills who display sign of boredom when the new novel is introduced. They each finish the novel within the first few days of it being assigned and want to engage in deeper discussion than their peers.

Solution: The teacher clusters the five students together to read a separate novel at a higher reading level on the topic of their choosing. In addition, this small group engages in advanced discussion around literary themes related to the novel and contrasted with the first novel.

Additional Resources

- [Fact sheet about cluster grouping from the National Research Center on the Gifted and Talented](#)
- [AASA article describing the cluster grouping model and its effective implementation in schools](#)
- [Chapter on Clustered Learning from Drs. Gentry and Mann](#)

16

COLOUR CUES

> **Definition**
>
> Using different colours to signify meaning in a text or lesson to help with organization (e.g. colour by topic/ category), comprehension (e.g., colour by question type), or other activity or skill. Colour cues can be consistently incorporated in teaching materials, student work, and any other contexts that might be useful to the student.

In action

Teachers should collaborate with students and families to designate specific colours for subjects (e.g., English, math, social studies), themes, vocabulary, concepts, etc. so that the student can use the colour cues consistently across settings.

Support Strategies

- Colour cue systems should be collaboratively developed with students and families whenever possible to ensure consistency between supports provided at home and school.
- Some students may have preferences for or aversions to particular colours. It is important to take these into consideration when developing the colour cue system.
- Ensure students have access to notebooks, binders, and other organizational tools such as dividers in the appropriate colours.
- Designate highlighter and pen colours for specific themes in text to be used consistently across curricular subjects.
- Use colour cues to represent specific activity centers, library genres, and other resources in the classroom.
- Ensure students have access to visual reminders (e.g., anchor charts) reminding them of what each colour represents (e.g., red for math).

Case Study

Student: Grade 5 student in a math class.
Content: Students are independently completing a worksheet where they have to solve problems involving the four operations (e.g., addition, subtraction, multiplication, and division).
Problem: The student is having difficulty differentiating between the four types of questions on the page and is confusing addition with subtraction and multiplication with division.
Solution: The teacher assigns a corresponding colour for each of the four operations and provides all students with the option to use the colour-coded worksheets. The student is able to use colour cues to distinguish between the different types of questions, and understands that red means addition, blue means subtraction, yellow means multiplication, and green means division.

Additional Resources

- [Clinical study investigating the impact of using colour cues to support students with Down syndrome in identifying information](#)
- [Examples of visual supports involving colour cues to support students with ASD on literacy-related tasks](#)
- [Collection of printable, visual resources using colour cues that students can use at school and home](#)
- [Ontario curriculum unit planner containing several examples of when and how colour coding might be used in the classroom](#)
- [Colour cueing tips for the classroom from James Stanfield](#)
- [Example of colour coding across school activities from the US Department of Education](#)

17

COMPUTER OPTIONS

> Definition
>
> Any computer-based support that can help students more readily access or participate in lessons or activities. Computer options are considered a subset of assistive
> technology (AT) with specific focus on computer-based AT supports.

In action

Teachers can create computer-based options for class output or input to augment traditional offering such as class lectures, textbook readings, or handwritten assignments.

Support Strategies

- Students can watch instructional videos or listen to audio books
- Students can type assignments on the computer with tools such as spell check
- Students can use a keyboard or speech-to-text convertor to write instead

> Case Study
>
> **Student:** A Grade 5 student in English class.
> **Content:** Students must read a chapter of a book and write a short reflection in their notebooks.
> **Problem:** The student is reading very slowly as some of the words are new and difficult. This is causing them to focus on the words and miss the main ideas of the story.
> **Solution:** The teacher sets the student up with an audio book to listen to while simultaneously reading the text.

Additional Resources

- [Chapter on computer-based AT from eworkshop and the Ontario Ministry of Education](#)
- [General categories of computer-based AT access tools from the Big Hack](#)

- [Examples of computer-based AT software from University of New Brunswick](#)
- [Comparison between assistive and accessible technology from SNOW Inclusive Learning and Education](#)
- [List of sources for free audiobooks from Understood.org](#)
- [List and links to accessibility features in Google](#)

18

CONCRETE/HANDS ON MATERIALS

Definition
Any tangible material that can be used by a student to better understand a specific concept or skill. Use of materials should be helpful in promoting increased understanding and/or skill accuracy.

In action

Teachers can provide relevant tangible materials to students during presentation or practice of a new/difficult skill or concept

Support Strategies

- Using actual or replicated money as part of a mathematics lesson on counting
- Using a map with pins to identify the provinces of Canada
- Using props to discuss the plot of a story

Case Study

Student: A Grade 1 student in Math class.
Content: Students are learning how to tell time on an analog clock. Students are given a worksheet with pictures of different clocks telling different times and are asked to write out the correct time.
Problem: The student is having trouble understanding how to tell time using the classroom wall clock.
Solution: Teacher provides a tangible plastic 2D analog clock and has them practice moving the clock hands to match the teacher whole-class model.

Additional Resources

- [Article describing the benefits of concrete and virtual (online) manipulatives](#)
- [Summary of manipulative use in the classroom with research and practical examples from the University of Cambridge](#)
- [Description of the Concrete-Representational-Abstract (CRA) instructional sequence to support student progress from concrete to abstract conceptualizations and skills from PATTAN](#)
- [Article from Dr. Daniel Willingham on whether and how manipulatives can help students learn](#)
- [Specific ideas for using manipulatives in mathematics from TeacherVision](#)

19

CONTRACTS

In action

Teachers should involve and coach students in the process of creating contracts so that they can experience control and ownership of their own learning and growth as they work toward a desirable outcome (e.g., extra break time, choice activity).

Support Strategies

- Target behaviours for contracts should be collaboratively selected with the student and often the family as well to ensure relevance and buy-in.
- Students may have trouble selecting goals or understanding contracts. It is helpful to coach the students in this process, by modeling a contract, showing examples, and/or starting with a very simple contract using an easily attainable goal.
- After the contract is set up, help the student track their own progress, adjust supports as needed, and be sure to celebrate successes!

Case Study

Student: Grade 8 student in a science class
Content: Class is completing an end of term activity in which they work in groups to research, prepare for, and give a class presentation on their assigned topic.
Problem: The student has difficulty keeping up with assignments due to organizational issues and will likely have a tough time contributing to the group's work.

Solution: The teacher works with the student to set an end goal for the students work in their group and uses backward planning from the due date to break the tasks into daily chunks. This daily activity plan is then used to collaboratively create a contract describing the expectations. It is agreed that when the student is able to complete the contract, the teacher will let them select the class intro music for a day.

Additional Resources

- Fulsome description of behavioural contracts with defined terminology, charts, and sample contracts from the National Center on Intensive Intervention
- Parent tips for creating homework contracts from Intervention Central
- Introduction and steps for creating a behavioural contract from Intervention Central
- Steps for creating contracts with examples from the University of Washington
- Explanation and examples of self-directed learning contacts (post-secondary focused) from the University of Waterloo
- Tip sheet on social contracts with cited research from the University of Minnesota
- Video on group social contracts from Edutopia

20

DESCRIPTIVE FEEDBACK FROM PEERS

In action

Teachers can model both giving and receiving descriptive feedback that is both kind and helpful to support student collaboration and growth.

Support Strategies

- Explain the importance of peer feedback and how to provide effective, descriptive feedback in an informal but informative lesson
- Model giving and receiving helpful feedback often
- Arrange for assignments with an emphasis on peer feedback
- Provide clear guidelines for assignments and a rubric which outlines performance expectations to help guide specific feedback
- Ensure that all students, with and without exceptionalities, have an opportunity to give and receive descriptive feedback equally

Case Study

Student: Grade 6 student in English class
Content: Students are writing a persuasive essay on which animal is better: cats or dogs.
Problem: Student is struggling to figure out how to structure their ideas in written assignments.
Solution: After the first draft is completed and the teacher models giving feedback, students are put in pairs to give feedback on each other's

work using the assignment rubric. Each student works with 2 other students to get diverse feedback and opinions on what they did well and what can still be improved.

Additional Resources

- [Exhaustive summary on what constitutes effective feedback videos](#)
- [and accompanying handbook from EduGains and the Ontario Ministry of Education](#)
- [Tips for teaching students to give feedback from Edutopia](#)
- [Online book on effective strategies for peer feedback from Starr Sackstein](#)
- [Video of five-phase 20 Minute Peer Feedback System](#)

21

DRAMATIZING INFORMATION

> **Definition**
>
> Acting out information such as steps in a task or an abstract concept using physical gestures and modeling to assist in understanding and learning of a skill or concept.

In action

Teachers can incorporate dramatizing information into lessons to help students internalize and better understand information and skills.

Support Strategies

- In history class, a teacher or student can act out a specific moment of history to help them remember the smaller details such as dates and names.
- Teachers can model the steps of a task like washing hands or using a specific function on a calculator while talking through each step.
- Teachers or other students can use gestures to teach the difference between pronouns (I- point to self, you- point to other).

> **Case Study**
>
> **Student:** Grade 4 student in language class
> **Content:** Students are asked to recall what happened in the story they read by writing a summary.
> **Problem**: The student is having trouble remembering what happened in the story because they had trouble reading the book.
> **Solution:** In small groups of 4-5, the teacher has students act out the story before writing the summary.

Additional Resources

- [Definition and examples of story dramatization from Reading Rockets](#)

- [Definition of modeling with video exemplars from the University of Louisville](#)
- [Description of the multiple variations of video modeling from News2you](#)
- [A how to guide for video modeling with emphasis on research and effectiveness](#)
- [Video on video modeling and prompting from DADD](#)

22

DUPLICATED NOTES

> **Definition**
>
> Ensuring that students who have trouble transcribing or processing information are provided with a complete copy of all notes for a lesson/class in advance.

In action

The teacher can print class notes or make them available online in advance to supplement the notes that students are already taking. Notes should be available in the format most appropriate for the student (e.g., large font, varying amounts of detail, etc.).

Support Strategies

- Provide all students with notes outlining what will be covered in class with more detailed copies available for students who need them.
- Distributing copies of guided notes, which have gaps that students can fill in as they follow along.
- Colour-code notes and content displayed in slides to help students follow along.
- Designating peer note-takers so that students can also access a peer's notes.
- Providing an audio-recording of the lesson so that students can pause it and take notes at their own pace.
- Provide models and structured practice for effective note-taking in class.

> **Case Study**
>
> **Student**: Grade 9 student in a math class.
> **Content:** Students are asked to take notes during the teacher's lesson on the distributive property. The teacher is writing down a series of different examples on the board, which students are trying to copy themselves.

Problem: The student is unable to write as fast as the teacher or their classmates, and is missing important components of the examples, such as the brackets.

Solution: The teacher provides the student with guided notes containing each example prior to the lesson so that the student can fill in gaps rather than needing to record every detail. The brackets are already on the sheet for the student, so they only need to fill in the numbers.

Additional Resources

- [Article from Reading Rockets explaining how to use visual note-taking to promote the literacy skills development](#)
- [Description from Learning Disabilities Ontario of AT for notetaking](#)
- [Summary of issues with note-taking and research based strategies and commentary from experts from the IRIS Center](#)
- [Description and tips on using guided notes from Intervention Central](#)
- [Blog post on how guided notes can be used in an inclusive classroom](#)
- [Summary of the research and important considerations on notetaking including videos and a podcast episode from the Cult of Pedagogy](#)

23

EXTRA TIME FOR PROCESSING

> **Definition**
>
> Providing students with extra time to think before they are required to respond to questions or begin a task.

