Teacher Researcher Programme 2009/2010

Raising awareness of hidden disabilities (Dyslexia and Autism Spectrum Disorder): the impact of awareness raising workshops and assemblies on primary school children

Kirsten Duncan
Loanhead Primary School

Caroline Bingham
Edinburgh Academy

May 2011
Acknowledgments

We have many people to thank for their participation, support and encouragement.

Firstly, we would like to thank the children, parents/carers and staff at the nine Primary Schools who participated. We are most grateful for the time given by parents/carers in completing questionnaires, the welcome given by schools and enthusiasm shown by the children, without whom the project would not have been possible. Members of Dyslexia Scotland and the Lothian Autistic Society (LAS) also gave up their time to complete questionnaires, for which we are most thankful.

We also appreciate the help, support and advice given by Ian Matheson of the GTCS. We value the support and flexibility shown by our Head Teachers, Jeanette Finlayson and Caroline Bashford, who were keen to see us succeed. Thanks must also go to Anne Warden of Dyslexia Scotland and Michelle Keenan and Catriona Herd of Lothian Autistic Society who distributed questionnaires amongst their members.

A final note of thanks goes to our families and friends for their endless support, encouragement and patience.

bgah@blueyonder.co.uk
kirstenduncan67@hotmail.co.uk
Contents

Acknowledgements 1

Abstract 4

1. Introduction 5
   1.1 Background 5
   1.2 Aims 6
   1.3 Objectives 6

2. Literature Review 8

3. Methodology 13
   3.1 Research Aim 13
   3.2 Objective One 13
   3.3 Objective Two 14
   3.4 Objective Three 19
      3.4.1 Both Workshops 19
      3.4.2 Dyslexia Workshop 20
      3.4.3 ASD Workshop 21
      3.4.4 Assemblies 23
      3.4.5 Delivery of Workshops and Assemblies 24
   3.5 Objective Four 26
   3.6 Objective Five 27
   3.7 Objective Six 27

4. Findings and Discussion 28
   4.1 Objective One 28
      4.1.1 Dyslexia Scotland Questionnaires 28
      4.1.2 Lothian Autistic Society Questionnaires 36
   4.2 Objective Two 46
   4.3 Objective Three 53
      4.3.1 Dyslexia Workshop 53
      4.3.2 ASD Workshop 55
      4.3.3 Assemblies 58
   4.4 Objective Four 59
   4.5 Objective Five 72
   4.6 Objective Six 74

5. Conclusion 77
   5.1 Objective One 77
   5.2 Objective Two 78
   5.3 Objective Three 78
Abstract

This project investigates the impact of workshops and assemblies highlighting specific hidden disabilities (Dyslexia and Autism Spectrum Disorder - ASD) on Primary age children in nine schools. A before and after comparison was made of the pupils' knowledge and understanding of Dyslexia and ASD. Additionally, the development of children's empathy and awareness of diversity was explored.

Data was gathered via questionnaires distributed to primary school pupils and their parent/carers, in addition to parents of children with Dyslexia and ASD through Dyslexia Scotland and the Lothian Autistic Society. Further data gathering techniques included observations during the workshops, filming of workshops and teacher observation logs.

The report concludes that breadth of knowledge and understanding of Dyslexia and ASD was greatly increased through workshops and assemblies. The depth of understanding was particularly notable in workshop participants. It was also established that there was a heightened awareness of diversity and demonstration of empathy amongst many pupils.

There is scope for such workshops and assemblies to be delivered throughout Scottish primary schools as part of the Health and Wellbeing aspect of the Curriculum for Excellence.
1. Introduction

If children's perceptions of people who are different from themselves are based on stereotypical thinking it is likely that they will retain this misinformation for the rest of their lives unless positive steps are taken to counter this learning.

