



Autism Spectrum

Autistic Disorder (Autism)



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Classroom-based tips (focus on instructional methods)

1. **Use pictorial self-instruction** (Mithaug & Mithaug, 2003). Pupils can learn to complete academic assignments using a picture-based graphic organiser. Pupils plan, complete, and evaluate their work by circling pictures according to the following categories: (a) Subjects to Work, (b) What I Will Do, and (c) What I Did. Use this strategy to teach self-management skills.
2. **Use multimedia to teach social skills.** A lot of pupils with autism tend to be visual learners thus videos, simulations, virtual environments and other multimedia can be effective teaching tools (Parsons, 2006; Parsons, Leonard and Mitchell, 2006). You can also implement role-playing, social stories, and observing others' behaviour by utilising multimedia.
3. **Read and discuss literature related to stories on social skills,** which involve topics such as dealing with new situations, dealing with bullying or making new friends (DeGeorge, 1998)
4. **Create your own social skills tools and adapt them to your pupils' needs.** For instance, you can audio/video-record your pupils in class and then use the materila to initiate a discussion of your pupils' social interactions. Make sure necessary parental consent forms are signed. (NCTI, CITED – Centre for Integrating Technology in Education)
5. **Ask pupils to create their own stories about social behaviour** and discuss and provide feedback about these stories. (NCTI, CITED)
6. **Use photographs or still images** from the videos created, as 'reminders of social behaviour' with your pupils. (NCTI, CITED)
7. **Use technology, such as tablets, to teach vocabulary and social skills to pupils with autism.** Choose from a wide range of applications freely available online to meet your pupils' needs.
8. **Create and implement a visual schedule on a consistent basis.** These provide a sense of predictability and security. Avoid sudden changes to the pupils' schedules as much as possible. [Reference: <http://www.cesa7.org/sped/autism/structure/str11.htm>
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9. **Provide repetition, predictable routines and structure.** Prepare for changes in routine such as school trips in advance. Ensure that you break down the activities and provide opportunities for discussion and role-playing, such as how to study a restaurant menu, how to order and ask for the bill, and how to organise the correct amount of money to pay for the bill.
10. **Teach your pupils life skills including food preparation, laundry, household cleaning.** Determine the usefulness of a particular skill by asking questions such as:

- Is this knowledge/skill going to be helpful for the pupil to be more independent and successful in his home, school, or community?
 - Will failure to learn this knowledge/skill have any negative consequences to the pupil? The ultimate approach to determining if a given skill qualifies as functional curriculum is to contemplate this question from the pupil's perspective: "Will I need it when I'm 21?" (Heward, 2013)
11. Use visual cues, simulations and prompts to teach everyday skills to your pupils, such as meal preparation. (Mechling, Gast, & Langone, 2002). For example, there might be images modelling the activity of getting dressed and going to the grocery in a sequential form.
 12. **In the event that the pupil exhibits self-destructive behaviour, conduct a multi-disciplinary team meeting** or contact the educational psychologist in order to develop a Functional Behavioral Analysis and consequently a Behavioural Intervention Plan.
 13. **For pupils who present echolalia: Present opportunities for use of repetitive language to change the pupil's echolalia.** Also, reinforce the pupil's responsive speech, which is free of echolalia. Use simple language when communicating with autistic pupils to lower their anxiety or frustration levels.



School-based practical tips (focus on instructional methods)

Announcement / Sign at School

Put visual signs of places within the different school areas to help autistic pupils with orientation in the space for the various daily tasks and activities.

Class Divisions / Arrangements

1. Provide the classrooms with resources that can help autistic pupils tackle their motor, social and academic skills, such as equipment for relaxation including music, radio, and a soft couch, and multisensory equipment such as sand letters, sky writing and rice trays.
2. **Equip the school with tablets and computers** so as teachers and pupils can use technology for teaching/learning social skills and augmentative alternative communication (AAC) devices. Additionally, teach pupils to communicate by using AAC, for example:
 - Observe the interaction between an individual with RTT and a familiar person
 - Provide targeted strategies to implement during familiar settings, such as:
 - A) Offer choices
 - B) Increase the time within which you expect responses
 - C) Acknowledge behaviours that can potentially be communicative such as gazing, having an open mouth, vocalisation, hand and body movementsAsk questions or make comments that require responses from your pupils.

