



A collection of articles  
from P.S. magazine

# Learning Disabilities and Disorders



The following short articles came from the magazines previously published by Primary Success.

I hope you will recognize some of the children from your past or present classes!

A star in a few of these articles is my grandson, Aidan. He is now 16 years old and is in Grade 11. I mentioned him in the dyscalculia article when he was in Grade 2. He can't have had true dyscalculia as he has progressed decently in math, improving each year of school and by Grade Seven achieving 'Bs'. He now frequently beats his grandma to the answers.

He will, however, have DCD all his life, and this may have caused his very slow start in math understanding. Developmental Co-Ordination Disorder is preventing him from playing team sports, running well and doing hand/eye coordinated activities (catching a ball, for example). His printing and handwriting skills are still poor, so he now types out his work. He learned to swim and skate adequately after years of private lessons. He is very uncomfortable in situations where he does not feel his body in control - as a young child he wouldn't swing or slide at the playground, and now he dislikes carnival rides and other activities where he doesn't feel secure. As a young child he had some of the sensory problems shown on page 17.

Aidan is a very happy teen, and has a wonderful sense of humour and great self-esteem, with an good understanding of his disability. He has been a joy to work with all these years, as I helped him to get his homework done..... slow moving, charming, disorganized, messy and full of fun.

*Jean*



Aidan at 11....



Aidan at 16 - Christmas morning 2014.

# Teaching LD Children

Some experts believe that up to 15% of children have some learning disability. That means that an average of one in seven children in our classrooms have some form of this. Because it is so prevalent, we must have some tools to help these children succeed.

A learning disability is a neurological disorder. In simple terms, there is a 'disconnect' between sight, hearing or muscles and the brain. Children with learning disabilities may have difficulty reading, writing, spelling, reasoning, visualizing or organizing information if taught in conventional ways. Learning disabilities usually are hereditary and run in families.

A learning disability can't be cured. The person will have it all his/her life. With the right support and intervention, however, children with learning disabilities can succeed in school and go on to successful, often distinguished careers later in life. Difficulty with basic reading, language and math skills are the most common learning disabilities.

Learning disabilities should not be confused with other disabilities such as mental retardation, autism, and behavioural disorders. None of these conditions are learning disabilities.

The Grade One and Two classroom teachers often discover the disabilities first. We are not able to make a diagnosis, but we are able to collect information for this purpose. We are also the first line in assisting these children to succeed. The child will not understand why he cannot do what the other children are doing easily, and it is up to us to find the child's strengths so he is able to make reasonable progress.

The children with learning disabilities in your classroom will usually fall into the following categories. The problems and instruction ideas below are simplified, but hopefully will give you some ideas to take further to help the students in your class.

**1. Visual reading disability:** The child does not recognize or recall sight vocabulary as the brain is not processing the information correctly. You may tell him a word and he will not recognize it seconds later. Some students will never remember the basic sight reading vocabulary or be able to accurately spell words that cannot be decoded as they are not able to recall or visualize a word. Watch students that are very slow to gain a basic reading vocabulary.

Instruction: These children must be taught sequential, specific phonics skills with practice in blending and spelling phonetically and rules that they are able to apply. The severely LD students may have to decode every word, but they will have the tools to be able to read slowly.

**2. Dyslexia:** Dyslexia is somewhat different from the visual disability, in my opinion. Children who are dyslexic apparently have the letters move around. The letters reverse and flip vertically as they look at a word. This is often most pronounced with b and d, and sometimes p, q, g. A child may just guess the word dog as pod, bop, god or other words with these problem letters. Oddly enough, the 'o' or other vowels often stay in place. Children with severe dyslexia may have the letters in a word reverse, move up to the line above or below or move around as the child looks at the word. It is hard to imagine! Every word is like a puzzle and a word does not look the same when it is seen again. You may not be able to differentiate these students from the visually disabled children in the early years. Young children do not realize that what they see is not what others see or experience.

Instruction: There isn't a good solution for these students, but concentrated phonics helps as in the visual disabilities. Some children find a clear coloured overlay will help, or cardstock with a slit out of it so only one line shows. They need to be taught coping skills in order to read.



**3. Auditory disability:** These students are not hearing the sounds correctly. Young children with this problem will often have articulation difficulties - when they do not hear sounds accurately they are unable to reproduce them accurately. Many of these students will find phonics very difficult if not impossible, for obvious reasons. They find it very difficult to learn the letter sounds and use them for decoding.

Instruction: These students need a strong sequential sight word program in order to learn to read, using visual techniques. They often have problems in the higher grades when words are no longer taught, and as the students are unable to decode unfamiliar words their reading vocabulary forms slowly.

**4. Both visual and auditory disabilities:** This is more rare. You may find a child with normal intelligence who has problems with visual recognition and recall and also difficulties with phonics - decoding and encoding. This makes learning to read by the usual methods very difficult.

Instruction: These children often have a strength in kinesthetic learning, and can be helped by associating the physical act of printing or writing with the words, and learning words with physical motions can assist.

**5. Learning disabilities in math - dyscalculia:** Children with a math disability cannot visual numbers or number patterns. They will not be able to see a number of objects in their minds and will count objects rather than use obvious patterns to tell how many objects they see. They do not truly understand the relationship of numbers. Place value may be meaningless to them. In the more severe cases children have difficulties with the concepts of time - even simple ones such as 'yesterday' and 'tomorrow', minutes and hours, weeks and even seasons. They can use manipulatives over and over without understanding the underlying concept. They may give you math answers that do not make sense. They are unable to manipulate numbers - for example, the understanding of this....  $7 + 6 = 7 + 3 + 3 = 10 + 3 = 13$  .... is like a foreign language.

Instruction: Give the students strategies to use. Practice counting on and counting down for simple addition and subtraction, and allow the children to use a number line. Give the students 'tricks' to remember or find answers. Give them answers to memorize and practice these often. Try for understanding, but if this is too difficult for the child give other coping mechanisms to find answers.

