



Learning to Play... Playing to Learn.

An information booklet for those living and working with young children with an Autism Spectrum Disorder (ASD).

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Wales' National Charity for Autism
Elusen Genedlaethol Cymru ar gyfer Awtistiaeth

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Foreword by The Children's Commissioner for Wales

Play is essential for a child's development and an important part of the learning process. Every child has a right, enshrined in the United Nations Convention on the Rights of the Child, to experience quality play experiences. We must, however, recognise that each child has his/her individual needs and these must be recognised and taken into account in the provision of play opportunities. Children with an Autism Spectrum Disorder may not respond to play activities in a traditional way because of the difficulties they have with social interaction, communication and social imagination. We must be flexible and creative in order to help make their play a happy and rewarding experience.

Our recent publication, *A Happy Talent*, looked into play provision for disabled children and we found that many local authority play strategies were at an embryonic stage of development. From September 2008, local authorities are required for the first time to publish their single Children and Young People's Plan (CYPP). We anticipate a busy period when we look at these important documents to see how the importance of play has been incorporated into local planning

With this in mind, I welcome the publication of this information booklet produced by Autism Cymru and funded by the Welsh Assembly Government. I hope that it will have a role in informing the further development of play strategies across Wales. It should also prove to be a valuable resource for anyone living or working with young children on the autism spectrum.

A handwritten signature in blue ink, reading 'Keith Towler', with a horizontal line underneath.

Keith Towler

Acknowledgements

Autism Cymru has formed a Celtic Alliance with Autism NI (PAPA), The Irish Society for Autism and the Scottish Society for Autism with a view to sharing best practice. This booklet has been inspired and informed by the work of Autism NI (PAPA) who have developed a highly successful pre-school programme known as The Keyhole® Jigsaw of Early Intervention

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What is an Autism Spectrum Disorder (ASD)?

ASD is a developmental disability that affects how children understand the world. The intellectual ability of children with an ASD can range from severe learning difficulties with little or no verbal communication to above average intelligence with an articulate command of language. Each child with an ASD is unique and will have their own individual needs and preferences. There is no 'one size fits all' for these children just like any others.

However, regardless of intellectual ability all children on the autistic spectrum will have core difficulties with their:

- Communication
- Social Interaction
- Imagination/flexibility of thought

This is known as **The Triad of Impairment**.

Children with an ASD may not want to **communicate**. They often do not know that gestures, facial expressions and different tones of voice have a particular meaning.



The **social skills** of children with an ASD are not as well developed as their mainstream peers. They may avoid eye contact, dislike turn taking/ sharing and only enjoy limited and repetitive play. They may not make any distinction between the way they behave with strangers and familiar adults. Sometimes they will insist upon rules and routines and get very distressed if everything is not on their own terms. Often children with an ASD have no sense of danger.

Children with an ASD will have difficulties with their imaginary skills and an **ability to think in a flexible way**. They will often like routine and structure in their life and find change difficult. They may become fixated with or have a very 'special interest' in particular objects or topics e.g. Thomas the Tank Engine or Disney characters. Sometimes they will focus on the smaller detail and ignore the bigger picture.

In addition to the difficulties highlighted above, individuals with an ASD tell us about the reactions they can have to **sensory** stimuli. They may be distressed by certain noises, lighting, colour, tastes or smells. They may seek out visual stimulation by staring at objects from unusual angles or spinning and flicking objects under a light. They may seek physical stimulation by spinning, flapping hands or rocking and may refuse to wear certain items of clothing.

Children with an ASD learn very differently from typically developing children and may well have other difficulties to overcome such as Dyspraxia, Dyslexia or Attention Deficit Hyperactivity Disorder (ADHD). Children with an ASD will not learn to enjoy play incidentally; they will need to be taught this skill alongside social skills.

Why is Play Important?

The document 'Play/Active Learning. Overview for 3 to 7 year-olds' (Welsh Assembly Government, 2008, p.7) states that play is important because it:

- » Motivates
- » Stimulates
- » Supports
- » Develops skills
- » Develops concepts
- » Develops language/communication skills
- » Develops concentration
- » Develops positive attitudes
- » Demonstrates awareness/use of recent learning and skills
- » Consolidates learning.