In action

The teacher can build in additional pause time after asking a question or beginning a new task by silently counting to 10 before re-engaging the student.

Support Strategies

- Give the student additional time to complete tests and in-class work
- Encourage students to take breaks while completing tasks (i.e., stand up, stretch, take deep breaths)
- Give the student extra time to respond to questions in class
- Provide students with both oral and simple written instructions
- Reduce the length of repetitive assignments (e.g., completing the even numbered questions)
- Allow the student extended time for test-taking

Case Study

Student: Grade 6 student in Social Studies class
Content: The teacher asks students to discuss the development of the reserve system and the perspectives of Indigenous Peoples, European settlers, and the federal government.
Problem: The student becomes frustrated throughout the discussion as they are having trouble participating effectively due to the quick pace of the discussion.

> **Solution:** The teacher provides the student with a written copy of the question in advance and informs them that their response will be requested in a class discussion to allow extra time to consider the question and formulate an answer.

Additional Resources

- [Interview with Dr. Ellen Braaten on helping children who struggle with processing speed](#)
- [Short article describing how to incorporate "wait time" in the classroom the Inclusive Schools Network](#)
- [Description and justification for use of wait time in the classroom from Reading Rockets](#)
- [Teaching resource for accommodating students with processing speed needs from the OTF](#)
- [Informational fact sheet on wait time, including summary, examples, and video links from the IRIS Center](#)

24

GESTURE CUES

Definition

Using a gesture to direct a student's attention without giving additional verbal information.

In action

Gesture cues can include use of pointing, invented or established signs (i.e., sign language), or proximity (e.g., standing by the door as a cue for the class to line up). The teacher can familiarize the student (and the whole class) with specific gestural cues to help communicate meaning.

Support Strategies

- Provide specific cues to communicate with all students, such as by lowering their hands when the class should lower the volume of their voices.
- Use consistency of routines (e.g., reading a story in the same spot every time)
- Provide visual reminders (e.g., anchor charts) of gesture cues and their meanings.
- Promote the use of gesture cues in the classroom by having students use it to communicate basic requests (e.g., creating a gesture that students can use when students need a break)
- Make us of naturally occurring or organic gesture cues
- Incorporate gesture cues in instruction and modeling of non-verbal receptive and expressive communication

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Case Study

Student: Grade 4 student at the beginning of the day
Content: The class always starts their day with the literacy block, and students choose from five independent activities each morning (e.g., read to self).
Problem: The student is excited about their book and trying to tell a peer about what happened in the previous chapter.
Solution: The teacher holds up a book to redirect the student's attention to reminder independent reading activity.

Additional Resources

- [List of nonverbal cues that can be used in the classroom, such as ASL from UT Permian Basin](#)
- [Resource guide outlining strategies for success (including the use of cues in the classroom) for students with ASD from Autism Speaks](#)
- [Description of cues and prompts from Alberta Ministry of Education](#)
- [Hierarchy of prompting showing where gestures fit in (includes examples) from NPRInc](#)
- [List and video of gestural cue examples from Understood.org](#)

25

GRAPHIC ORGANIZERS

Definition

    Visual tool such as a Venn diagram or charts that visually organizes information and illustrates relevant relationships.

In action

Graphic organizers can be fully completed or in a fill-in format with headings. Teachers can allow students the option to organize their thinking with digital or print graphic organizers when working on a task.

Support Strategies

- Give students the option to hand in graphic organizers as part of an assessment (i.e., handing in a mind map in addition to a written response).
- Model use of graphic organizers when presenting new content
- Create a variety of graphic organizers, teach students how to use them, and make them available on a regular basis.
- Present information in a graphic organizer when teaching a lesson.
- Ensure graphic organizers contain sufficient space for students to record their thoughts.
- Teach students to create their own graphic organizers to summarize complex information

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Case Study

Student: Grade 10 student in an English class.
Content: Students have a work period to write a response to the short story they read as a class.
Problem: The student is unsure where to begin and is writing down their thoughts out of order.
Solution: The teacher provides all students with concept maps to help them organize their ideas before writing.

Additional Resources

- [Article describing how graphic organizers can be used to scaffold learning in the classroom from Edutopia](#)
- [List of resources that teachers can use to create graphic organizers for students from the Inclusive Schools Network](#)
- [Five types of graphic organizers to support students with writing](#)
- [Succinct research summary outlining the benefits of using graphic organizers from the IRIS Center](#)

26

HIGHLY STRUCTURED APPROACH

Definition

Structured learning environment including clear guidelines around time and activities in each class which supports the student's ability to understand expectations and complete tasks with maximum independence.

In action

The teacher can organize work periods into small chunks for the student, so tasks are more accessible to them.

Support Strategies

- Ensure consistency across classes by creating a structure for independent work periods for the student (e.g., checking in with the teacher or a peer after 15 minutes of independent research).
- Co-create a detailed daily schedule with the student so that they can refer to it throughout the day to know what to expect next. The schedule can be shared as an agenda with the whole class with more detailed versions for individual students.
- Co-create clear learning goals with the class so students know the objective of each lesson as well as success criteria that outline the process and steps required for each task. This can be differentiated by including different amounts of detail for different students and distributing copies accordingly.
- Allow the student to take breaks when they need them with designated tasks (e.g., reading for 15 minutes).
- Communicate with the student's caregivers regularly to ensure consistency between home and school (e.g., the amount of homework assigned should be aligned with the amount of time designated for homework at home).

Case Study

Student: Grade 7 student in a history class.
Content: The class is conducting independent research on topics of interest in the computer lab for an upcoming assignment.
Problem: The student has difficulty selecting a topic so they are unable to start.
Solution: The teacher provides the student with choices for a potential topic in advance so they know what they will research when they arrive at the computer lab. The teacher also creates a task schedule organized into smaller chunks for the student, with each chunk having an explicit goal, so they know what they need to accomplish that day. The task schedule also includes time for the student to take a break if need be and lists activities that they can do during their break.

Additional Resources

- [Description and tips on structured teaching for students with autism from Reading Rockets](#)
- [Strategies for supporting students with organization skills and developing classroom routines from the Alberta Ministry of Education](#)
- [List of articles about creating structure for students with autism spectrum disorder by the Indiana Resource Center for Autism](#)
- [Tips on creating structure in your classroom from the IRIS Center](#)
- [Helpful suggestions for using structure to create an inclusive classroom from UNC](#)

27

LARGE-SIZE FONTS

Definition

Enlarging print text or enabling text enlargement on a computer to increase text clarity and readability for individuals with visual impairment.

In action

Ensure every resource is accessible and available in enlarged text in advance for the student.

Support Strategies

- Teach students to use built-in free computer text enlargement tools
- Provide access to specialized text enlargement computer software and hardware when necessary.
- Locate all course texts in a digital format
- Ensure a variety of books with large print are available in the classroom
- Provide all appropriately enlarged text for assessments and ensure sufficient space for student response
- Ensure classroom displays and labeled resources use accessible font size

Case Study

Student: Grade 4 student with low vision in science class
Content: The teacher is presenting a PowerPoint on photosynthesis
Problem: The child cannot see the small font size on the SMART board
Solution: The teacher adapts the presentation, so it uses large font size, and also provides an enlarged text hard copy of the presentation to the student.

Additional Resources

- [Article on using accessible formats, including large font size from Reading Rockets](#)
- [Article on assistive technology for reading, which includes using large font size for electronic texts from Reading Rockets](#)
- [Guide on effective inclusion for children with low vision from CNIB](#)
- [Online library from CELA](#)
- [Digital accessibility toolkit from the Government of Canada](#)

28

MANIPULATIVES

Definition

Physical or virtual objects that students can use to represent and explore abstract concepts in class, at home, or in any other learning environment.

In action

Provide students with access to a range of different objects (e.g., blocks, shapes, puzzle pieces, game pieces, playdough, etc.) to illustrate a new concept or when students are completing work independently and may need support. Manipulatives should always be available to students, and they should know where to find them in the classroom to support their learning.

Support Strategies

- Model how to use manipulatives when teaching a new concept, making it part of the lesson.
- Encourage the use of manipulatives for specific concepts (e.g., using base ten concrete or virtual blocks for place value during math).
- Have a wide variety of objects available that students may use at any time in a designated area in the classroom.
- Use computer programs and apps that allow students to manipulate materials (e.g., dragging and dropping objects to different areas of the screen).
- Ask students what manipulatives they might use to help them with a task before sending students to work independently.

Case Study

Student: Grade 1 student in a math class
Content: The class has been given a worksheet with addition and subtraction problems with numbers between 1-10.

Problem: The student is relying on the "counting on" strategy using their fingers. They sometimes forget whether or not they have already counted a finger, and write down some answers incorrectly as a result.

Solution: The teacher provides the student with base-ten blocks so they can visualize the problem. The counters are a more permanent visual than counting on their fingers, so the student doesn't have to remember to keep their fingers up when solving the problem.

Additional Resources

- [Link to multiple virtual manipulatives for math from K to grade 12 from the National Library of Virtual Manipulatives](#)
- [Explanation of manipulative use in language comprehension and phonological awareness from Reading Rockets](#)
- [Definitions, tip sheets, and practice videos of commonly used manipulatives from EduGAINS](#)
- [Video from the National Centre for Excellence in the Teaching of Mathematics on using Cuisenaire rods, a versatile collection of rectangular rods that can be used to teach students the four operations](#)

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MIND MAPS

Definition

A type of graphic organizer that supports student organization of their thinking on a topic. Typically, the mind map is centered on a keyword with designated spaces surrounding for related information, ideas, and facts. Resulting is a tool that visually organizes thinking on a topic to enhance a student's ability to think and communicate on a given topic.

In action

Teachers should provide mind maps to students at various stages of learning, such as when they are asked to write about a specific topic. Teachers can also create mind maps that are scaffolded and tailored to students' individual needs so they can plan and organize their ideas independently before beginning a related task.

Support Strategies

- Students can use mind maps as a pre-reading strategy to engage and build their background knowledge on a topic, independently or as a class
- Provide students with mind maps that contain prompts reminding them what to include (e.g., specific vocabulary words), which they can consult while completing the task
- Model and teach use of mind maps
- Encourage the use of pictures and visuals in mind maps to help students express their knowledge
- Encourage planning and organization by asking students to submit their mind maps as precursor to submitting the main assignment (e.g., paper, presentation).

Case Study

Student: Grade 3 student in a science class

Content: The teacher is reading a story that explains the water cycle and students are encouraged to raise their hands to share what they know with the class.

Problem: Some students struggle to recall certain terms and articulate their ideas about the water cycle in response to the teacher's questions.

Solution: Before teaching the water cycle, the teacher provides students with a mind map with the term "water cycle" in the center as well as a list of key vocabulary for the unit. The teacher asks students to write or draw what they know about the water cycle on the mind map. The teacher asks students to bring their mind maps to the carpet so they can use them as a reference when thinking about and responding to the teacher's questions.

Additional Resources

- Video from a teacher illustrating an example Mindmap for a class activity on weather
- Description and examples of concept maps, an extension of mind maps, from Reading Rockets
- Description of mind mapping from LD@School
- Quick and concise definition of mind mapping with rationale and steps to begin from the University of Portsmouth, UK
- Short article on using Mind Maps for critical thinking from University of South Carolina

30

MORE FREQUENT BREAKS

Definition

Separating structured activities by adding break time in between to help a student rest and before returning their effort and focus on a specific task.