**6. Dyspraxia or DCD:** Developmental Coordination Disorder is a common disability. The child does not do physical skills automatically as other children do. The student will have problems with gross motor skills - jumping on two feet, running well, climbing, ball skills, etc., and also fine motor skills. He may have problems with printing and will be slow at completing written exercises - and these will often be very untidy. The child may not want to try and may not complete assignments.

Instruction: Give specific lessons on gross and fine motor skills, breaking the skill down into small pieces. In Kindergarten and Grade One do many specific lessons showing letter formation with lots of directed practice. Written work may have to be modified or done in smaller pieces so the child is not faced with a full page of work. P.E. (and even recess play) may be difficult for the child and there may be peer pressure that will make the child unhappy - this needs intervention if it happens.

Early understanding and the correct teaching can make a big difference to an LD child. If a child is allowed to simply fall behind in reading and math in the first two years of school, it will be much more difficult to help the child later. Self-esteem suffers if a child feels helpless and confused when others can do things he can't.

If you would like more information on any of the above disabilities, contact Primary Success and we will send you a variety of websites with helpful information. You can also ask for the booklet "Why John and Janet Aren't Learning to Read". This has a lot of information on reading disabilities.



# What are the signs of a learning disability?

1. Learning disabilities are often genetic. If either of the parents has had difficulties in reading or math, watch for disabilities in the child. So often we hear from parents, 'Johnny must take after me. I had problems in math (or reading) when I was in school.' Most of the children in Learning Assistance programs have a mother or father who is learning disabled (often not diagnosed). DCD is also a genetic disability.

2. Boys are learning disabled more often than girls, although when girls have disabilities they are no less severely affected.

3. A learning disabled child is often bright and creative. It is very difficult for the parent to understand why he is having a problem with easy reading or simple math problems. It is also difficult for the child to see others easily do what he is not able to do.

4. Children with a visual learning disability often reverse letters or words. Some reversals are common for most children as they begin to read, but by the second grade this should have passed. A reversal of 'b' and 'd' is most common, and also 'g', 'q' and 'p'. A grade three girl read 'gob' for 'dog', and 'big' for 'did', sometimes. Other times when she came to these words she said something else, sometimes the correct word and sometimes with different reversals or vertically flipped letters. Children with visual learning disabilities often reverse letters in words, so when spelling will write 'taht' for 'that' and 'teh' for 'the', for example. Sometimes whole words are reversed when reading or spelling. 'Was' and 'saw' and 'on' and 'no' are the simplest.

5. Children with an auditory learning disability will not hear or reproduce sounds correctly, and not be able to remember the sound of a letter easily. Often these children will have articulation problems.

6. Learning disabled children will often read a word correctly or be told a word and not recognize the same word in the next sentence.

7. Children who are disabled in math will want to continue to use manipulatives or add and subtract on their fingers long after they should have the facts memorized. They have difficulty with time, the calendar, sequence of events, money and directions.



# ADHD in the Classroom

- Make clear precise rules with the class and post them. Have logical consequences and rewards. Review the rules daily.
- Move your ADD/ADHD student's desk to where there are fewer distractions. There should be little movement in their line of sight - for example, the child should not be near the pencil sharpener or students coming up to your desk should not move in front of the ADHD student. Avoid hallways or windows where there are distractions. Seat the student near your desk and away from other students who cause disturbances. Experiment to find the quietest place. Seat those quiet attentive girls near the student.
- Make 'offices' - stand file folders up to make a private space.
- If you have ADHD students it is better to seat the class in rows. Sitting at tables is too distracting for these students.
- An over-decorated classroom is a distraction. Keep both visual and auditory distractions to a minimum. Keep the classroom neat and organized. Mess is a huge distraction!
- Post a schedule. These children do not cope well with surprises or change in routines. Warn the child of changes.
- Students often do better in the morning, early in the school day. Schedule reading and math when the student is most focused.
- Some teachers provide earphones and soft classical music while the student is doing assignments. The music must cut out distractions and not be a distraction in itself. You can also play classical music in the quiet classroom - it may be beneficial to other students, too.
- There are soft balls the student can squeeze when he is feeling fidgety, and cushions that he can sit on to give him the motion that he craves without disturbing others.
- Organize his environment. It is helpful to remove all tools (scissors, crayons, glue, etc.) except what is needed for the lesson.
- It often helps to break assignments into small pieces. For example, cut a math sheet into thirds and give the student only one third at a time. The task will look much less daunting. Modify the amount of work if the student has difficulty completing assignments. Stress accuracy - quality instead of quantity.
- Use off-white or cream coloured paper if the lighting produces a glare.
- In math, graph paper may help when writing problems so the columns are organized.
- Homework is a problem for these children. They forget to take it home, forget to do it and if they do complete it, forget to bring it back. Have a routine with similar homework each night and a system of reporting.
- You can give the student a minute timer to have on his desk. Ask how long the child thinks it would take to do an assignment and set the timer. The child can see how much longer he has to complete the work.
- ADHD children tend to act impulsively. This shows a lack of understanding of cause and effect. They often do things without thinking about the consequences of their actions and say things without considering how others will respond. Have them think out loud when solving a problem. It also can help to tell the child to wait 15 to 20 seconds before answering. This gives them time to think out an answer.
- Reward positive actions rather than punish negative actions. If negative actions need a consequence, make sure the student knows this consequence ahead, and be consistent with consequences so the student knows what to expect.
- ADHD students have difficulties socially. They tend to repeat self-defeating social behaviour patterns and not learn from experience. They often fare better if they play with much older or younger children so the roles are more obvious. They usually have difficulty on the playground, and it helps if an adult is nearby to intervene when necessary.
- Have hand signals to use in class for this child. Have a signal for 'sit down', for 'don't blurt out', etc. These help because you are not repeating them in front of the rest of the students.

# ADHD

To be successful with ADD and ADHD students there needs to be modification in the areas of academic instruction, behavioural interventions, and in the classroom itself.

Routine is the most important part of handling these students. They need to know what they are going to do, what is expected of them and what will happen next. Changes in the daily routine will cause disturbances in your classroom! Print the day's schedule on a chart with the times, and follow it as best you can.