3. **Arrange staff meetings to inform teachers how the class can be adapted** in order to best accommodate the autistic pupils, including factors such as where the pupil needs to sit, how to prepare and put up visual signs in the class, and how to create visual timetable.
4. **Reduce distracting stimuli** such as wall decorations, or the hum of florescent lights.
[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]
5. **Provide a separate space for breaks** or regular physical movement outside of the classroom.
[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]

Community

Arrange regular meetings between parents and staff to discuss the pupils' progress, and to enhance home-school collaboration. This will help to monitor progress and to discuss issues that might be related to the social life of the pupil, such as marginalisation, social interactions with peers, behavior at home and self-esteem. (McCaleb, 2013)

Curricular Adaptations

1. **Provide the classrooms with resources that can help autistic pupils tackle their motor, social and academic skills**, such as equipment for relaxation including music, radio, and a soft couch, and multisensory equipment such as sand letters, sky writing and rice trays.
2. **Equip the school with tablets and computers** so as teachers and pupils can use technology for teaching/learning social skills and augmentative alternative communication (AAC) devices. Additionally, teach pupils to communicate by using AAC, for example:
 - Observe the interaction between an individual with RTT and a familiar person
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[Reference: <http://practicalaac.org/practical/fresh-look-aac-for-children-who-have-rett-syndrome-with-dr-theresa-bartalotta/>]

Discipline

1. **Provide increased supervision during free time.**
[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]
2. **Provide a separate space for breaks** or regular physical movement outside of the classroom.
[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]

Educational Visits / Field Trips / Camps / School Exchanges / Trips Abroad

1. **Inform teachers about autistic pupils' needs for school excursions in advance.** Make sure that there won't be any sudden change to pupils' schedules to avoid upsetting or unsettling them.
2. **Provide teachers and assistants a communication form and telephone numbers of parents/caregivers of autistic pupils** in the case of an emergency. Communicate in advance with the parents of autistic pupils to be aware of any particular needs to be considered such as diet, behaviour management, medical care and mood swings.
3. **Provide a weekly or monthly calendar of events to parents** in order to assist them in preparing their child for upcoming changes.

Other (Pupil Involvement – Important for Inclusion)

Request pupils' feedback on decision-making that concerns them. This will help them develop their social skills. For instance, in collaboration with the pupils you can decide that a specific week there will be awareness week for autism and ask the pupils to contribute by preparing a presentation and other collaborative tasks.

Other (Raising Awareness)

Encourage and train teachers to help their classes in understanding ASD, and their classmate with autism, so as to be more accepting and supportive.

Parents / Parents' Associations

1. **Provide teachers and assistants a communication form and telephone numbers of parents/caregivers of autistic pupils** in the case of an emergency. Communicate in advance with the parents of autistic pupils to be aware of any particular needs to be considered such as diet, behaviour management, medical care and mood swings.
2. **Provide a weekly or monthly calendar of events to parents** in order to assist them in preparing their child for upcoming changes.
3. **Ensure autistic pupils are able to communicate their needs effectively.** In collaboration with parents and speech-language pathologists, determine if augmentative or alternate communication supports need to be explored.
4. **Arrange regular meetings between parents and staff to discuss the pupils' progress, and to enhance home-school collaboration.** This will help to monitor progress and to discuss issues

that might be related to the social life of the pupil, such as marginalisation, social interactions with peers, behavior at home and self-esteem. (McCaleb, 2013)

Safety

Provide increased supervision during free time.

[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]

Scheduling Events

1. **Inform teachers about autistic pupils' needs for school excursions in advance.** Make sure that there won't be any sudden change to pupils' schedules to avoid upsetting or unsettling them.
2. **Provide teachers and assistants a communication form and telephone numbers of parents/caregivers of autistic pupils** in the case of an emergency. Communicate in advance with the parents of autistic pupils to be aware of any particular needs to be considered such as diet, behaviour management, medical care and mood swings.
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School Breaks

1. **Provide increased supervision during free time.**

[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]

2. **Provide a separate space for breaks** or regular physical movement outside of the classroom.

[Reference: <http://www.learnalberta.ca/content/inmdict/html/autism.html>]

School Purchases

1. **Provide the classrooms with resources that can help autistic pupils tackle their motor, social and academic skills**, such as equipment for relaxation including music, radio, and a soft couch, and multisensory equipment such as sand letters, sky writing and rice trays.
2. **Equip the school with tablets and computers** so as teachers and pupils can use technology for teaching/learning social skills and augmentative alternative communication (AAC) devices. Additionally, teach pupils to communicate by using AAC, for example:
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 - C) Acknowledge behaviours that can potentially be communicative such as gazing, having an open mouth, vocalisation, hand and body movements
- Ask questions or make comments that require responses from your pupils.
3. **Ensure autistic pupils are able to communicate their needs effectively.** In collaboration with parents and speech-language pathologists, determine if augmentative or alternate communication supports need to be explored.
 4. **Provide training to teachers regarding the use of technology such as AAC devices.** Teachers should be in a position to use these devices with their pupils.