In action

Teachers can schedule breaks for students by adding them into a task schedule or prompting them between activities.

Support Strategies

- Teachers can create a designated break area in the classroom that students can use when they need extra time between tasks
- Teachers can ask students to help by erasing the board, collecting papers, or dropping something off before starting something else
- Teachers can encourage students to take a walk, draw, or read to themselves before starting an academic activity
- Teachers can provide students with breaks for access to different sensory input (e.g., playing with sand).
- Teachers can break up the instructional period into smaller discrete parts for all students by having all students participate in a "body break" activity
- Teachers can create signals for students to use when they feel they need a break but are not ready to communicate it verbally

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Case Study

Student: A Grade 4 student with ASD in a social studies class.

> **Content:** The teacher spends 15 minutes reviewing the previous lesson before the class transitions into 20 minutes of independent work.
> **Problem:** The student with ASD is looking out the window while the teacher is assigning the class activity.
> **Solution:** The teacher can instead incorporate a structured break (e.g., body break) between instruction and independent work so students are able to maintain their focus. When the break is over, the teacher explains the independent task and ensures that the student with ASD knows to ask for a longer break should they need one.

Additional Resources

- [Reading Rockets article on managing attention, with a description of brain breaks](#)
- [Detailed information on providing predictable and scheduled breaks for students with ASD by using sensory equipment, breaking up instructional periods, and providing quiet spaces for students](#) from the Ontario Ministry of Education
- [Article on the benefits of body breaks](#) from Edutopia
- [Tips for taking sensory breaks at school from Autism Speaks](#)
- [Why breaks are important and how to incorporate them into the classroom from The Friendship Circle](#)
- [Handbook on movement breaks including tips for transitioning back to learning from the National Council for Special Education](#)

31

NON-VERBAL SIGNALS

> **Definition**
>
> A signal or system of signals established between a teacher and student, not involving verbal communication, that can be used to help the student focus their attention or highlight important of information.

In action

Teachers can use gestures, eye contact, referencing key images, and other non-verbal signals (e.g., symbols, motions, sign language, patterns, etc.) to direct a student's attention verbal information. Ideally, teachers will develop the signals in consultation with students to ensure student comfort with the signal as well as its effectiveness and efficiency.

Support Strategies

- If a student appears to be taking an extended break from completing a task, the teacher can re-direct their attention by pointing to the student's work or the instructions on chalkboard rather than asking them what they are doing.
- The teacher can use a signal (e.g., snapping twice) to convey the importance of information that is about to be explained
- If the class is participating in an activity that involves responding in a certain way (e.g., clapping if you hear a certain word), the teacher can provide or display cue cards to remind the students of the different responses
- Teachers can use a transition item (e.g., a bell, visual timer) to demonstrate that a change or transition is about to take place or to ask for the class's attention
- When a teacher is pleased with a student's work, they can use facial expressions (e.g., smiling), body language (e.g., thumbs up), or other cues (e.g., passing the student a post-it note that says "great work!") so they can praise the student without giving verbal information to process.

Case Study

Student: Grade 9 student in an English class
Content: The teacher is reading a chapter of a novel to the class to introduce a new unit of study. The teacher asks students to follow along in their own copies of the book.
Problem: The student is staring out the window and appears not to be following along with the reading.
Solution: The teacher knows that the student tends to look out the window during certain activities and miss key information. They conference with the student to understand how they like to be supported when they lose focus. The teacher and student agree that the teacher can quietly tap on the student's desk three times when they are looking out the window to help re-direct their attention.

Additional Resources

- [Tips for using nonverbal cues in the classroom from UTPB](#)
- [Rationale, strategies, and resources on nonverbal cues and signals from PBIS World](#)
- [Strategies for group and individual signals with video example from Understood.org](#)
- [Brief description and contextual considerations for implementing cues from HISD](#)

32

NOTE-TAKING ASSISTANCE

Definition

Providing individualized instruction and/or support to the student on note-taking, such as providing an alternative format (e.g., fill-in-the-blanks template, graphic organizer, or assistive technology) to better support the student's ability to glean essential information and fully engage in the course content.

In action

Teachers can improve a student's ability to retain information through note-taking by providing individualized supports and making them available to students ahead of the lesson.

Support Strategies

- Use a scribe when available and appropriate if it will support the student to complete a certain task
- Simplify course information into an accessible note-taking format (eg., fill-in-the-blanks)
- Use peer support by pairing students who need note-taking assistance with those who take notes independently
- Offer different options for assistive technology (e.g., typing or speech-to-text devices)

Case Study

Student: A Grade 10 student in a science class.
Content: Students are viewing a PowerPoint presentation on photosynthesis and are expected to take notes on important details.
Problem: The student is struggling to multi-task processing the information, identifying the most important parts, and writing it down.
Solution: The teacher provides a fill-in-the-blank template as an option for note-taking so the student can focus on only recording the most important information without worrying about the order. As a result, the student is better able to process and engage with the information presented in the lesson.

Additional Resources

- [Instructions on how to use guided notes and downloadable templates from the Teacher Toolkit](#)
- [Article on supporting students with note-taking from Reading Rockets](#)
- [Podcast summary of research on supporting student note-taking efforts from the Cult of Pedagogy](#)
- [Article summarizing note-taking issues and concrete means to support students from Preventing School Failure](#)
- [Beneficial list on strategies to assist with note-taking and related examples and considerations from the IRIS Center](#)

33

NOTE-TAKING SIGNALS

Definition

One-on-one coaching and embedded support to increase note-taking skills.

In action

Provide students with visual prompts (e.g., a hand signal) or specific tools and formats to support recording important information during class.

Support Strategies

- Meet with the student to understand their strengths, needs, and perspective on note-taking.
- Identify specific note-taking problem areas such as identifying critical content, recording content, organization, etc.
- Provide visual (e.g., raise hand, circles or highlighted text in presentation) or verbal (e.g., "take this down") cues during presentation to signify critical information
- Use partially completed note-taking templates (e.g., fill in the blank) to narrow student focus to essential information
- Including symbols in visual materials (e.g., an asterisk) to indicate the most important details to be recorded
- Give students feedback on their note-taking abilities, such as suggestions for how to organize with headings.

Case Study

Student: A Grade 5 student in science class
Content: The teacher is introducing the class to the digestive system using visuals and asks them to take notes.
Problem: The student is unsure of what information needs to be recorded as there are no words on the slides—only images.

> **Solution**: The teacher provides the student with a note-taking template in advance to help focus on essential information while taking notes.

Additional Resources

- [Comprehensive article on evidence-based note-taking supports for students with disabilities from *Preventing School Failure*](#)
- [Brief descriptions on note-taking accommodations from UW](#)
- [Podcast and article on background and strategies for successful note-taking supports from cult of pedagogy](#)
- [Tips for creative and fun note-taking strategies for the whole class from Edutopia](#)
- [Tips on teaching note-taking skills to students with learning disabilities from LDOnline](#)

34

ORGANIZATIONAL COACHING

> **Definition**
>
> Modeling, teaching, and supporting strategies to aide memory and efficiency in recording, prioritizing, and completing day to day and long-term tasks.

In action

Provide explicit instruction, scaffolding, and intentional supports related to organizational skills rather than relying on incidental teaching.

Support Strategies

- Model organizational skills such as creating and adhering to a schedule by writing an agenda each day and reviewing it as a class
- Colour code and label shared supplies so students know where to find them independently
- Provide frequent feedback on the organization of students' work, noting where they can add organizational elements such as headings and sub-headings
- Teach students about time management in specific contexts such as assessments, group work, etc.
- Provide students with the tools they need to stay organized independently, such as subject dividers for their binders
- Provide scaffolded instruction on organizational tasks such as recording assignments, taking notes, study tasks, or noting important dates from the course syllabus.

> **Case Study**
>
> **Student:** Grade 10 student in a history class
> **Content:** Students are asked to take notes during a class discussion on the social, economic, and political context between 1929-45.

Problem: The student takes notes diligently throughout class, though doesn't use headings to organize them

Solution: The teacher collects students' notebooks every other week to provide feedback, and suggests that the student separate their notes by date, headings, and sub-headings. The teacher provides the student of an example of what this would look like, as well as with different coloured highlighters so they can distinguish between headings and sub-headings. The teacher checks in the student periodically over the term to gauge progress and provide support as needed.

Additional Resources

- [Article on supporting students with organizational skills from Reading Rockets](#)
- [Organizational tips for supporting students with exceptionalities in general education classrooms from OTF](#)
- [Interactive study skills professional learning module (part 1) from IRIS](#)
- [Interactive study skills professional learning module (part 2) from IRIS](#)

35

PARTNERING

> **Definition**
>
> Assigning the student a partner to assist with class work or projects that are slightly more advanced than the student can complete alone.

In action

Teachers can create both structured and unstructured opportunities for students to connect with peers, such as by offering the option for students to complete tasks in partners.

Support Strategies

- Encourage social opportunities in the classroom (e.g., through the use of morning or community circles)
- Allow students to practice verbal communication and listening skills by adding an element of peer assessment to assignments
- Create opportunities for peer teaching during different units of study
- Scaffold tasks and assignments such that students can contribute their knowledge and skills to a shared project
- Ensure that students with disabilities have equal opportunity to support their peers without disabilities through partnering

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Case Study

Student: Grade 4 in a math class.
Content: Students are working on learning the multiplication tables up to 10.
Problem: The student is struggling to remember the 9 times table and is losing motivation due to the repetitive nature of the task.
Solution: The teacher partners the student who is having trouble with a student who uses a strategy to remember the 9s times table. This student teaches the struggling student their strategy, and the two students practice together.

Additional Resources

- [Book chapter on the benefits of partner work for students by Marc Prensky](#)
- [Article on strategies to consider when creating student groups from Reading Rockets](#)
- [Recorded presentation on peer supports for students with extensive support needs by Dr. Erik Carter](#)
- [Description, tips, and examples of peer supports in action from Inclusive Schools Network](#)
- [Facilitators manual for peer supports in secondary school- specific to autism from CSESA](#)

36

PICTORIAL SCHEDULES TO ASSIST IN MAKING TRANSITIONS

> **Definition**
>
> A visual schedule, often personalized for the student, that depicts the daily or activity-based schedule to support student understanding of and transition from one activity to the next.

In action

Provide students with visual schedules that highlight when transitions will occur throughout the day and what activities will come next to help ease student uncertainty. It is important that the teacher adhere to the schedule for consistency.

Support Strategies

- Select visuals with students so they will be more likely to understand the schedule
- In some cases visuals used must be taught, check whether this is the case and proceed accordingly
- Provide an updated schedule with plenty of notice if a given day will follow a different structure
- Create consistency between home and school by working with families to co-ordinate the use of visuals and schedules
- Provide centrally located as well as portable schedules (e.g., one that is posted for class use, as well as one the student can keep in their desk or pocket)
- Communicate with the student's other teachers so that they can encourage the use of the schedule during their classes

Case Study

Student: Grade 2 student transitioning to a French class.
Content: There is a half day at school, so the class is ending literacy early to transition to French.
Problem: The student's routine is disrupted because they are accustomed to having French at a different time.
Solution: The student is given an individual pictorial schedule the day before (which is also posted in a central location in the classroom). The student knows about the change and can refer to their schedule for reminders about timing and expectations. The student is able to transition to French early because they know about the change in advance.