**Academic Instruction:** Students with ADD and ADHD learn best with a carefully structured lessons.

- These children do not handle lessons that are not completed in that session. Creative writing, for example, should be completed in one session. By the following day the student will find it very difficult to go back to the same story.

- Review the previous lesson skills before adding something new.
- Tell the students what they are expected to learn in the lesson.
- Tell the children how they are expected to behave in the various parts of the lesson.
- Give explicit instructions, and ask the student to repeat them back to you.
- Give the student only the materials needed in the lesson.
- Simplify the instructions and the choices.
- Provide warnings that the end of the work period is approaching.
- Check assignments in that lesson period. Work checked later is of no value to the student.



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**Behavioural Interventions:** Quiet classrooms with firm routines have less behavioural problems than classrooms with interaction, movement and noise. The teacher wants to spend the minimum amount of time disciplining the problem students, as this time is taken from teaching and assisting all the students.

- Verbal reinforcement of appropriate behaviour is the most effective. Be very specific with praise.  
- Give praise immediately and vary your words. Be consistent and sincere.  
- Negative consequences will rarely change behaviour over the long term and may actually increase the poor behaviours.

- Selectively ignore some behaviours. Sometimes the student is looking for recognition, and will stop the behaviours if this recognition is not given.

- Remove all items around the child that could cause problems. Rulers, elastic bands, etc., are often considered toys. Give the child manipulatives that are calming - stress balls to squeeze, etc.

- Allow the student to move around frequently - purposefully if possible. Send him on errands.

- Give directions near the child, and have him repeat them if you can. Establish eye contact.

- Establish private hand signals instead of saying 'Be quiet', 'Remember to put your hand up', etc. For example, ask the child to raise his or her hand every time you ask a question. A closed fist can signal that the child knows the answer; an open palm can signal that he or she does not know the answer.

**The Classroom:** Children with ADHD often have difficulty focusing on their assigned work. They are easily distracted by other children or by nearby activities in the school classroom.

- Seat the child near the teacher and a role-model student.

- Seat the student in a place where there are as few distractions as possible. Seating near the door or the pencil sharpener would not be helpful.

- A cooking timer can show the student the amount of time left to accomplish the work.

- Sometimes these students have difficulty tracking in their reading. A line marker can help.

- Try having a very wiggly child sit on one of the big exercise/occupational therapy balls.

Document everything that happens every day. This is very important for the school-based team and for the parents. You may want a 'back-and-forth' book that goes home every night where you and the parents discuss the happenings.

# Disabilities in Math

To begin this, I would like to tell you about two children I know well. Every day I pick up my grandchildren from school. The boy is seven and in Grade Two, and his little sister is four and going to pre-school. I have watched these two charming little people develop as independent characters.

The boy didn't learn to count to 10 until he was almost five years old, and he was beginning Grade One before he could do one-to-one correspondence to 10 - and even then often made errors. In Grade One he could not tell you that there were two or three things without counting them, and even today at the end of the second grade he does not visualize numbers over three - and often counts out three when adding. He cannot 'see' the use of the ten to help in addition and subtraction. He has problems with memorizing the addition facts because they have little meaning to him. He has never shown an interest in numbers. And yet, his Dad read him Roald Dahl, Harry Potter and other high level vocabulary books from the age of four, and he can visualize the action and repeat all the story plots and he reads well.

My granddaughter is four. She counted to ten with one-to-one correspondence when she was two years old. Now she adds and subtracts numbers to 18 - sometimes in her head and sometimes uses manipulatives - but she visualizes the numbers and has a very clear understanding of number patterns. Her favourite toy is grandma's calculator, and she checks her addition and subtraction for accuracy. Once she works out  $7 + 8$ , for example, she remembers the answer because it is meaningful to her. She makes statements like, "There are 14 friends in my morning class and 15 friends in my afternoon class - that makes 29, but 2 people were away today so I had 27 friends at pre-school." (This isn't part of her daily class circle....) She is delighted with numbers.

There are children like these two in every class we teach. Both ends of the math spectrum are often ignored. Here, I would like to discuss the students who have a disability in mathematics. This is often called 'number blindness' - an apt term - or dyscalculia.

In every aspect of our daily life we are surrounded by numbers - telephone numbers, street and house numbers, TV channels, money, schedules, time, cooking, to name but a few. Because numbers are such a part of our lives, many teachers find it difficult to understand that these children cannot see what others see. We repeat lessons that they do not 'get', trying to impart understanding where the very basis of understanding is not present.

Experts tell us that five or six percent of children (an average of one in every classroom) have dyscalculia to some degree. It has been my experience that there are more than that. As in all disabilities, this problem ranges from a mild impairment to severe. Children with a mild impairment like my grandson may go through school with some degree of frustration in math classes, and those with a severe disability will have great difficulty.

Babies as young as 6 months expect that adding one object to another object will produce a set of two objects. They begin to use a mental process quite distinct from counting. This is called 'numerosity'. Most of us, as adults, can easily see groups of five objects without counting, and up to seven or eight by mentally breaking the group into sub-groups. This is an innate skill that is impaired in people with dyscalculia. Most children have a number sense where they have a clear mental picture of what is happening when they add, subtract, multiply and divide. The students with 'number blindness' do not have this picture and may memorize the answers but cannot evaluate or reason beyond the memorized answer. They have no vision of abstract generalizations.

Counting is simply putting a list of number words (one, two, three) into one-to-one correspondence





with a group of objects. Children with dyscalculia typically have no difficulty remembering the sequence of the number words, and they can put those words into a one-to-one correspondence with a group of objects. It looks as if these children are counting normally, if somewhat slowly. But when these children tell you that there are three objects, they do not have an understanding of 'three' - they simply have faith that their counting procedure has led them to the correct answer.



A simple test can be used in kindergarten and early grade one to show the possibility of dyscalculia. Give the student two sets of items and ask which has more. The reaction time for these children to answer is much longer than for 'normal' students. For most people, as the distance between numbers increases, the task becomes easier - for most, it is easier to tell that 7 is more than 4 than it is to tell that 5 is more than 4. Children with dyscalculia must rely on counting and sequencing. If you're counting, it takes longer to determine that 7 is more than 4 than it does to determine that 5 is more than 4.