Pupil Support

1. **Provide Teaching Assistant services in the classroom in order to facilitate autistic pupils' needs,** such as how to keep them on track, ensure they are able to work at their own pace on a given task, provide reminders and reinforcement during tasks, create a schedule of the tasks that need to be completed and support pupils during lesson time.
2. **Encourage teachers to keep a record regarding the pupils' progress in social and academic skills.** This will help to design interventions based on their individual needs (Hoppey, & McLeskey, 2013).

Teacher Professional Development

1. **Arrange staff meetings to inform teachers how the class can be adapted** in order to best accommodate the autistic pupils, including factors such as where the pupil needs to sit, how to prepare and put up visual signs in the class, and how to create visual timetable.
2. **Establish an inclusive culture within your school by organising workshops related to the inclusion of children with autism in schools.** Contact academics or others with expertise in the area of autism to talk to teachers. This will help teachers understand aspects of inclusion and raise awareness on behavioural excesses and challenging behaviour, and apply inclusive practices, which will in turn contribute to enhancing pupils' social and academic skills (Hoppey, & McLeskey, 2013).
3. **Encourage teachers to keep a record regarding the pupils' progress in social and academic skills.** This will help to design interventions based on their individual needs (Hoppey, & McLeskey, 2013).
4. **Provide training to teachers regarding the use of technology such as AAC devices.** Teachers should be in a position to use these devices with their pupils.
5. **Encourage and train teachers to help their classes in understanding ASD,** and their classmate with autism, so as to be more accepting and supportive. [References: <http://www.learnnc.org/lp/editions/every-learner/6692>; Shally, C., *Since we're friends: An Autism picture book*. (Centeron, AR: Awaken Specialty Press. 2007)]

Technology

1. **Equip the school with tablets and computers** so as teachers and pupils can use technology for teaching/learning social skills and augmentative alternative communication (AAC) devices. Additionally, teach pupils to communicate by using AAC, for example:
 - Observe the interaction between an individual with RTT and a familiar person
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Supportive Literature

Characteristics of Autistic Spectrum Disorders

(adapted from DSM-5 Autism Spectrum Disorder 299.00 (F84.0))

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive, see text):

1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

Specify current severity:

Severity is based on social communication impairments and restricted repetitive patterns of behavior

B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive):

1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
2. Insistence on sameness, inflexible adherence to routines, or ritualised patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with

transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).

3. Highly restricted, fixated interests that are abnormal in intensity or focus, such as strong attachment to or preoccupation with unusual objects, with excessively circumscribed or perseverative interest.

4. Hyper- or hyporeactivity to sensory input or unusual interests in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

- C. Symptoms must be present in the early developmental period (but may not become fully manifested until social demands exceed limited capacities, or may be masked by learned strategies in later life).
- D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.
- E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

Websites and EU Reports

<http://www.autism.org.uk/>

<http://www.autism-society.org/> <http://www.autismeurope.org/publications/reports-and-good-practices/>

<http://www.autismeurope.org/main-fields-of-action/right-to-education/>

https://www.kent.ac.uk/tizard/research/eu_decl_conference/EAIS%20Nov%2007.pdf

<http://www.edu.gov.on.ca/eng/general/elemsec/speced/autismSpecDis.pdf>

<http://www.swaac.com/files/assessandimp/aacbasicsandimplementationbook.pdf>

<http://www.learnnc.org/lp/editions/every-learner/6692>

References

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Hoppey, D., & McLeskey, J. (2013). A case study of principal leadership in an effective inclusive school. *The Journal of Special Education*, 46(4), 245-256

McCaleb, S. P. (2013). *Building communities of learners: A collaboration among teachers, students, families, and community*. Routledge.

Mechling, L. C., Gast, D. L., & Langone, J. (2002). Computer-based video instruction to teach persons with moderate intellectual disabilities to read grocery aisle signs and locate items. *Journal of Special Education*, 35, 224

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Pennington, R. C. (2010). Computer-assisted instruction for teaching academic skills to students with autism spectrum disorders: A review of literature. *Focus on Autism and Other Developmental Disabilities, 25*(4), 239-248.

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Ryan, J. B., Hughes, E. M., Katsiyannis, A., McDaniel, M., & Sprinkle, C. (2011). Research-based educational practices for students with autism spectrum disorders. *Teaching Exceptional Children, 43*(3), 56.

Sperry, L., Neitzel, J., & Engelhardt-Wells, K. (2010). Peer-mediated instruction and intervention strategies for students with autism spectrum disorders. *Preventing School Failure: Alternative Education for Children and Youth, 54*(4), 256-264.

Xin, J. F., & Sutman, F. X. (2011). Using the smart board in teaching social stories to students with autism. *Teaching exceptional children, 43*(4), 18-24.