Additional Resources

- [Article containing detailed information about creating and implementing visual schedules by Reading Rockets](#)
- [Templates for different visual schedules for students with ASD from the Geneva Centre for Autism](#)
- [Description and examples of downloadable visible schedules for different purposes from the National Autistic Society](#)
- [Visual support toolkit for students with ASD from Autism Speaks](#)
- [Boardmaker community educator sharing page with templates and samples of visual schedules, among other visual supports](#)

37

REDUCED/UNCLUTTERED FORMAT

Definition

Intentionally simplistic design of physical handouts, online resources, or other visual displays to allow focus on the essential information.

In action

Teachers can create alternate forms of regularly used displays, handouts, or other resources which are more sparse (more white space, less unnecessary graphics) and focus solely on the primary function (e.g., assessment via worksheet, information sharing via a list of project tasks).

Support Strategies

- Consider having two versions of the resource (regular and simplistic) and allow access to the whole class
- Consider the most effective font size and the amount of blank space provided on handouts
- Edit and omit unnecessary information (e.g., extra graphics and text)
- Consider use of dedicated text boxes for required responses
- Providing clear and concise instructions that students can follow easily
- Replace and condense text with visuals when appropriate to reduce the amount of written information to process
- In addition to reducing clutter, it is important to simultaneously support and instruct students in how to strategically identify key/ relevant information from cluttered displays and resources

Case Study

Student: Grade 4 student in a math lesson
Content: Students are preparing to write a math test. They will be asked to read a series of word problems and respond in the space below.
Problem: The student struggles with reading paragraphs with limited blank space between questions.
Solution: The teacher ensures that there is only one word problem per page and provides a box to help students organize their answer.

Additional Resources

- [Article about visual processing needs, such as dyslexia from Reading Rockets](#)
- [Tips for designing accessible documents with Microsoft word from Perkins School for the Blind](#)
- [Specific ideas for simplifying instructions and supports from Reading Rockets](#)

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REINFORCEMENT INCENTIVES

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Definition

The promotion and use of appropriate rewards/ incentives to promote positive behaviours, increasing the likelihood of the behaviour occurring again in the future.

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In action

Teachers can use a wide variety of reinforcement incentives based on student interests to motivate students toward specific goals. Caution should be taken regarding food-related incentives in promotion of healthy habits and behaviors.

Support Strategies

- Allow for student choice in selecting incentives and related goals to work toward.
- Plan special activities (e.g., an outdoor lesson) when students meet a given learning objective
- Introduce special seating options (e.g., an exercise ball) that students can use when working together effectively
- Identify words and phrases of encouragement that resonate with students and write them down on a post-it note to give to them when they are working well
- Celebrate small successes (e.g., solving one step in a three-step math problem) to motivate future achievements
- Highlight and enhance natural incentives
- When appropriate, utilize reinforcement schedules and fading to decrease reliance on reinforcers and increase student independence

Case Study

Student: Grade 1 student in a language lesson.
Content: The class is practicing printing the letters in their names.
Problem: The student is only to write the first three letters.
Solution: The teacher reminds the student that three letters is more than half of their name, praising their efforts thus far. The teacher offers the student the opportunity to take a break before trying to print the final two letters. When the student returns to the task, the teacher reminds them that the class will be playing a game once everyone has finished printing their letters. The student is excited about the particular game and feels ready to continue printing.

Additional Resources

- [Blog post describing ideas for rewarding student reading achievements from Reading Rockets](#)
- [Exhaustive details, definitions, and ideas on appropriate use of reinforcement strategies from the National Center on Intensive Intervention](#)
- [Extensive list of ideas and strategies for motivating students with autism spectrum disorder from Reading Rockets](#)
- [Descriptive explanation of reinforcement schedules with advantages and disadvantages of each from Franklin Porter Graham](#)
- [Ideas for reinforcement in the classroom from IRCA](#)
- [Tips and tools for classroom reinforcement specific to early childhood education from the IRS Center](#)
- [Description of reinforcement in education and suggestions for practice from Learn Alberta](#)

39

REPETITION OF INFORMATION

Definition

Intentionally presenting vital information to a student on multiple occasions and potentially through multiple means (e.g., via on print, voice, online) to increase student engagement and success.

In action

Identify and pursue opportunities to present key information across multiple occasions and in multiple means.

Support Strategies

- Encourage students to repeat information in their own words
- Use the same language when repeating information
- Structure lessons so that repetition is incorporated (e.g., as part of an exit ticket or self-assessment)
- Provide multiple different sources of information (e.g., text, video, podcast, lecture)
- Have students practice repeating information back to one another
- Incorporate repetition into games or play-based learning

Case Study

Student: Grade 10 student in a history class.
Content: Students are learning about Indigenous cultures and subcultures and are asked to research and report their learning.
Problem: The student is overwhelmed with the amount of information and feels like they are forgetting most of the information.
Solution: The teacher uses a "turn and talk" exercise to encourage repetition of concepts with partners so students can recall and discuss what they learned, identifying if anything needs to be clarified.

Additional Resources

- [Article featuring helpful repetition strategies from Reading Rockets](#)
- [Video demonstrating the "turn and talk" exercise from Heather Parsons (YouTube)](#)
- [Strategies for supporting students with working memory difficulties from LD @ School](#)
- [Description of UDL principle- multiple means of representation with details and suggestions from CAST](#)

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REWORDING/REPHRASING
OF INFORMATION

Definition

Repeating content of instructions or other information already been given but using different words and phrasing for clarity.

In action

Teachers can reword or rephrase information presented to the entire class or to individual students in written, verbal, and/ or visual formats to enhance student understanding and engagement.

Support Strategies

- Vary vocal tone and pitch to emphasize the most important parts of the instructions
- Provide students with a list or review of relevant vocabulary words and their definitions before or after providing the instructions
- Engage in conversations with students to see which words and phrases resonated with them from the instructions
- Ask student(s) to rephrase and/or repeat information to identify which parts need clarification
- When instructions are written, provide alternative instructions that summarize what the student needs to do using simple vocabulary
- Consider students' needs when repeating reworded or rephrased instructions, ensuring they have time to process the information the first time
- Provide information in multiple formats

Case Study

Student: Grade five student in a language class.
Content: The students are being asked to read a short passage independently and answer two questions based on the content.
Problem: The student understands that they will be answering questions, but they are unsure about what.
Solution: The teacher provides detailed instructions to the class. Before distributing the materials, the teacher says, "story first, questions second." By rephrasing the vocabulary into simple terms and reducing the amount of words the student needs to process, they better understand the task sequence.

Additional Resources

- [Strategies for effective communication between students and faculty from University of Washington DO-IT](#)
- [General ideas for successful communication from the Child Mind Institute](#)
- [General information about processing difficulties individuals with autism spectrum disorder can experience from ARI](#)
- [Tips on presentation accommodations from the IRIS Center](#)

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SCAFFOLDING LEARNING

<div>

Definition

Providing a structured learning opportunity with embedded support that promotes success and growth toward independence as well as increased learning complexity and reduced supports.

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In action

Provide necessary support in initial learning stage and gradually release responsibility to students as they work through a task and gain knowledge, skills, and confidence.

Support Strategies

- Break down instructions, tasks, and information into smaller chunks
- Continually monitor student performance and the necessity of external interventions (e.g., verbal reminders from teacher). Make adjustments as needed.
- Provide teacher or peer coaching as students learn new and/or difficult tasks.
- Practice completing a similar task before asking students to work independently
- Model the steps required to complete a task before students begin
- Incorporate self-management strategies within scaffolding

<div>

Case Study

Student: A Grade 3 student in a Language lesson
Content: Students are practicing procedural writing.
Problem: The student is unsure where to begin and can't recall how to summarize information in steps.
Solution: Before beginning the task, the teacher models procedural writing using an anchor chart, which the students can refer to as they work. Later in the week once the students have had some practice, the teacher removes the chart as students no longer need it.

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Additional Resources

- [Scaffolding strategies with examples from Edutopia](#)
- [Scaffolding strategies to use during reading from Reading Rockets](#)
- [Detailed article on instructional scaffolding from the IRIS Center](#)
- [Book chapter on scaffolding instruction from Granite State College](#)
- [Resource guide on scaffolding for English Language Arts from NYSED](#)
- [Tip sheet with resources and videos on scaffolding from CEC](#)

42

SPATIALLY CUED FORMATS

Definition

A form of visual cueing that uses space to signal the type response needed (such as 2 empty lines on a worksheet indicating the need for a 2-word answer) to clarify expectations.

In action

Teachers can insert spatial cues into assignments that indicate expectations such as the number of words, sentences, or paragraphs required.

Support Strategies

- Provide students with visual and structural supports (e.g., graphic organizers) to assist with planning and organization
- Model and practice using spatially cued supports to ensure understanding and benefit
- Organize assignments into individual components with spatial cues to help students pace themselves and the amount of writing required
- Provide students with exemplars to show them what the finished product might look like
- Use different templates for different types of writing (e.g., a template for writing a letter with separate lines for the greeting, body paragraphs, and a closing/signature)

Case Study

Student: Grade 5 student in an English class.
Content: Students are learning how to write five-paragraph essays.
Problem: The student is unsure how to structure the essay and how much writing is involved in each section. The student is worried about how they will fill all five paragraphs if they write too much in the first.
Solution: The teacher provides a template with spatial cues that show how many sentences belong in each paragraph (e.g., one paragraph space for the introduction).

Additional Resources

- [Detailed chart explaining how different types of processing, including visual-spatial, affect learning from York Region District School Board](#)
- [Article on visual supports in the classroom setting from Reading Rockets](#)
- [Tips for visual support strategies from Understood](#)
- [Ed Guide on Visual Cueing from Add*Ed](#)

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TACTILE TRACING STRATEGIES

Definition

Embedding learning content with physically raised texture to highlight and guide accurate tracing (e.g., letters, numbers, shapes).

In action

Make use of multiple tactile-oriented resources and activities to help increase physical sense of the abstract concept like a letter, number.

Support Strategies

- Assess student baseline skills in tracing prior to determining appropriate supports
- Model the use of tactile tracing strategies when teaching students to write numbers and letters
- Make use of raised text (e.g., glue lines) in early learning of letters and numbers
- Provide multiple options for tracing (e.g., shaving cream and sand writing, marker tracing on pencil). Be sure consider and student sensory sensitivities/ aversions.
- Ensure physical materials (e.g., paper) is appropriate for tactile tracing
- Work on phasing out tactile tracing supports as students gain skills.

Case Study

Student: A Kindergarten student
Content: Students are learning how to write their name
Problem: The student has low vision and is writing the letters incorrectly, despite knowing the correct sounds
Solution: The teacher provides the student with a tactile tracing worksheet containing the letters in their name. After practicing with the traceable material, the student is able to write the letters in their name independently on lined paper.

Additional Resources

- [General tips on how to teach handwriting from Edutopia](#)
- [Blog post outlining the benefits and considerations in using tactile tracing and other multisensory approaches from Reading Rockets](#)
- [Module with information on how to accommodate students with visual impairments in the general classroom from the IRIS Center](#)

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TAPED TEXTS

<table>
<tr><td>Definition</td></tr>
<tr><td style="text-align:center">Audio recording of written material.</td></tr>
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In action

Provide access to both audio recording and necessary listening device (e.g., digital player and headphones, computer) for all essential texts.