It goes on to say that play should be valued by all practitioners and structured with clear aims for children's learning. The document also notes the different stages of play development. For children with an ASD moving through these stages will be very difficult and so they will need teaching, creativity and patience from the adults who live and work with them. It may be that they do not reach the latter stages at all or if they do it may take many years. The stages of development (p.13) are:

- » **Solitary** - children play alone; little interaction with other children, often absorbed in their own activities.
- » **Spectator** - children observe their peers; usually they just watch and do not join in.
- » **Parallel** - the child plays alongside other children; initially it will appear that children are playing together but on closer observation it is evident that they are playing separately.
- » **Partnership/associative** - children play together; interaction between children is developing and they enjoy playing with the same activities and equipment.
- » **Cooperative/group** - children play in group situations and share outcomes from their play; often the play will be intricate and detailed. However, even if children are able to play cooperatively, they may still choose to be involved in solitary play.

Developing play in children with an ASD

Often people divide play into different categories such as constructive play, creative play, sensory/motor play, interactive play, social play, physical/ outdoor play and pretend play. Although separate headings for play activities are noted, they do not always exist in isolation e.g. imaginary play may well include construction.

In the early stages of developing play, it is important to focus on the things that motivate and interest the young child with an ASD. A young child with an ASD may not realise that you can have fun doing the same things together and may feel at times that you are invading his/her space. Be patient and gradually build up the time you interact with each other. In order to start this process, you may wish to consider the following types of play.

Sensory motor play

Sensory motor toys can include sound makers, squeaky toys, bubbles, balloons, play dough and water play. Other activities can include games such as 'Peek a Boo' and 'Round and Round the Garden' and outside play such as swings and trampolines.

Sensory motor play helps children to learn about turn taking, prediction, looking, listening and paying attention. This sort of play can also be used to encourage youngsters with an ASD to explore their environment. However, adults must always be sensitive to any sensory anomalies such as a dislike of certain textures e.g sand or dough.

Constructive play

Often this sort of play can involve young children in a cause and effect situation. If the child does something to a toy - squeeze, shake, throws - something happens as a result. This sort of play can also mean that children are involved in building with bricks, making things or using interactive computer games linked to a special interest e.g. trains, dinosaurs, TV characters etc. Children with an ASD may need you to prompt them in the early stages of these activities.

Interactive and social play

Children learn through imitating others. For children with an ASD it may be necessary for you to begin by imitating them. Copy what the child is doing with toys/objects, mimic his/her sounds and actions and watch if he/she notices. If he/she shakes a rattle then bangs it on the table, imitate these actions and see if he/she notices.

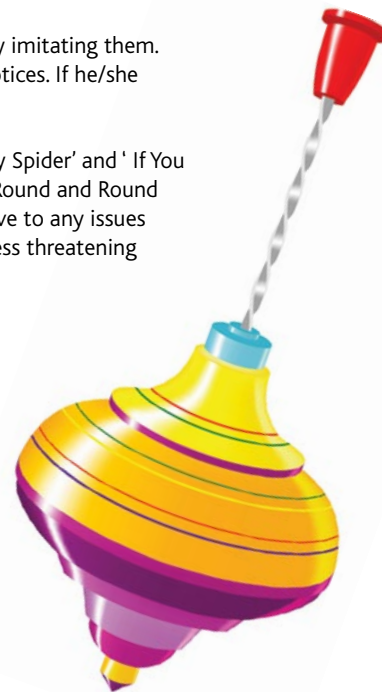
Sing repetitive action songs such as 'Head and Shoulders, Knees and Toes', 'Row Your Boat', 'Incey Wincey Spider' and 'If You are Happy and You Know it...' and encourage the child to join in. Take it in turns to play 'Peek a Boo' or 'Round and Round the Garden'. You may need someone with you to help the child imitate at first though do be very sensitive to any issues relating to touch and body space. Puppets of favourite characters could help in this respect and appear less threatening to some children. Do use any toys/objects relating to a 'special interest' in whatever way you can.

Structuring play activities

Children with an ASD like routines and structure. It may therefore be advisable to introduce the child to play activities in an extremely structured way. This will mean having a designated area and table for play activities.

Children should be encouraged to work from left to right and therefore have new activities placed to the left of the table and a 'Finish' box to the right of the table (see p. 10)
Children also need to know that all activities have:

- » A start
- » A middle
- » A finish



Children with an ASD can sometimes have problems with organisation and planning, so this approach shows them that there is a clear start and finish to the activity and helps them to successfully complete the task. Making play predictable, organised and visual can be a great motivational factor for children with an ASD.

Teaching children with an ASD to develop a positive play routine helps them to learn more appropriately. It also helps them to understand:

What has to be done?

How much has to be done?

When the activity will end?

What will happen next?