While this disability is quite different from other learning disabilities such as dyslexia, dysgraphia or dyspraxia, it is a neurological abnormality, too. It is not well understood, but what is clear is that the brain has certain ways in which it processes mathematical information, and that these are disabled to a mild or severe degree.

## Teaching Children with Dyscalculia

It is unclear whether practicing numerosity at an early age will improve this. If small children are encouraged daily to 'see' groupings without counting it may help to counter this disability. Showing groups of two and three and four for one second so there is no time for counting may help - but the child may soon recognize what you are doing, rather than being able to transfer this information to another situation.

These children will use manipulatives, their fingers or dots on the side of the page long after most students are answering questions mentally. Unless told differently and given an explicit strategy, they will add  $4 + 2$  by counting out the numbers - 1,2,3,4 - 1,2 - and then adding by recounting - 1,2,3,4,5,6 - going back to the 1 each time.

One thing seems to be clear - a child with serious dyscalculia will find true understanding of larger numbers very difficult if not impossible. I remember teaching a seven year old about place value to 100 over and over and over - counting out tens and talking about tens and ones. She soon was able to answer questions if I kept the same format (but still counting them out each time) - but the moment the format was changed it was obvious that there was no understanding of the concept. She learned the process but could not transfer it to another situation.

If you use the process of hands-on learning, the child will learn the strategies as long as manipulatives are being used. These strategies will not transfer to the abstract no matter how often they are repeated and often this early training makes them more dependent on the manipulatives rather than less. It does not appear to improve the basic understanding of numbers.

Children with these problems usually have difficulties with money and time. A 12 year old student with severe dyscalculia may not understand abstractions such as 'last week', 'next month', 'two years ago' - even 'yesterday' and 'tomorrow' or 'one hour' may be too abstract. He/She may have difficulty counting coins, as the problem changes format with each new set. These children usually do not understand money - they can read a purchase price but do not understand how this fits with the money they have - and making change is very difficult if not impossible.

These students may find ways to cope in mathematics - memorization of facts, processes and strategies. They need simple rules for doing the different processes. A child may be helped by having a number line on the desk after they are taught to begin on the largest number and then count on or count back. They will need to be taught this or most will continue to count out the first number when adding. Having a set of manipulatives is great in *Grade One*, but by *Grade Two* and *Three* the numbers are larger and counting them out is labour intensive. They need to be taught short-cuts to find answers. Once they have these short-cuts, they can be taught the steps for addition and subtraction with re-grouping, and other more involved processes. Using a calculator is helpful for older students - but if they make a mistake with the calculator they do not process the answer to see if it is sensible. Higher level thinking and problem solving are usually beyond them.

Keep in mind that learning disabilities cannot be 'fixed'. As primary teachers, we want to believe that extensive hands-on practice will help the child, but understanding of the math concepts may never happen because the basic understanding of numbers is not there. After the usual practice with the concepts, these children will need strategies in order to succeed. They need to be taught the short-cuts, rules and steps to do the processes. They can succeed with teaching that provides these strategies. Have them orally describe the steps they are taking to find an answer. They need careful instructions and directions. For example, a high school student may not be able to 'see' a triangle, and will have to say 'A triangle is a closed figure with three straight sides,' to himself to be able to recognize this shape.



# Autism

*The following definition is from the Autism Society of America:*

"AUTISM is a severely incapacitating lifelong developmental disability that typically appears during the first three years of life. It occurs in approximately fifteen out of every 10,000 births and is four times more common in boys than girls. It has been found throughout the world in families of all racial, ethnic and social backgrounds. No known factors in the psychological environment of a child have been shown to cause autism.

The symptoms are caused by physical disorders of the brain. They include:

1. Disturbances in the rate of appearance of physical, social and language skills.
2. Abnormal responses to sensations. Any one or a combination of senses or responses are affected: sight, hearing, touch, pain, balance, smell, taste, and the way a child holds his body.
3. Speech and language are absent or delayed while specific thinking capabilities might be present.
4. Abnormal ways of relating to people, objects and events.

Autism occurs by itself or in association with other disorders which affect the function of the brain such as viral infections, metabolic disturbances, and epilepsy. .... The severe form of the syndrome may include extreme self-injurious, repetitive, highly unusual and aggressive behavior. Special educational programs using behavioral methods have proven to be the most helpful treatment."

Autism is a neurological disorder. It affects behavior and the ability to communicate and interact socially. Children with autism do not develop mental, social or physical skills in typical sequence. Some children may sit for hours by themselves and appear to be engrossed in some mindless task or repetitive self stimulating activity. Both the severity and the range of disordered thought and behaviours vary greatly from one child to the next.

Students with autism benefit from an individualized program that is predictable, structured and consistently focuses on improving verbal and nonverbal communication, social and behaviour development, self-awareness, and self-help lifeskills.

## **Best Practices for the autistic child:**

Having an autistic student in your classroom is a challenge! Many of the best practices for the autistic child are opposite to the best practices for the other students. Students with autism should be with their peers if possible, but most will require extensive support.

The child should have a safe and predictable environment, and this means peaceful routines for all students. Provide a predictable and consistent activity classroom schedule.

Untidy over-stimulating classrooms will be difficult for this child.

The environment should have minimal transitions. Transitions should be announced ahead, and then there should be fixed routines for these transitions.

Provide many verbal and visual cues and supports to help with routines. Say the same things. You can show a picture cue or hand motion for the different routines.

Keep distractions and sensory/stimulus activities to a minimum. For example, students moving freely about the classroom, or the student having many items within his grasp - these may be disturbing to the student. Provide a quiet area and frequent relaxation time.

Focus on very specific strategies (1 or 2 at a time) that will promote independence. Use visual pictorial prompts.

Communication should be the priority. Work on simple steps that progress to the goal. Provide opportunities for sharing and turn taking experiences.

Use behaviour modification techniques. Be firm, specific and use simple rewards and consequences with absolute predictability.