Support Strategies

- Provide audio recordings of any written class material (e.g., textbooks, class notes)
- Ensure students have access to audiobook libraries (e.g., Epic Books)
- Ensure access to appropriate listening hardware and software.
- Provide training and support in use of listening deceives or software
- Focus on portable tools for use across school and home
- Incorporate other forms of taped texts (e.g., podcasts) in instruction when possible

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Case Study

Student: A grade 9 student in a science class
Content: Students are reading an article about the effects of human behaviour on natural habitats and then answering a series of comprehension questions.
Problem: The student is struggling to decode the article at the same pace as their peers and is concerned about their ability to answer the comprehension questions.
Solution: The teacher provides the student with an iPad and headphones to listen to an audio version of the text. The student is able to pause the recording and take notes as they listen, allowing them to more accurately show their comprehension of the content.

Additional Resources

- [Free digital library for kids from EPIC! containing thousands of titles](#)
- [Article outlining the benefits of audio-assisted reading from Reading Rockets](#)
- [Summary of the benefits of audiobooks/taped texts for all students](#)
- [Large resource of audiobooks from Bookshare](#)
- [List of audiobook sources from Dyslexia Canada](#)

45

TIME MANAGEMENT AIDS

> **Definition**
>
> An array of strategies and tools focused on supporting student time management development over short (e.g., a lesson) and long (e.g., a course, term) periods of time.

In action

Provide resources (e.g., planners, timers) and appropriate modeling and support to incorporate time-management tools and strategies into their day-to-day life.

Support Strategies

- Model and teach short- and long-term goals setting for school-based tasks (e.g., daily homework, end of term paper)
- Encourage use visuals (e.g., a sand or electronic timer) to keep track of how much time they have to complete a task
- Model the effective use of time management aids, such as digital planners and alarms
- Help students break larger tasks down into smaller steps, estimating the length of time each step will take.
- Remind students to consider how much time they have to complete a task
- Devote time to planning and organization before students start a project or a larger task
- Be sure to note any specific time management aids to be used in the student's IEP

Case Study

Student: Grade 10 student in a new school
Content: The student joins the school in the middle of the year and is adjusting to their new schedule.
Problem: The student is having trouble deciding how much time they will need to study for tests in different classes when they are scheduled close together.

> **Solution:** A teacher or guidance counsellor arranges a time to conference with the student and uses a digital calendar to visualize when they need to start studying for each test. They block out study times for each subject in the calendar with breaks and use colours to distinguish between them.

Additional Resources

- [At-a-glance list of tips for teaching time management from OTF](#)
- [Helpful considerations for time management across ages from Scholastic](#)
- [Modules with information on teaching time management skills for secondary teachers from LD @ School](#)
- [Organization and time management resources from TEDEd](#)
- [Time management lesson plan from Harvard](#)
- [Tips for time management for students with ADHD from PLU](#)

46

TRACKING SHEETS

Definition

Physical or digital chart where data and information about student effort, progress, as well as accommodations can be documented.

In action

Tracking sheets should be used to create a record of the topics that a student has learned and those still in need of attention.

Support Strategies

- Use tracking to document student progress on the curriculum and or individual goals and objectives.
- Periodically review the tracking sheet with the student and discuss strategies and supports that appear beneficial and those that are not.
- Use tracking data to support setting appropriately ambitious future goals.
- Share tracking with student's teaching team for wholistic documentation and student support.
- Model and support student self-management of tracking and recording their own progress.
- Present tracking data to parents and the educational team when reporting progress, determining appropriate supports, and preparing for transitions.

Case Study

Student: A Grade 10 student in a history class
Context: Students are preparing for an exam on democracy
Problem: The student is having difficulty knowing what to study.
Solution: The classroom teacher makes time to meet with the student and review their progress on the curriculum thus far via tracking data. This data, along with the exam study guide enables the two to identify key areas in need of the most attention by the student in preparation for the exam.

Additional Resources

- [Learning for All from the Ontario Ministry of Education- see chapter four for a description of creating class and individual student profiles](#)
- [Tips on collecting observational data in the classroom from the IRIS Center](#)
- [Strategies to use data collection to guide decision making from the IRIS Center](#)
- [Links to blank, use-ready, data collection templates from LA Unified School District](#)
- [Description and links on tech-enabled classroom data collection tools from Microsoft](#)

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USE OF HEADPHONES

Definition

Allowing students to use headphones, either to cancel out any noise or to add specific sound (e.g., music), to support calming or focus during an activity or transition

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In action

Depending on specific needs and preferences, provide access to noise-cancelling or reducing headphones or audio-connected headphones for white/ ambient noise or music while during a difficult or stressful activity an activity or transition.

Support Strategies

- Keep different types of headphones in the classroom, including noise-cancelling headphones
- Establish and model guidelines as a class around respectful use of headphones (e.g., keeping music at a quiet volume)
- Encourage students to bring headphones from home with parent/caregiver permission
- Help students to self-assess the effect of music/ noise cancelling on their work to determine when and how it can be most effective.
- Work with students to create a playlist that students can listen to through the headphones while doing their work

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Case Study

Student: Grade 12 student in an art class.
Content: The class is drawing self-portraits as part of their final assignment.
Problem: The class is working quietly and extremely focused, but the student is having trouble focusing on their work due to the quiet.
Solution: The teacher provides headphones with a pre-approved playlist loaded for student to support completing their work.

Additional Resources

- [Description of setting accommodations and tips for use, including headphones, from the IRIS Center](#)
- [List and description of common barriers and related setting accommodations, including audio-related, from the IRIS Center](#)
- [Review of literature related to noise-cancelling headphones use from Cogent Education](#)

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VIDEO RECORDINGS OF LESSONS FOR INTENSIVE REVIEW AT LATER TIME

Definition

Video recordings that capture the audio and visual elements of lessons that students can view at a later time.

In action

Determine in advance which lessons should be recorded (i.e., check IEP). Record all lessons in their entirety including all necessary visuals (e.g., teacher, whiteboard) and audio and make recordings easily accessible (e.g., through an online learning platform).

Support Strategies

- Work with school administration and technology staff to ensure appropriate set-up and supports.
- Ensure recording device is set up to capture all necessary visual and audio components of a lesson (including slides, graphs, pictures, etc.)
- Consider wearing a microphone so that all verbal information is captured clearly
- Consider linking audio to an automatic captioning or transcription service (e.g., youtube, zoom).
- Consider use of playback technology with embedded learning features such as time stamps and the ability to add notes.
- Communicate with school administration and parents/caregivers to ensure students have the tools they need at home to access and use the recordings

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Case Study

Student: Grade 8 student in a math class

Content: The class is beginning to learn how to balance equations

Problem: The student does not always remember the steps required to solve for the unknown variable

Solution: Create a video recording of the lesson so the student can review the video while doing homework, allowing them to pause between steps or read the transcript.

Additional Resources

- [Article describing different types of assistive technology, including video recordings from LD@School](#)
- [Article summarizing relevant research on the benefits of video-mediated instruction from Edutopia](#)
- [Tool to embed question/answer segments in video recordings of lessons from EdPuzzle](#)
- [Article describing best practices in video-recording instruction from JRI](#)

49

VISUAL CUEING

Definition

A visual sign or symbol the teacher can use to cue a student to support them with carrying out a certain behaviour.

In action

Co-create a system of visual supports with students that can be used as reminders (e.g., showing a student a picture of a pencil instead of asking if they have one).

Support Strategies

- Use cue cards that signal appropriate behaviors (e.g., a green light to indicate a student can proceed with a task)
- Consistently label objects in the environment so they correspond with visual cues (e.g., if a teacher uses a cue card with a visual for "books," the library should have the same visual)
- If a student is using a visual schedule or a task schedule, ensure the visual cues are included

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Case Study

Student: A Grade 2 student in a music lesson.
Context: The teacher is distributing instruments to students in partners.
Problem: The student is struggling to understand when it is their turn to play the instrument and when it is their partner's turn.
Solution: The teacher can create visual "your turn/my turn" cards to provide the student with a visual cue that helps them with the waiting.

Additional Resources

- [Video about the importance of visual information for students with ASD from Reading Rockets](#)

- [Breakdown of how visuals can be used to support students with ASD from the Ontario Ministry of Education](#)
- [Description, examples, and common challenges of using visual cues from AFIRM](#)
- [Description of non-verbal cues from UT- Permian Basis](#)
- [Chart with different types of cueing and prompting from TEA](#)

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WORD-RETRIEVAL PROMPTS

Definition

Visual or verbal cues that help students remember particular words necessary for a given context or activity.

In action

Teachers can use resources (e.g., cue cards, vocabulary sheets) to remind students of a certain word.

Support Strategies

- Provide a brief summary sheet with key definitions required to understand a text (e.g., novel, science chapter)
- Display written or illustrated definitions for classroom expectations (e.g., classroom rules, proof-reading steps, instructions for work submission)
- Model and practice use of online or physical dictionary and thesaurus
- Provide access to dictionary pen
- Begin lessons/ units with discussion and hard copy of key definitions
- Incorporate representative imagery in shared or individual reading of difficult texts or unfamiliar topics
- Provide pictures, definitions, or other cues to help students think of a particular word
- Create mnemonics to aid in memory of a string of important words or phrases

Case Study

Student: Grade 9 student in an English class.
Content: The class is writing a quiz on a novel they finished.
Problem: The student is struggling to recall the major themes in the novel despite understanding what the novel was about.
Solution: The teacher adjusts the test format so the student with the accommodation can answer questions by filling in the blanks, helping them to recall the names of the themes.

Additional Resources

- [Tips for supporting students' memory using word retrieval prompts from Reading Rockets](#)
- [Examples of accommodations that support student responses from the IRIS Center](#)
- [Tips for using retrieval practice in the classroom from EducationWeek](#)
- [Detailed overview of how to use dialogic reading to prompt students to use particular vocabulary from Reading Rockets](#)
- [Ideas and strategies for using mnemonics from Brookes Publishing](#)

PART III

ASSESSMENT ACCOMMODATIONS

51

ALLOWING CHOICE AS A DEMONSTRATION OF LEARNING

Definition

Providing students with options on activities to demonstrate what they know.

In action

Instead of assessing understanding traditionally (e.g., through a written quiz or test), present a diverse array of relevant assessment activities and allow students to select their preferred form.

Support Strategies

- Ensure that you have clear goals/ objectives to be measured by the assessment articulated
- Use the goals to distinguish which assessment activities are central to the identified goal (e.g., content knowledge, addition skills)
- Design a basic assessment rubric around the central assessment goals/ objectives
- Identify other means to address measurement needs on the identified goals/ objectives with different periphery skills (e.g., writing, drawing, speaking, designing)
- Add any measurement-specific elements required to the rubric
- Describe each of the options to the student, highlighting the central and periphery assessment activities and provide models of completed assessment when possible
- Allow students to make an informed choice of assessment activity

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Case Study

Student: Grade 5 student in science class.

Content: Students are wrapping up a series of lessons on the digestive system.

Problem: The teacher wants to quickly assess student learning before moving on to the nervous system but knows that the student struggles with written assessments.