Case study example

Geraint is a very active three-year-old with a limited attention span. He is a great fan of Winnie the Pooh. He is therefore given a four piece form board that consists of four characters in the Pooh stories but with only one piece/ inset missing. Geraint's attention is gained by using his 'special interest' and his success at completing the task comes quickly. This routine can be gradually built on to increase Geraint's attention span and the time spent on task e.g. after a few more sessions he can be given the puzzle with two pieces missing. Geraint was also given a meaningful reward once he had completed the activity successfully. In this instance it was the chance to listen to the Pooh theme song.

Autism NI (PAPA) recommends the following routine for completing puzzles:

- » Show the child the puzzle.
- » Ask the child to come to play.
- » Give the child one piece of the puzzle and encourage him/her to see where the piece belongs.
- » Once the child is at the structured play area, encourage him/her to complete the puzzle.

They advise never to insist that the child sits; he/she will sit when ready. They also suggest that the adult sits beside the child acting as a natural boundary and teaching him/her to stay close until the activity is finished.



It is important to get the right balance between providing the help to make a child successful without making him/her too reliant on that support. Autism NI (PAPA) suggests the use of a range of prompts to help encourage independence. They argue that sometimes using speech to direct a child can be confusing and indeed overwhelming but also results in him/her becoming dependent on verbal instruction to complete a task.

Hand-over-hand can be used to teach new routines to young children with an ASD. The adult places a hand over the child's hand and guides him through the sequence of steps involved in learning the new task. Each time you teach a routine, wait a little bit longer before offering the physical prompt and also try to fade the prompt by becoming more light handed. Gradually you should aim towards a gentle touch on the child's arm or hand to encourage him through the steps of the room.

The use of this approach will depend on the sensitivity of the child to touch.

Pointing is a subtler prompt and a natural progression from hand-over-hand. Use a point to show the child where something goes and what he/she must do next. Prompts should be faded to allow the child to become more independent. This is important if the child is to transfer skills taught in one setting to another. Moving away from the child or supervising from a distance can also increase independence.

Children will soon come to learn that each activity has a start and middle and is not over until they reach **Finish**. A finish box is a useful way of teaching a child that an activity has finished. This can be used in a number of ways such as tidying up or to indicate that an activity is over e.g. a puzzle goes in the finish box once it is complete.

It is important to gradually increase the number of things that the child can do at one time. Activities should be set out to the left hand side of the table and an adult should prompt the child to reach for each new task as he/she finishes the previous one. This will encourage a left to right routine.

Using this approach you may see an increased satisfaction in completing activities and a youngster who plays calmly with toys and objects. This structured approach is based on the principles of TEACCH (Treatment and Education of Autistic and related Communication- handicapped Children), a teaching method that has been used successfully with children and adults with an ASD across the globe (<http://www.teacch.com>)



Autism NI (PAPA) top tips for structured play

- » Prepare a distraction-free area where your child can learn new play skills.
- » Use a left to right routine.
- » Use a Finished Box.
- » Teach activities that are within the child's capabilities.
- » Teach activities for independence.
- » Fade out all prompts as soon as you can.
- » Allow the child to complete easy activities with you just supervising from a distance and using as few prompts as necessary.
- » Vary tasks to keep the child interested and stimulated.
- » Include the child's interests as long as they do not cause him to be distracted or excited.
- » Persevere with poor co-operation as you try to establish any new routine.
- » If poor cooperation persists, review the tasks and the work routine.
- » Start and end with an easy task that the child can do with little help.
- » Introduce new and slightly harder tasks in the middle of the structured play time.

If things don't seem to be working ask yourself

- » Are the tasks too difficult?
- » Are there any distractions?
- » Are you following a consistent routine?
- » Has he/she got bored? You may need to think again!
- » Does the child understand what he/she is suppose to do?

Autism NI (PAPA) recommend that adults keep a record of the child's likes and dislikes, what he/she is able to do now and the things he/she is not yet ready to do.



Examples of some play activities

This is a young boy with an ASD playing a colour matching game. The dice has been made using the WIDGET software programme.

The game: Child throws the dice and then asks for the colour it has landed on using Picture Exchange Communication Symbols (PECS). He is given the corresponding coloured balloon and matches it to the baseboard.



Building tasks

A variety of commercially made resources can be used to teach building skills such as large plastic bricks and the stacking toys shown in the picture. It is important to build up the task gradually starting with only two or three of the building toys. Turn taking and a sense of fun can also be introduced into the activity i.e. adult places brick on top of brick and then guides child to do the same using the strategies suggested in the booklet. It may also be useful to have a photograph available of the completed task to show the child before starting.