# Asperger's Syndrome

This condition was first identified in 1944. Asperger's is a neurological disorder generally considered on the 'autistic spectrum'. People with Asperger's look 'normal', may have average to high intelligence, but lack the social awareness and skills needed to connect well with their world. It affects social interactions, language use, and nonverbal communication.

Many individuals who fall within the category of having Asperger's Syndrome are often misdiagnosed with ADD, ADHD, schizophrenia, learning disabilities, bi-polar, receptive language, oppositional defiant and emotional disorders. Many children with Asperger's are seen as being behaviour problems.

## Characteristics

- May not make direct eye contact
- May lack empathy
- May have rituals or specific routines that must be followed
- May move into the personal space of others
- May have repetitive body movements
- May be obsessed with parts of objects rather than the whole
- May talk a great deal about something which is of interest only to themselves and does not pick up cues that others are uninterested.
- May have speech peculiarities such as: stilted and formal language, voice too loud or monotone or talking too much.
- May be very sensitive to noises or smells
- May be of average to high intelligence
- May have difficulty with subjects that require inferences, abstract concepts, problem solving or social judgments.
- May have fine motor problems with poor handwriting
- May have gross motor problems



## Asperger's in the Classroom

- Students need a quiet safe atmosphere in order to learn. They are easily overwhelmed by noise, chaos or random activities - recess or assemblies where there are lots of other people moving about - and will be easily stressed and anxious.
- These students should not be seated near class bullies or aggressive students. They should be seated by quiet pleasant students who follow the rules. Some students may need a quiet open space or a corner that is separate to work best.
- Practice and model teamwork and working within a group. Modelling and roll-play is very helpful.
- Try using earplugs or headphones to screen out noise.
- Give access to a quiet, private place (library, learning assistance room, empty classroom or cubicle) where the student can spend free time alone, can rest and refresh themselves as the classroom will generally be stressful.
- Keep to strict routines as much as possible. Write out the timetable for the day so the child will know what to expect and be ready for changes. Explain changes well in advance.
- Students with Asperger's often respond well to visuals, graphic models and technology. They are usually good at computers and as they often have impaired gross or fine motor skills it helps to be able to do writing or math on the computer rather than with pencil and paper. They will usually enjoy computer research and work because there is less stress where there are no interpersonal relationships. Be careful that it doesn't become an obsession.
- Document all behaviours. Have a home-school connection with the parents.
- Promote positive friendships with peers.
- Be warm and caring. Do not take odd behaviours personally.

# Asperger Syndrome

Asperger syndrome is considered a disorder at the higher functioning end of autism. It presents as severe and sustained impairment in social interaction and the development of restricted, repetitive patterns of behaviour, interests, and activities. This disturbance causes significant impairment in social, occupational, or other important areas of functioning.

Most children with Aspergers will have average or above average intelligence, and this often masks the disorder. Teachers will sometimes expect more than these children can produce.

## Some indicators of Aspergers syndrome are:

- The child carries on one-sided, long-winded conversations, without noticing if the listener is listening or trying to change the subject. These almost always are about him/herself or about a single interest.
- The child displays unusual nonverbal communication, such as lack of eye contact, few facial expressions, or awkward body postures and odd gestures.
- He/she shows an intense obsession with one or two specific, narrow subjects, such as patterns, schedules, certain music or spiders.
- The child has a strong preference for routines and avoidance of change.
- The child appears to not understand, empathize with, or be sensitive to others' feelings.
- He/She has difficulty 'reading' other people or understanding humour.
- There may be a lack of 'common sense'.
- The child may speak in a voice that is monotonous, rigid or unusually fast. The conversations may sound scripted, robotic or repetitive.
- He/She may move clumsily, with poor coordination, and have odd posture or walk rigidly.
- There may be a problem with reading, math or writing skills but the child may have average or above verbal and understanding skills.

## Teachers need to take into account:

- Children with AS have difficulty generalizing concepts from one situation to another.
- These children do not learn incidentally because of the lack of generalization and must be directly taught the concepts.
- They take things literally.
- They have difficulties with group activities including play and games.
- They may have reactions to over-stimulation in situations where other children do not have problems.
- These children have difficulty sequencing tasks, especially if told to do a series of things in a specific order.

## Some suggestions for the classroom teacher:

- Provide a set daily routine and a very clear simple structure for the daily happenings. Make sure the child knows the day's program at the start of each day and can reference it in words or pictures.
- Provide warning of any impending change of routine or activity. Have substitute teachers in as little as possible as this is the biggest change in routine. Changes may trigger anxiety.
- Keep the classroom as quiet and peaceful as possible. Sudden sensory changes may cause over-stimulation. Remove as many distractions as possible when the child is doing a task involving concentration. Sometimes an individual work area helps. Some children may find colourful wall decorations or noise very difficult to cope with.
- Use clear and unambiguous language. Avoid humour or irony, or phrases like 'my feet are killing me' or 'it's raining cats and dogs', which will cause confusion.

- Speak to the child individually at all times - the child may not realize that an instruction given to the whole class also includes him/her.
- Have the child repeat instructions and check for understanding.
- Use visual presentations whenever possible.
- Set behavioural expectations and always follow through.
- Do not take rude or aggressive behaviour personally.
- Teach the child what 'finished' means when a job or activity ends.
- Specifically teach social rules and skills, such as manners, taking turns and personal space.
- Link the work to the child's interests whenever possible.
- Some AS children work better on the computer.
- Protect the child from teasing at play times, and give the other children some awareness of his/her particular needs.
- Allow the child to avoid certain activities (such as sports and games) which he/she may not understand or like. Give support in open-ended and group tasks.

Sometimes behaviours that might be seen as simple naughtiness or non-compliance may have a range of other meanings for the child with Asperger syndrome. The child may be indicating the need for help or attention or the need to escape from stressful situations.

Every child responds to positive feedback from the teacher, but any learner with AS is especially in need of some tangible measure of success. These children are not likely to have high self-esteem, and respond well to deserved recognition for work done well or appropriate behaviour. Stars or stickers on a chart can be useful, with a prize for a certain number collected.