Solution: The teacher provides students with a choice board so students can choose their preferred method of assessment. The student is excited about the prospect of creating a poster instead of writing a quiz and is able to demonstrate their learning accordingly

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Additional Resources

- [Article on how to differentiate by offering choice from Edutopia](#)
- [Tips for building in choice for students with ASD from Reading Rockets](#)
- [Resource on creating choice boards for students with ASD from the Geneva Centre for Autism](#)
- [Guidelines and tips to optimize choice and autonomy from CAST (UDL-focus)](#)
- [Top 10 UDL Tips for Assessment from CAST](#)
- [Learning module on flexible assessment from the IRIS Center](#)

52

ALTERNATIVE SETTINGS

> **Definition**
>
> Separate space for quiet and distraction-free testing and/or near necessary supports unavailable in the typical assessment setting.

In action

Such settings should be pre-determined and could include a separate room or a set apart area in the classroom for individual or small group testing. Often alternative settings include spaces that are free of typical classroom noise or distraction to increase focus. Sometimes such spaces are nearer to necessary testing supports (e.g., proximity to teacher or scribe, near accessible equipment).

Support Strategies

- Alternative settings should be pre-determined among the educational team including the student and their parents, teacher(s), and school administrators.
- Educational teams should consider students' needs and available space in determining options and best fit.
- Provide the student the chance to visit and complete some work, if possible, in the alternative settings prior to use for an assessment to gain familiarity.
- When using separate rooms or spaces, ensure appropriate supervision and access to staff support as needed.
- Consider discussing any benefits and drawbacks of using an alternative space for their setting. Any drawbacks can be used to help select a more suitable space and benefits can be used to assess continued usefulness.
- Help student develop self-advocacy for their alternate space-related assessment needs.

Case Study

Student: Grade 8 student that often gets distracted by classroom sights and sounds during tasks requiring reading
Content: End of unit literacy exam with significant comprehension component
Problem: Based on previous experience and the student's IEP, it is clear that taking the assessment in the classroom would result in student distraction and a poor mark reflecting the student's difficulty to attend to the task rather than their comprehension skills.
Solution: Based on IEP guidelines and educational team planning, the student takes the assessment in a distraction-free setting away from the regular classroom.

Additional Resources

- [Description and suggestions on assessment setting accommodations from the University of Kansas Special Connections](#)
- [Info page on setting accommodations including suggestions for and examples of alternative settings from the IRIS Center](#)
- [Recommendations for distraction free testing locations from Santa Anna College](#)

53

ASSISTIVE DEVICES OR ADAPTIVE EQUIPMENT

> **Definition**
>
> Technology (e.g., a computer), tools (adapted scissors) or a program (e.g., text-to-speech software) to help students complete their work, focus on a task, access an activity, or support their learning.

In action

For students with assistive devices or adapted equipment, ensure that access, maintenance, and continued usefulness across the day in collaboration with the student's educational team (e.g., parents, other teachers, therapists). For students without, assess and discuss potential devices and equipment with educational team to improve access.

Support Strategies

- Communicate with parents/caregivers to ensure technology supports provided at school are compatible with those provided on any devices at home
- Meet with the student to ensure they understand and can access the different functions on a given tool (e.g., all of the features of Google Read & Write)
- Ensure devices are charged and available for whenever students require them across settings
- Teach students how to maintain their technology so they can use it for prolonged periods
- Consider ways to make technology available to other students in the classroom to promote Universal Design for Learning

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Case Study

Student: Grade 8 student in a math class.

> **Content:** Students are working on graphing, by hand, the responses to surveys completed by their classmates.
> **Problem:** The student is unable to grasp coloured pencils tightly enough to colour in the bar graphs
> **Solution:** Provide access to adaptive pencil grip holder.

Additional Resources

- [Overview of assistive technology with hyperlinks to additional resources from Reading Rockets](#)
- [SET Framework for evaluating assistive technology from CEC](#)
- [Assistive device example list from the NIH](#)
- [Broad AT (including devices and equipment) from ATiA](#)

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ASSISTIVE TECHNOLOGY

<div style="border:1px solid #ccc; background:#eee; padding:1em;">

Definition

Refers to any device or system that helps students perform functions that they may find difficult or impossible. Assistive technology includes a wide variety of tools ranging from simple (low tech) to very complex (high tech).

</div>

In action

Teachers support students in using assistive technology (AT) by collaborating with students, families, and other school staff to identify areas of student support need and potentially helpful AT tools. Once tools are identified, teachers work collaboratively to find the best AT tool, assist in student training to use the tool, and provide ongoing support to ensure the tool is ready for use and remains a good match for both the student and their support need.

Support Strategies

- Learning about different technologies available
- Asking students and guardians what they need
- Having students do their own research on what might work for them

AT Examples

High Tech AT

- Power wheelchairs/ scooters
- Computers with specialized software such as eye gaze
- Digital hearing aids

Mid Tech AT

- Alternate mouse or keyboard
- Closed captioned television
- Talking spell checkers

Low Tech AT

- Highlighted text
- Large print text
- Paper-based communication book

Case Study

Student: Grade 2 student in language class.

Content: Students are asked to rewrite a story in their own words.

Problem: The student is having a hard time getting his ideas down quickly enough using the pencil and paper and keeps losing his train of thought.

Solution: The student can use a computer with text to speech (e.g., google voice) to construct the paper verbally and have it automatically converted to text.

Additional Resources

- [Basic AT information from the OTC](#)
- [AT assessment process steps from SNOW](#)
- [AT informational module for teachers from the IRIS Center](#)
- [Low Tech AT for students with ASD from the Vanderbilt Kennedy Center](#)
- [AT Facts and links from ATiA](#)
- [Video example of text-to-speech in the classroom from Edmonton Regional Learning Consortium](#)
- [Video example of word prediction in the classroom from Edmonton Regional Learning Consortium](#)

55

AUGMENTATIVE AND ALTERNATIVE COMMUNICATIONS (AAC) SYSTEMS

Definition

Communication systems that are used alongside (augmentative) or in place of (alternative) spoken and/or written communication, particularly for students with difficulties in speech-language production and/or comprehension.

In action

Teacher provides aids for individuals with speech-language difficulties to support their communication abilities, including equipment, technology, training, and ongoing support.

Support Strategies

- If the student does not have AAC, but could use it, work with the student's educational team to conduct an AAC assessment to determine the best fit between AAC and student needs
- Teach necessary school/activity vocabulary to enable student engagement
- Provide ongoing training and learning support to student in the use of their AAC system
- Provide training and support to other school personnel, student's family members, and classmates in use of the AAC system.
- Ensure that the AAC system is equipped to meet the appropriate language needs of school activities for student participation
- Incorporate and encourage AAC use across all school and home activities
- Monitor AAC usage including successes and barriers and work with the educational team to ensure best fit and decide on AAC-related learning goals and support needs.

Case Study

Student: Kindergarten student learning the alphabet.

Content: The teacher is practicing the alphabet song with the class.

Problem: While the student can comprehend verbal communicating, they are having difficulty participating in singing the alphabet due to their speech-language production challenges.

Solution: While teaching the class the alphabet song, the teacher uses sign language for each of the letters to help students with all speaking abilities to participate.

Additional Resources

- [Exhaustive resource describing AAC and considerations for school use from WATI](#)
- [Article on augmentative and alternative communication for young children including sample videos from EBIP](#)
- [American Speech-Language-Hearing Association webpage describing augmentative and alternative communication](#)
- [AAC basics and links to more resources from ISAAC](#)
- [AAC and assessment info from CTNSY](#)
- [ASHS position statement describing the issues with Rapid Prompting and Facilitated Communication systems](#)

56

CHUNKING OF ASSESSMENT TASKS OVER TIME

Definition

Breaking assessments into smaller more manageable parts to reduce the cognitive load and the information processing required by the student and to increase the student's ability to demonstrate their knowledge.

In action

Teachers should use past student observations and discussion with the student and their other teachers to determine how much information is appropriate to include in each chunk to maximize student engagement.

Support Strategies

- Break one assessment into multiple smaller assessments, each with their own instructions, rubric, and due date
- Provide the student with an assessment overview or timeline of when to work on the different chunks
- Allow for practice assessments to trial chunking with the student and make adjustments as needed.
- After the assessment is completed, help the student to make connections between the chunks by discussing the different tasks they completed.

Case Study

Student: Grade 3 student in a science class

Content: Students are to choose an animal and create a poster about it to present to the class. The poster should include information about its appearance, habitat, and relationship to other animals in its environment.

Problem: The student is excited about the task but does not know where to begin. They start by researching one area, but frequently switch back to another, resulting in a poster that can be difficult to follow.

Solution: The teacher chunks the project into three smaller parts, so the student can initially focus on describing the animal's appearance, drawing it, and finding helpful pictures. When the student has gathered sufficient information for this chunk of the assignment, the teacher provides them with the next chunk, and so forth. After the assignment is completed, the teacher helps the student make connections between the three chunks to prepare for their presentation.

Additional Resources

- [Step-by-step instructions on how to chunk information for instruction and assessment from Accommodation Central](#)
- [Article on adapting assessments to meet students' needs from LD @ School](#)
- [Examples of chunking text in classroom activities from Facing History and Ourselves](#)

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COLOUR CUES

Definition

Using different colours to signify meaning in a text or lesson to help with organization (e.g. colour by topic/ category), comprehension (e.g., colour by question type), or other activity or skill. Colour cues can be consistently incorporated in teaching materials, student work, and any other contexts that might be useful to the student.

In action

Teachers should collaborate with students and families to designate specific colours for subjects (e.g., English, math, social studies), themes, vocabulary, concepts, etc. so that the student can use the colour cues consistently across settings.

Support Strategies

- Colour cue systems should be collaboratively developed with students and families whenever possible to ensure consistency between supports provided at home and school.
- Some students may have preferences for or aversions to particular colours. It is important to take these into consideration when developing the colour cue system.
- Ensure students have access to notebooks, binders, and other organizational tools such as dividers in the appropriate colours.
- Designate highlighter and pen colours for specific themes in text to be used consistently across curricular subjects.
- Use colour cues to represent specific activity centers, library genres, and other resources in the classroom.
- Ensure students have access to visual reminders (e.g., anchor charts) reminding them of what each colour represents (e.g., red for math).

Case Study

Student: Grade 5 student in a math class.

Content: Students are independently completing a worksheet where they have to solve problems involving the four operations (e.g., addition, subtraction, multiplication, and division).

Problem: The student is having difficulty differentiating between the four types of questions on the page and is confusing addition with subtraction and multiplication with division.

Solution: The teacher assigns a corresponding colour for each of the four operations and provides all students with the option to use the colour-coded worksheets. The student is able to use colour cues to distinguish between the different types of questions, and understands that red means addition, blue means subtraction, yellow means multiplication, and green means division.

Additional Resources

- [Clinical study investigating the impact of using colour cues to support students with Down syndrome in identifying information](#)
- [Examples of visual supports involving colour cues to support students with ASD on literacy-related tasks](#)
- [Collection of printable, visual resources using colour cues that students can use at school and home](#)
- [Ontario curriculum unit planner containing several examples of when and how colour coding might be used in the classroom](#)
- [Colour cueing tips for the classroom from James Stanfield](#)
- [Example of colour coding across school activities from the US Department of Education](#)

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COMPUTER OPTIONS

> **Definition**
>
> Any computer-based support that can help students more readily access or participate in lessons or activities. Computer options are considered a subset of assistive
> technology (AT) with specific focus on computer-based AT supports.

In action

Teachers can create computer-based options for class output or input to augment traditional offering such as class lectures, textbook readings, or handwritten assignments.