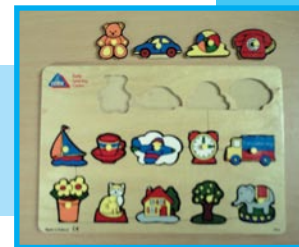
Home-made building toys can also be used e.g. shoe boxes, mini cereal boxes, toilet rolls, plastic tumblers that sit firmly on top of each other, DVD cases and books.



Puzzles

Form boards and jigsaw puzzles can be completed alone (once the child is confident in knowing what he/she is to do) or under the guidance of an adult. It is important to build up the task gradually and offer meaningful rewards on completion. Children with ASD may not respond to stickers, stamps and verbal praise but prefer 5-10 minutes engaged in a favourite activity or playing with a particular object.

In this task, the child is only expected to insert four out of the fourteen pieces in the form board. The chosen pieces have been lined up directly above to make the task easier and visually clearer. If a child has a 'special interest' e.g. Thomas the Tank Engine or Winnie the Pooh, use form boards depicting these characters for extra motivation (see the case study of Geraint on p. 6)



Sorting and matching tasks

A variety of commercially produced and home made objects can be used to help young children to match and sort objects by colour, shape and size. Children with an ASD may have colours/shapes they like or dislike intensely so it is important to find out about this before designing a task. Also it is important to appreciate health and safety issues in relation to certain resources and remember that children with an ASD do not necessarily respond to objects in a traditional way. For example, if a child delights in spinning the wheels of toy cars, it will not be easy to get them to conform to matching a selection of cars by colour without doing this. Adults may need to consider ways in which the 'spinning' activity could therefore be part of the reward system.



A 'special interest' can also be used to provide extra motivation in a sorting or matching exercise. For example, sets of laminated photographs showing Thomas the Tank Engine, James and Henry could be used as a colour/ number/character matching exercise. Sets of everyday objects such as fruit, drinks, mugs can also be used in the same way.

Using 'Start' and 'Finish' boxes

Start and Finish Boxes help the child understand when a task has ended and it is time for a reward. Plastic trays can be used to do this, with the 'Start' box to the left and the 'Finish' box to the right. A photograph of the completed task in front of the 'Finish' box could provide an additional visual cue that the task has been completed.



Teaching pretend play

This sort of play is often very difficult for young children with an ASD. Children with an ASD may relate to objects in an idiosyncratic way rather than an expected way. For example: they may be more interested in banging a toy car on the table and spinning its wheels around than playing with it in the traditional way. Children with an ASD often lack the skills to use objects to substitute other objects in pretend play e.g. using a banana as a telephone or a spoon as an aeroplane. In addition, they may find it difficult to use toys in a representational way e.g. think of a doll as a real baby or a toy lawn mower as a real lawn mower. Children with an ASD will develop pretend play skills slowly when they are ready. Some children with an ASD may never like this activity. Adults must always be guided by the child in deciding how best to help him/her to learn.

Is the child ready for pretend play?

- » Has he/she established good attention?
- » Can he/she imitate actions/or words in a meaningful way?
- » Does he/she understand simple directions and questions?
- » Is he/she able to show joint attention during play with objects?
- » Does he/she look at you when you play together?
- » Is it easy to get his/her attention during free-play?
- » Does he/she show an interest in symbolic toys such as cars, dolls, tea cups and food?

Autism NI (PAPA) advise that if the child shows few of these indicators, it is best to continue with structured constructive and sensory motor play as this will benefit the child most at this time.

If the child does seem to be ready for pretend play think about:

- » What pretend play skills your child has already established?
- » Using a 'special interest' to begin pretend play e.g. trains, zoo animals, insects, favourite characters
- » Teaching some simple pretend play sequences that the child can imitate e.g. doll to bed/ cow in field/ shopping in basket.
- » Keeping steps to a minimum to avoid confusion and make sure that there are no distractions.
- » Keeping language simple and teach some repetitive phrases which he/she can learn to say such as Dolly bed/ Cows field/ Shopping in basket.
- » Using stories with a lot of repetitive lines such as 'Goldilocks and the Three Bears' and 'The Three little Pigs'. Use puppets/replica toys to enact the story encouraging participation.
- » Using 'special interests' to develop skills e.g. watching DVD of Thomas the Tank then re enacting the story with the toy figures.
- » Acting out nursery rhymes and songs e.g. Hickory Dickory Dock, Incey Wincey Spider etc.

And last but by no means least, try and have as much fun as you can together!

References

Autism NI (PAPA)(2005) *The Keyhole® Early Intervention Programme in Autistic Spectrum Disorder* (www.autismni.org)

Welsh Assembly Government (2008) *Play/Active Learning.
Overview for 3-7 year olds.*



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