## Colour Blindness

Colour blindness does not mean that the child sees in black and white as this is a rare condition. But children with colour deficiencies may have problems in one colour range - green or red being the most common. 5 to 8% of boys have some colour deficiency, so this is not uncommon. Perhaps 2% of children (usually boys) have a more severe deficiency - they may see dark colours in the red spectrum as blacks or dark gray.

Examples of how the condition can cause problems at school.

1. Errors can be made on worksheet pages with coloured pictures or diagrams.
2. Some pages in basals or trade books are written with coloured print on coloured background - blue on purple, for example.
3. Teachers sometimes think that young children do not know their colours when they mix up colours with a similar intensity.

How can teachers help if a child has a colour deficiency?

1. Label a picture with words or symbols when the response requires colour recognition.
2. Label crayons, coloured pencils, and pens with the name of the color.
3. Use white chalk, not coloured chalk, on the board to maximize contrast. Avoid yellow, orange, or light tan chalk on green chalkboards.
4. Photocopy parts of textbooks or any instructional materials printed with coloured ink. Black print on red or green paper may not be seen by some students. It may appear as black on black.
5. Assist colour deficient students when assignments require colour recognition. For example - colour coding different countries on a world map.
6. Teach colour deficient students the colour of common objects. Knowing what colour things are can help them in their daily tasks. Example: when asked to colour a picture, they will know to use the crayon 'labeled' green for the grass, blue for the sky, and light tan for faces.



# Oppositional Defiant Disorder

ODD is a psychiatric disorder that is characterized by two different sets of problems. These are aggressiveness and a tendency to purposefully bother and irritate others. Oppositional Defiant Disorder is a behaviour disorder, often associated with ADHD, in which a child's hostility, disobedience and negative attitude are out of proportion to what would be expected for his or her age group. The extreme behaviour would have to continue for more than six months, and have a serious, significant and harmful effect on the child's life and functioning, before an ODD diagnosis would be made.

The criteria for ODD are:

A pattern of negativistic, hostile, and defiant behaviour lasting at least six months during which four or more of the following are present:

1. often loses temper
2. often argues with adults
3. actively defies or refuses to comply with adults' requests or rules
4. often deliberately annoys people
5. often blames others for his/her mistakes or misbehaviour
6. is frequently touchy or easily annoyed by others
7. is often angry and resentful
8. is frequently spiteful and vindictive



The disturbance in behaviour causes clinically significant impairment in social, academic, or occupational functioning.

Getting a reaction out of others is the chief hobby of children with ODD! They like to see you get mad. They try to provoke reactions in people and are often successful in creating power struggles. Therefore it is important to have a plan and try not to show any emotion when reacting to them. If you react too emotionally, you may make big mistakes in dealing with this child. Plan in advance what to do when this student engages in certain behaviours and be prepared to follow through calmly.

- Decide which behaviours you are going to ignore. Most children with ODD are doing too many things you dislike to include all of them in a behaviour management plan. Thus, target only a few important behaviours, rather than trying to fix everything.
- Make this student a part of any plan to change behaviour. If you don't, you'll become the enemy.
- Provide consistency, structure, and clear consequences for the student's behaviour.
- Praise students when they respond positively.
- Establish a rapport with the ODD child. If this child perceives you as reasonable and fair, you'll be able to work more effectively with him or her.
  - Avoid making comments or bringing up situations that may be a source of argument for them.
  - Never raise your voice or argue with this student. Regardless of the situation do not get into a "yes you will" contest. Silence is a better response.
  - Do not take the defiance personally. Remember, you are the outlet and not the cause for the defiance- unless you are shouting, arguing or attempting to handle the student with sarcasm.
  - Avoid all power struggles with this student. They will get you nowhere. Thus, try to avoid verbal exchanges. State your position clearly and concisely and choose your battles wisely.



- Always listen to this student. Let him/her talk. Don't interrupt until he/she finishes.
- Address concerns privately. This will help to avoid power struggles as well as an audience for a potential power struggle.
- In the private conference be caring but honest. Tell the student calmly what it is that is causing problems as far as you are concerned. Be sure you listen as well. In this process, insist upon one rule—that you both be respectful.
- When decisions are needed, give two choices or options. State them briefly and clearly. Students with ODD are more likely to complete or perform tasks that they have chosen. This also empowers them to make other decisions.
- Give the ODD student some classroom responsibilities. This will help him/her to feel apart of the class and some sense of controlled power. If he/she abuses the situation, the classroom responsibilities can be earned privileges.
- When you see an ODD child getting frustrated or angry, ask if a calming down period would help. But don't force it on him/her. Rather than sending the student down to the office for this cooling down period, it may be better to establish an isolated "calming down" place in the classroom so he/she can more readily re-engaged in classroom activity following the cooling down period.
- Ask parents what works at home.

#### And more ideas.....

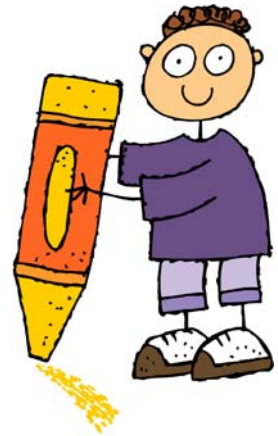
- Establish clear classroom rules. Be clear about what is nonnegotiable.
- Post the daily schedule so the student will know what to expect.
- Make sure academic work is at the appropriate level. When work is too hard, students become frustrated. When it is too easy, they become bored. Both reactions lead to problems in the classroom.
- Pace instruction. When the student with ODD completes a designated amount of a non-preferred activity, reinforce his/her cooperation by allowing him/her to do something they prefer or find more enjoyable or less difficult.
- Systematically teach social skills, including anger management, conflict resolution and how to be assertive in an appropriate manner. Discuss strategies that the student may use to calm him/ or herself down when they feel their anger escalating. Do this when the student is calm.
- Select materials that encourage student interaction. Students with ODD need to learn to talk to their peers and to adults in an appropriate manner. All cooperative learning activities must be carefully structured and monitored, however.
- Minimize downtime and plan transitions carefully. Students with ODD do best when kept busy.
- Structure activities so the student with ODD is not always left out or is the last person picked.