Support Strategies

- Students can watch instructional videos or listen to audio books
- Students can type assignments on the computer with tools such as spell check
- Students can use a keyboard or speech-to-text convertor to write instead

> **Case Study**
>
> **Student:** A Grade 5 student in English class.
> **Content:** Students must read a chapter of a book and write a short reflection in their notebooks.
> **Problem**: The student is reading very slowly as some of the words are new and difficult. This is causing them to focus on the words and miss the main ideas of the story.
> **Solution:** The teacher sets the student up with an audio book to listen to while simultaneously reading the text.

Additional Resources

- [Chapter on computer-based AT from eworkshop and the Ontario Ministry of Education](#)
- [General categories of computer-based AT access tools from the Big Hack](#)

- [Examples of computer-based AT software from University of New Brunswick](#)
- [Comparison between assistive and accessible technology from SNOW Inclusive Learning and Education](#)
- [List of sources for free audiobooks from Understood.org](#)
- [List and links to accessibility features in Google](#)

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EXTENDED TIME LIMITS

Definition

Extra time to complete assessments

In action

Teachers can provide extra time on assessments including both formal activities (e.g., assignments, exams, etc.) and informal activities (e.g., completing an exit ticket).

Support Strategies

- Allow the student to take breaks while writing an assessment in class
- Work with students and families to determine the length of extensions on assignments to be completed at home
- Work with other teachers to ensure any extra time allotted isn't cutting into other instructional time
- Work with other teachers to ensure any extra time allotted isn't cutting into break or lunch times

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Case Study

Student: Grade 10 student in a math class
Content: Students are completing a written test after their algebra unit
Problem: The student requires extra time to read through the word problems and plan their answers.
Solution: The teacher checks the student's schedule and sees that they have English after math. The teacher confirms with the student's English teacher that each class starts with 15 minutes of reading, so the student will not be missing new instruction if they take an additional 15 minutes on the test. The student is provided with supervised extra time to complete the word problems, allowing them to fully demonstrate their abilities.

Additional Resources

- [Information about timing and scheduling accommodations from the IRIS Center](#)
- [Guide to choosing timing and scheduling accommodations for students with disabilities from Reading Rockets](#)
- [Detailed explanations as to why students may benefit from testing accommodations from the IRIS center](#)

60

EXTRA TIME FOR PROCESSING

Definition

Providing students with extra time to think before they are required to respond to questions or begin a task.

In action

The teacher can build in additional pause time after asking a question or beginning a new task by silently counting to 10 before re-engaging the student.

Support Strategies

- Give the student additional time to complete tests and in-class work
- Encourage students to take breaks while completing tasks (i.e., stand up, stretch, take deep breaths)
- Give the student extra time to respond to questions in class
- Provide students with both oral and simple written instructions
- Reduce the length of repetitive assignments (e.g., completing the even numbered questions)
- Allow the student extended time for test-taking

Case Study

Student: Grade 6 student in Social Studies class
Content: The teacher asks students to discuss the development of the reserve system and the perspectives of Indigenous Peoples, European settlers, and the federal government.
Problem: The student becomes frustrated throughout the discussion as they are having trouble participating effectively due to the quick pace of the discussion.

> **Solution:** The teacher provides the student with a written copy of the question in advance and informs them that their response will be requested in a class discussion to allow extra time to consider the question and formulate an answer.

Additional Resources

- [Interview with Dr. Ellen Braaten on helping children who struggle with processing speed](#)
- [Short article describing how to incorporate "wait time" in the classroom the Inclusive Schools Network](#)
- [Description and justification for use of wait time in the classroom from Reading Rockets](#)
- [Teaching resource for accommodating students with processing speed needs from the OTF](#)
- [Informational fact sheet on wait time, including summary, examples, and video links from the IRIS Center](#)

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LARGE-SIZE FONTS

Definition

Enlarging print text or enabling text enlargement on a computer to increase text clarity and readability for individuals with visual impairment

In action

Ensure every resource is accessible and available in enlarged text in advance for the student.

Support Strategies

- Teach students to use built-in free computer text enlargement tools
- Provide access to specialized text enlargement computer software and hardware when necessary.
- Locate all course texts in a digital format
- Ensure a variety of books with large print are available in the classroom
- Provide all appropriately enlarged text for assessments and ensure sufficient space for student response
- Ensure classroom displays and labeled resources use accessible font size

Case Study

Student: Grade 4 student with low vision in science class
Content: The teacher is presenting a PowerPoint on photosynthesis
Problem: The child cannot see the small font size on the SMART board
Solution: The teacher adapts the presentation, so it uses large font size, and provides an enlarged text hard copy of the presentation to the student.

Additional Resources

- [Article on using accessible formats, including large font size from Reading Rockets](#)
- [Article on assistive technology for reading, which includes using large font size for electronic texts from Reading Rockets](#)
- [Guide on effective inclusion for children with low vision from CNIB](#)
- [Online library from CELA](#)
- [Digital accessibility toolkit from the Government of Canada](#)

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MORE FREQUENT BREAKS

> **Definition**
>
> Separating structured activities by adding break time in between to help a student rest and before returning their effort and focus on a specific task.

In action

Teachers can schedule breaks for students by adding them into a task schedule or prompting them between activities.

Support Strategies

- Teachers can create a designated break area in the classroom that students can use when they need extra time between tasks
- Teachers can ask students to help by erasing the board, collecting papers, or dropping something off before starting something else
- Teachers can encourage students to take a walk, draw, or read to themselves before starting an academic activity
- Teachers can provide students with breaks for access to different sensory input (e.g., playing with sand).
- Teachers can break up the instructional period into smaller discrete parts for all students by having all students participate in a "body break" activity
- Teachers can create signals for students to use when they feel they need a break but are not ready to communicate it verbally

> **Case Study**
>
> **Student:** A Grade 4 student with ASD in a social studies class.

> **Content:** The teacher spends 15 minutes reviewing the previous lesson before the class transitions into 20 minutes of independent work.
> **Problem:** The student with ASD is looking out the window while the teacher is assigning the class activity.
> **Solution:** The teacher can instead incorporate a structured break (e.g., body break) between instruction and independent work so students are able to maintain their focus. When the break is over, the teacher explains the independent task and ensures that the student with ASD knows to ask for a longer break should they need one.

Additional Resources

- [Reading Rockets article on managing attention, with a description of brain breaks](#)
- [Detailed information on providing predictable and scheduled breaks for students with ASD by using sensory equipment, breaking up instructional periods, and providing quiet spaces for students from the Ontario Ministry of Education](#)
- [Article on the benefits of body breaks from Edutopia](#)
- [Tips for taking sensory breaks at school from Autism Speaks](#)
- [Why breaks are important and how to incorporate them into the classroom from The Friendship Circle](#)
- [Handbook on movement breaks including tips for transitioning back to learning from the National Council for Special Education](#)

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ORAL RESPONSES, INCLUDING RECORDED RESPONSES

Definition

Providing students with the opportunity to respond verbally, live or recorded, in place of written or another format, to demonstrate knowledge and understanding

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In action

Arrange a space where students will be able to respond to prompts orally during an assessment, or prepare technology, space, and resources to allow students to record their responses in advance.

Support Strategies

- Identify non-verbal items or activities that could create barriers in accurately assessing student knowledge or understanding
- Replace identified non-verbal activities with equivalent opportunities for verbal response
- Provide students with tools that allow them to submit assignments with recorded responses, such as iMovie, google documents, or D2L recorded submissions
- Design assessments inclusive of oral responses, such as public speaking tasks
- Provide students with speech-to-text software so written responses can be enhanced
- Provide training and support for students using oral response
- Link oral and written responses, as appropriate, through use of automatic transcription tools.

Case Study

Student: Grade 9 student in a French class
Content: Students are analyzing their favourite French songs for a summative assessment focused on key vocabulary.
Problem: The student is struggling to write their thoughts in French.
Solution: The teacher provides all students with the option to orally record their analysis of the song instead of having them write out their responses. Oral response can later be transcribed and edited by the students.

Additional Resources

- Detailed chart outlining different types of response accommodations from the IRIS Center
- Information on different ways to solicit student responses from the Inclusive Schools Network
- Tool to support individual conferences with students from Edutopia
- Testing accommodation list from the IRIS CENTER
- Description on alternate evaluation methods, including oral response from the Friendship circle

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PROMPTS TO RETURN STUDENT'S ATTENTION TO TASK

Definition

Verbal and/or physical cues to return a student's attention to the task at hand

In action

Collaborate with the student to establish a system of prompts, that will be both useful for and acceptable to the student, to assist in redirecting their attention during an assessment.

Support Strategies

- Teach, model, and practice self-management of self-prompting to maintain attention
- Gestural Prompts (e.g., pointing, simple signing)
- Physical/ proximity prompts (e.g., lightly tapping the student's desk, standing near the student
- Visual/ Written prompts (e.g., passing the student a post-it note with a reminder, putting up a sign on the wall near the student's desk, displaying reminder images)
- Verbal/ auditory prompts (a countdown, sounds such as a rain stick, spoken words or phrases such as "remember what you're working on")

Case Study

Student: Grade 2 student navigating a transition
Content: The class has just finished having indoor recess. The students are sitting at the carpet as the teacher asks a series of questions about the book the class has been reading as a form of assessment as learning.

Problem: The student is distracted by the toy car that they were playing with during the indoor recess and is, therefore, not participating in the informal assessment.

Solution: The teacher uses verbal prompts to help the students transition to the new activity after recess. When the teacher notices the student is not engaged in the assessment, they use prompts to direct their attention back to their questions, such as by pointing to the book and then making a gesture that represents thinking.

Additional Resources

- [Teacher tip sheet with information about when to use prompts as well as examples of the different types from the Alberta Ministry of Education](#)
- [Prompting definition and example videos from TASN](#)
- [Strategies for supporting students' attention skills from Reading Rockets](#)

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REDUCED/UNCLUTTERED FORMAT

Definition

Intentionally simplistic design of physical handouts, online resources, or other visual displays to allow focus on the essential information.

In action

Teachers can create alternate forms of regularly used displays, handouts, or other resources which are more sparse (more white space, less unnecessary graphics) and focus solely on the primary function (e.g., assessment via worksheet, information sharing via a list of project tasks).

Support Strategies

- Consider having two versions of the resource (regular and simplistic) and allow access to the whole class
- Consider the most effective font size and the amount of blank space provided on handouts
- Edit and omit unnecessary information (e.g., extra graphics and text)
- Consider use of dedicated text boxes for required responses
- Providing clear and concise instructions that students can follow easily
- Replace and condense text with visuals when appropriate to reduce the amount of written information to process
- In addition to reducing clutter, it is important to simultaneously support and instruct students in how to strategically identify key/ relevant information from cluttered displays and resources

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Case Study

Student: Grade 4 student in a math lesson
Content: Students are preparing to write a math test. They will be asked to read a series of word problems and respond in the space below.
Problem: The student struggles with reading paragraphs with limited blank space between questions.
Solution: The teacher ensures that there is only one word problem per page and provides a box to help students organize their answer.

Additional Resources

- [Article about visual processing needs, such as dyslexia from Reading Rockets](#)
- [Tips for designing accessible documents with Microsoft word from Perkins School for the Blind](#)
- [Specific ideas for simplifying instructions and supports from Reading Rockets](#)

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REDUCTION IN THE NUMBER OF TASKS USED TO ASSESS A CONCEPT OR SKILL

Definition

Decreasing the amount and frequency of required questions, tasks, or components to avoid unnecessary repetition within an assessment.

In action

Determine the primary objectives of an assessment and ensure appropriate coverage of the content with no unnecessary repetition.

Support Strategies

- Create an assessment map linking each assessment component (e.g., question) to the essential learning/ assessment objectives. Use the map to identify and remove items that are repetitive.
- Model and support use of clear rubrics for student organization and self-assessment
- Provide class with details on the required components of an assessment or activity and those optional components for additional practice
- In writing tasks, use a word or page count range rather than a fixed number for writing-based assignments
- Model and allow for multiple modes of informal (e.g., share with peer, discussion, written reflection) and formal (e.g., presentation, audio recording, project) assessment

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Case Study

Student: Grade 6 student in a math class

Content: Students are writing an algebra test to assess their understanding of collecting like terms and balancing equations.

Problem: The student is overwhelmed by the number of questions on the test.

Solution: Reduce the number of items on the test to just those essential and create questions that assess both skills simultaneously.

Additional Resources

- [Description and examples on aligning assessments with learning objectives from CMU](#)
- [Strategies for supporting expressive writing for students with learning disabilities from LD@School](#)
- [Article on aligning instruction and assessment from Edutopia](#)

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VERBATIM SCRIBING

> **Definition**
>
> Recording exactly what a student says in response to a prompt, question, or task, typically used to enter student response on an assessment.

In action

Assign a scribe to students who have strong verbal skills but impairments in fine motor, spelling, or grammar skills to enable clear demonstration of their understanding of specific concepts.

Support Strategies

- Arrange for a designated and trained person to scribe for students while writing assessments and completing projects
- During in class partner work, pair students who require a scribe with those who have strong handwriting skills
- When students are completing independent work, conference with students who require a scribe and record their ideas while they speak
- While scribe refers to a person, you can also try out technology assisted scribing, such as speech to text for accuracy and usefulness.

Case Study

Student: Grade 7 student in an English class
Content: Students are filling in a graphic organizer to prepare for writing a five-paragraph essay
Problem: There is no educational assistant or other person available to scribe for the student with writing difficulties while they complete the graphic organizer
Solution: The teacher conferences with the student and records their ideas in the graphic organizer while they speak.

Additional Resources

- [Information on scribing for students with dysgraphia from LD Online](#)
- [Strategies for supporting students with writing difficulties from LD@School](#)
- [Example of guidelines used to select appropriate assessment accommodations from New Brunswick Education](#)
- [Stipulations for scribes on EQAO](#)

GLOSSARY

Ability Grouping [Instructional]

Purposefully grouping a student with those who have a slightly higher level of ability on a specific skill with the purpose of embedded peer support.

Allowing Choice as a Demonstration of Learning [Assessment]

Providing students with options on activities to demonstrate what they know.

Alternative Settings [Assessment]

Separate space for quiet and distraction-free testing and/or near necessary supports unavailable in the typical assessment setting.

Alternative Workspace [Environmental]

A combination of non-traditional work practices, settings, and locations that can supplement or even replace traditional workspaces.

Assistive Devices or Adaptive Equipment [Assessment & Environmental]

Technology (e.g., a computer), tools (adapted scissors) or a program (e.g., text-to-speech software) to help students complete their work, focus on a task, access an activity, or support their learning.

Assistive Technology [Instructional & Assessment]

Refers to any device or system that helps students perform functions that they may find difficult or impossible. Assistive technology includes a wide variety of tools ranging from simple (low tech) to very complex (high tech).

Augmentative and Alternative Communications (AAC) Systems [Instructional & Assessment]

Communication systems that are used alongside (augmentative) or in place of (alternative) spoken and/or written communication, particularly for students with difficulties in speech-language production and/or comprehension.

Buddy/Peer Tutoring [Instructional]

Pairing up a student with an exceptionality with another student to enrich their opportunities for social and academic learning.

Chunking of Assessment Tasks Over Time [Assessment]

Breaking assessments into smaller more manageable parts to reduce the cognitive load and the information processing required by the student and to increase the student's ability to demonstrate their knowledge.

Clustering Learning [Instructional]

Grouping students for learning on a specific topic or skill.

Colour Cues [Instructional & Assessment]

Using different colours to signify meaning in a text or lesson to help with organization (e.g. colour by topic/ category), comprehension (e.g., colour by question type), or other activity or skill. Colour cues can be consistently incorporated in teaching materials, student work, and any other contexts that might be useful to the student.

Computer Options [Instructional & Assessment]

Any computer-based support that can help students more readily access or participate in lessons or activities. Computer options are considered a subset of assistive technology (AT) with specific focus on computer-based AT supports.

Concrete/Hands on Materials [Instructional]

Any tangible material that can be used by a student to better understand a specific concept or skill. Use of materials should be helpful in promoting increased understanding and/or skill accuracy.

Contracts [Instructional]

Written agreement between a student and teacher (and often parents) describing specific academic or behavioural goals/ expectations as well as expected outcomes. While contracts can be made for an entire class (social contracts), in the case of IEP accommodations they are created for a particular student (individual contracts).

Descriptive Feedback from Peers [Instructional]

a reaction or comment to something a student has done based on the learning outcomes specified. This feedback includes praise for something done well and suggestions for improvement when needed

Dramatizing Information [Instructional]

Acting out information such as steps in a task or an abstract concept using physical gestures and modeling to assist in understanding and learning of a skill or concept.

Duplicated Notes [Instructional]

Ensuring that students who have trouble transcribing or processing information are provided with a complete copy of all notes for a lesson/class in advance.

Extended time limits [Assessment]

Extra time to complete assessments

Extra time for processing [Instructional & Assessment]

Providing students with extra time to think before they are required to respond to questions or begin a task.

Gesture Cues [Instructional]

Using a gesture to direct a student's attention without giving additional verbal information.

Graphic Organizers [Instructional]

Visual tool such as a Venn diagram or charts that visually organizes information and illustrates relevant relationships.

Highly Structured Approach [Instructional]

Structured learning environment including clear guidelines around time and activities in each class which supports the student's ability to understand expectations and complete tasks with maximum independence.

Large-size Fonts [Instructional & Assessment]

Enlarging print text or enabling text enlargement on a computer to increase text clarity and readability for individuals with visual impairment

Manipulatives [Instructional]

Physical or virtual objects that students can use to represent and explore abstract concepts in class, at home, or in any other learning environment.

Mind maps [Instructional]

A type of graphic organizer that supports student organization of their thinking on a topic. Typically, the mind map is centered on a keyword with designated spaces surrounding for related information, ideas, and facts. Resulting is a tool that visually organizes thinking on a topic to enhance a student's ability to think and communicate on a given topic.

Minimizing Background Noise [Environmental]

Intentionally identifying and reducing extraneous auditory input for students who have trouble filtering and selecting important input to increase student focus and engagement.

More Frequent Breaks [Instructional & Assessment]

Separating structured activities by adding break time in between to help a student rest and before returning their effort and focus on a specific task.

Non-verbal signals [Instructional]

A signal or system of signals established between a teacher and student, not involving verbal communication, that can be used to help the student focus their attention or highlight important of information.

Note-taking Assistance [Instructional]

Providing individualized instruction and/or support to the student on note-taking, such as providing an alternative format (e.g., fill-in-the-blanks template, graphic organizer, or assistive technology) to better support the student's ability to glean essential information and fully engage in the course content.

Note-Taking Signals [Instructional]

One-on-one coaching and embedded support to increase note-taking skills.

Oral Responses, Including Recorded Responses [Assessment]

Providing students with the opportunity to respond verbally, live or recorded, in place of written or another format, to demonstrate knowledge and understanding

Organizational Coaching [Instructional]

Modeling, teaching, and supporting strategies to aide memory and efficiency in recording, prioritizing, and completing day to day and long-term tasks.

Partnering [Instructional]

Assigning the student a partner to assist with class work or projects that are slightly more advanced than the student can complete alone.

Pictorial Schedules to Assist in Making Transitions [Instructional]

A visual schedule, often personalized for the student, that depicts the daily or activity-based schedule to support student understanding of and transition from one activity to the next.

Prompts to Return Student's Attention to Task [Assessment]

Verbal and/or physical cues to return a student's attention to the task at hand

Proximity to Instructor [Environmental]

Intentional student placement (e.g., classroom desk) near the teacher to increase quick access to support as well as to increase focus and attention.

Quiet Setting [Environmental]

Intentionally designed environments with reduced auditory input designed for focused work or a break from auditory input.

Reduced/uncluttered Format [Instructional & Assessment]

Intentionally simplistic design of physical handouts, online resources, or other visual displays to allow focus on the essential information.

Reduction in the Number of Tasks Used to Assess a Concept or Skill [Assessment]

Decreasing the amount and frequency of required questions, tasks, or components to avoid unnecessary repetition within an assessment.

Reduction of Audio/Visual Stimuli [Environmental]

Decreasing unnecessary stimuli from the classroom/ environment for students who struggle to process audio/visual stimuli.

Reinforcement Incentives [Instructional]

The promotion and use of appropriate rewards/ incentives to promote positive behaviours, increasing the likelihood of the behaviour occurring again in the future.

Repetition of Information [Instructional]

Intentionally presenting vital information to a student on multiple occasions and potentially through multiple means (e.g., via on print, voice, online) to increase student engagement and success.

Rewording/rephrasing of Information [Instructional]

Repeating content of instructions or other information already been given but using different words and phrasing for clarity.

Scaffolding Learning [Instructional]

Providing a structured learning opportunity with embedded support that promotes success and growth toward independence as well as increased learning complexity and reduced supports.

Spatially Cued Formats [Instructional]

A form of visual cueing that uses space to signal the type response needed (such as 2 empty lines on a worksheet indicating the need for a 2-word answer) to clarify expectations.

Special Lighting [Environmental]

Conscious decisions about lighting use in the classroom to affect the student experience

Strategic Seating [Environmental]

Intentional selection of a seat or place in the classroom based on a student's individual needs and the classroom context.

Study Carrel [Environmental]

A workspace surrounded by a physical barrier (permeant or temporary) to enable students to study/ work with fewer visual distractions.

Tactile Tracing Strategies [Instructional]

Embedding learning content with physically raised texture to highlight and guide accurate tracing (e.g., letters, numbers, shapes).

Taped Texts [Instructional]

Audio recording of written material.

Time Management Aids [Instructional]

An array of strategies and tools focused on supporting student time management development over short (e.g., a lesson) and long (e.g., a course, term) periods of time.

Tracking Sheets [Instructional]

Physical or digital chart where data and information about student effort, progress, as well as accommodations can be documented.

Use of Headphones [Instructional & Environmental]

Allowing students to use headphones, either to cancel out any noise or to add specific sound (e.g., music), to support calming or focus during an activity or transition

Verbatim Scribing [Assessment]

Recording exactly what a student says in response to a prompt, question, or task, typically used to enter student response on an assessment.

Video Recordings of Lessons for Intensive Review at Later Time [Instructional]

Video recordings that capture the audio and visual elements of lessons that students can view at a later time.

Visual Cueing [Instructional]

A visual sign or symbol the teacher can use to cue a student to support them with carrying out a certain behaviour.

Word-retrieval Prompts [Instructional]

Visual or verbal cues that help students remember particular words necessary for a given context or activity.

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