# Sensory Processing Disorder

Sensations are flowing into our brain at a rapid rate from all five of our senses. There are messages from our eyes, ears, skin, mouth and nose. These sensations need to be acted upon, organized and co-coordinated. Many children, especially those with other disabilities (autism, Aspergers, ADHD, DCD, etc.) have sensory difficulties that accompany the disability. Sensory integration problems have reportedly been seen more often in children who were born prematurely or with a low birth weight or were deprived of sensations in early childhood. Problems may also occur in children who have had too much sensation in their early environment, such as in children suffering from abuse or post traumatic stress. Many autistic children appear to have SPD based on their avoidance of sensation.



In the simplest terms, children with SPD either avoid sensation or seek it. The person is either under-processing information or over-processing (sensory overload). One doctor believes that 10% of the population have some form of SPD - which means at least two children in your classroom could be affected.

## Visual Sensitivity - Over-Responsiveness

The child is over-sensitive to bright lights and may cover the eyes to shut out the light. He may be uncomfortable in places that are over-stimulating - and many classrooms fit that. He will have difficulty focusing on one thing and be very easily distracted. Bright colours or mess around him will be a problem. Small children will not like to go up or down stairs. They may avoid eye contact.

## Visual Sensitivity - Under-Responsiveness

The child may have spatial difficulties and problems seeing the 'whole picture'. There may be letter reversals, untidy printing that tends to slope. The child may have problems with jigsaw puzzles and loses his place when reading or doing math.

## Auditory Sensitivity - Over-Responsiveness

The child may be sensitive to background sounds that we ignore, and be frightened of loud noises - oddly, the toilet flushing in strange bathrooms is one. (My DCD grandson had many of these symptoms as a small child.) He/She may have problems if the classroom is noisy. He will put his hands over his ears when noise is expected or when the levels are too high. He may not be able to pick one voice out of the background noise.

## Auditory Sensitivity - Under-Responsiveness

The child may love loud music or make a lot of noise himself. He may have difficulty with spoken directions and say "What?" often.

## Over-Sensitivity to Touch

These children will not want others to touch them and may lash back if another brushes against him. They may feel rough clothing as if it were sandpaper against their skin. This child will not want to be dirty and will not want to be messy in glue or finger-paint.

## Under-Sensitivity to Touch

The child with under-sensitivity to touch may want to be hugged constantly, will need to touch everything and be touched and even may be self-abusive. They may have under awareness of pain or temperature.

Some children are frightened of movement and do not like their feet off the ground. They do not swing or climb on the playground. Other children crave it - and bounce, climb, swing often without thought of danger. There is also sensitivity to taste and smells - and others.

There is a good website with check-lists - they don't give you conclusions but may give you interesting insights.

<http://www.sensory-processing-disorder.com/sensory-processing-disorder-checklist.html>

## SPD in the Classroom

We can't diagnose the children in our classrooms with sensory dysfunction, but you may notice that some of your children fit some of these categories. Children who have sensory problems live with stress, in many cases, and this is very difficult for them and certainly affects their learning. Here is how you can help these children cope with their disability.

Talk to the child about his discomfort, if it is obvious to you. Tell him that you understand and that you want to make things as pleasant as possible. Give the child options when his sensory levels are giving stress.

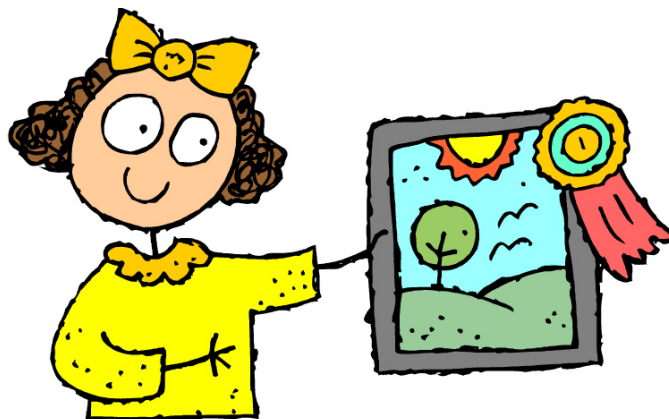
Keep the noise level as low as possible, and your voice at a mid to low pitch. If activities are planned that will be noisy and you know a child may be stressed - give the child an option to go to a quieter place for this time. If the fire bell is going to ring, you may want to tell the child ahead of time. Remember that if the classroom is noisy, that child may not be able to pick your voice out of the background noise.

Do not over-decorate the classroom. A wild profusion of bright colours makes it difficult for some children to concentrate. Mess is also very distracting. Keep the classroom tidy and organized. If a child has visual sensitivity problems and is not completing work because he is distracted, provide a desk or table with a bare 'office' surround facing away from the class, or let him go to a bare room nearby.

Some children have movement sensitivity, and will not want to do the same things in the gym or on the playground that the other children do.

Be aware of children who are acting out, and see if there could be some sensory trigger.

It is difficult to understand exactly what these children see, hear, or feel - unless you have some of these sensitivities yourself. But it is important to know that if a child is obsessing on something in the environment - he will not be working or learning to the best of his ability.



# Coordination Difficulties

Statistics say that 5% of children have DCD (Developmental Coordination Disorder). It is often not diagnosed or understood. DCD is part of a larger set of learning disabilities called Dyspraxia.

## Here are some of the symptoms of DCD.

- Appears clumsy or uncoordinated.
- Has difficulty tying shoelaces, doing up buttons, etc.
- Has difficulty with movement activities; running, jumping, climbing stairs, etc.
- Has difficulty with ball skills; catching and throwing.
- Has difficulty with printing, colouring and craft activities.
- Works hard but is often unsuccessful, sometimes frustrated.
- Rushes through tasks or is unusually slow.
- May have fears of the unknown or irrational fears.
- May be disruptive and may have poor self-esteem.
- Will often avoid socializing with peers, especially in physical games.



## How can you help a child in your classroom with DCD?

- Give specific lessons in printing, using scissors, etc., breaking each task down into small parts.
- Reduce the amount of motor tasks the child should do.
- Seat the child by a supportive peer.
- Do physical activities that do not focus on team winning. Encourage participation and effort.
- Often hand-over-hand help will improve printing and colouring.
- Explain new games before beginning and make the child's role clear.
- Show the child how he can participate in games, in PE and on the playground.
- Understand that fears may be preventing the child from participation or trying new things.
- Modify your expectations to what the child is able to achieve.

## Here are some exercises you can do in the classroom - they are good for all children, but especially good for children with motor difficulties:

- Crossing the mid line of the body helps the brain coordinate motor skills.
  - March around the room to music. The students touch their right knee with their left hand then the left knee with the right hand or touch the left shoulder with the right hand then touch the right shoulder with the left hand as they march.
  - Practice standing on one foot for one minute to improve balance.
  - Use individual chalkboards or white boards. Make big strokes top to bottom and left to right.
  - Cross clapping takes two people facing each other- they each clap their right hands together then left.
  - Reach for things across the body - left hand to reach for something on the right side and vice versa.
- Play imitation game like 'Simon Says'.

# Dyspraxia—Developmental Co-ordination Disorder

*You have a little boy in your kindergarten classroom. He seems to be a slightly withdrawn child who prefers to play by himself or with one other child. He does not appear to be able to join in with a group of children playing, although he seems to enjoy watching their activities. He appears to have an average intelligence, although slightly inarticulate speech. You notice that his pencil grip is immature and he appears to have difficulty with the simplest of fine motor tasks, although he can explain to you how the task should be done. His drawing seems to be at the level of a 2 year old, while his vocabulary is well within the average range for his age. He simply refuses to participate in circle time, dancing or games. He has trouble dressing himself and becomes stressed or confused if routines change. His parents state to you that he has always been a bit shy and that he is "just not athletic".*

It is very possible that the student described above has Developmental Co-ordination Disorder (DCD). Developmental Co-ordination Disorder is described as an impairment, immaturity or disorganization of movement. The term DCD is now replacing the labels "Clumsy Child Syndrome" and "motor learning difficulties". In the past these children may have been described as "klutzy" or "nerdy". Up to one child in 10 is affected by DCD. It is therefore likely that every class will have a child with this disorder in varying degrees of severity. As in all learning disabilities, the problem cannot be 'fixed' and the children will have this disability all their lives, but they can be taught positive coping skills.

Teachers may recognize the following symptoms in the classroom:

- Immature speech or articulation.
- Immature fine and gross motor skills. The child will have difficulty learning new motor tasks. He/she may appear clumsy and awkward.
- A child with normal intelligence may have difficulty planning and organizing his thoughts.
- Difficulty with reading, writing and spelling or math.
- Behavioural/emotional problems - difficulty joining in with peers, low self esteem, P.E. avoidance, acting out during craft time, trouble coping with free time, isolating. This area is especially important. Children with DCD are capable of growing into fully functional adults, however, confidence and self esteem issues can lead to larger problems than the disability itself.

If any of the above symptoms are noted it is important that the child is assessed by a paediatrician and an occupational therapist and physiotherapist.

It is quite possible for a child with DCD to be successful in school. It may be helpful to have a meeting with the parents and any other professionals working with the child to discuss their specific difficulties and strategies that work. Some strategies that are helpful when you are working with children with DCD in the classroom are:

- 1. Allow extra time:** Try to provide the child with enough time to complete fine motor activities such as math, printing, and artwork. If speed is necessary, be willing to accept a less accurate product, or adapt the exercise, i.e., provide the child with a photocopied set of questions. Children with DCD do not deal well with tasks when they are feeling stressed, so timed tasks may be especially difficult.
- 2. Use repetition:** Children with DCD will eventually learn the skills necessary to perform a task. However, they do not learn naturally as other children do, and need a significant amount of repetition and practice before a new skill or movement becomes automatic.

**3. Allow variability:** It is very important to remember that a child's ability will be variable day to day, sometimes even hour to hour. They may not be able to do something one day that you saw them do perfectly well the day before.

**4. Create an appropriate learning space:** A desk that allows the child to sit with his feet flat on the floor and to maintain good posture is important. The immediate workspace should have minimal distractions. He works best in a private space that he can organize in his own way - other children may disturb his task planning.

**5. Remember the goal:** It is important to always remember the goal of any activity. For example, if the point of an exercise is not printing, do not ask a child with DCD to copy from the board or from a book. If the goal is creative writing, ignore messy handwriting and focus on the content.

**6. Break it down:** In all tasks, both in the classroom and in the gym, ensure that each task is broken down into small, achievable parts. Simply including a child with DCD in the class explanation of a game and then expecting them to join in will only cause anxiety and/or isolation or acting out. Children with DCD need to learn physical things in small steps, where complete understanding and ability to do one motion is the foundation for learning the next.

Provide motivation and praise success: Motivation is key - a child with DCD may be quite ready physically to learn a new skill, but they are overly cautious. A behavioural reward program can be quite effective in getting over the first hurdle of "I can't do it".

Of particular importance is the child's reaction to functioning at a lower level of competence than his peers, despite his intelligence level. It is important to focus on the individual strengths that he will have. As a child learns each new skill, he will maintain it. At a point in adolescence or early adulthood, the signs of DCD will become much less intrusive. However, loss of confidence and self-esteem can be carried into the teen and adult years. Teachers, along with parents and others involved, can play a vital role in both the skill acquisition of these children as well as the growth of their confidence and self esteem.

*Kelly Raine, BSW, Dip. CYC*

*Note: Kelly's son, my grandson, has DCD quite severely. He learned to print quickly and reasonably legibly by Grade 3, but handwriting is now a problem. He reads above grade level but had some problems in math in the early grades. He has difficulty with physical movements - he runs awkwardly and can't catch a ball, and is finally learning to swim after years of lessons - he can do one physical movement (kick his feet, for example) but to coordinate the arm movements at the same time is difficult - and then add breathing in the proper places..... The physical things that other children do automatically must all be thought through and taught in isolation. (Written in 2008)*  
*Jean*

*Aidan, 2011*