(Brown, 1998:23)

1.1 Background

The Scottish Government’s 2006 report *Mainstreaming Pupils with Special Educational Needs: an evaluation* states that children with hidden disabilities such as, ‘hearing or visual impairment, social, emotional and behavioural difficulties and autistic spectrum disorders were considered more likely to be educated in a mainstream setting than previously’. With a reported 1 in 100 children on the Autism Spectrum (National Autistic Society) and 1 in 10 considered to be Dyslexic (Dyslexia Scotland) it is likely that most mainstream classes will include at least one child with a hidden disability. Accordingly, these questions should be considered:

- What level of knowledge and understanding do children have of hidden disabilities?
- How do children respond to peers with hidden disabilities?
- How well supported are children in dealing with any challenges they may encounter relating to hidden disabilities?

Inclusion and Equality is one of the National Priorities in Scottish Education, with a number of policies and frameworks supporting this, including HGIOS (How Good is Our School) quality indicator 5.6 and the Disability Equality Scheme (2008-2011) which recognises a need for greater peer awareness of issues relating to disability. The opportunity to raise such awareness has been created within the Curriculum for Excellence Health and Wellbeing experiences and outcomes.
As both parents and teachers of children with hidden disabilities, we have long discussed the stigma and misunderstanding attached to such disabilities. Moreover we wish to establish the viewpoints of other parents and professionals with regards to this issue and to investigate the impact of awareness raising workshops and assemblies on primary age children.

1.2 Aim

To ascertain if highlighting specific hidden disabilities will encourage children to:

- Be more aware of differences and diversity – have an understanding of ASD and Dyslexia and the diversity and individuality within these. To be aware that there are many other hidden disabilities.
- Be more accepting of others’ individuality – by trying to understand the impact of ASD and Dyslexia on everyday situations and relating this to their own experiences to help develop empathy.
- Develop a more open minded, non-judgemental outlook – becoming responsible citizens by using their new found knowledge in the wider community to assess situations before possibly forming inaccurate conclusions.

1.3 Objectives

1. To establish the views of parents with children with Dyslexia and ASD and, where possible, children with these hidden disabilities – their views of society’s awareness and understanding, how they have been affected by the hidden disability and their views on the value of workshops to mainstream primary pupils.

2. To establish from the sample groups of parents and children in mainstream primary schools – their current level of awareness and understanding of hidden disabilities (Dyslexia and ASD) and their views on how valuable the delivery of workshops within mainstream schools would be.
3. To deliver workshops to groups of Primary 4 - Primary 7 pupils and to support these children to present an assembly to the rest of the school.

4. To evaluate the impact of the workshops and assemblies on the sample groups.

5. To identify any change in pupil behaviours/attitude throughout the school in the 2 week period following the workshops and assemblies.

6. To establish views of school staff as to the value of delivering the workshops and assemblies in schools.
2. Literature Review

We found that literature specific to raising awareness of hidden disabilities was sparse. With this in mind, we widened our search and reviewed literature pertaining to disability in general, to consider societal attitudes, self esteem, peer relationships and school experience. We also considered how awareness raising has impacted other minority groups.

There is one basic and major improvement which can be made which requires no legislation or increase in resources, but would probably bring about the greatest change in the lives of those families who have a handicapped member. That is for everyone to accept the fact of handicap in such a way that those who have to suffer the pain of having it in their family do not have to dread the reaction of others, coming to feel that they must either retreat from all contacts or fight to be recognised and accepted and to have their needs appreciated.

(Furneaux, 1988: 98)

Scotland has come some way in addressing this over the past 20 years through legislation, such as Additional Support for Learning Act (Scotland) 2009 and the current Disability Equality Scheme (2008-2011) which acknowledges that whilst Scotland endeavours to create an environment where all its people are treated fairly and given the opportunity to fulfil their potential, it is still recognised that, "Too often disabled people face barriers and discrimination that deny them equal access to information, education, health services, work and the opportunity and choice to live independently.” (Disability Equality Scheme, 2008-11)

Whilst policy and legislation provide a legal framework in which to work, one of the difficulties can be its accessibility and availability to the wider community. Excellent awareness raising work is being carried out by various groups throughout the country, e.g. Dyslexia Scotland’s events during Dyslexia Awareness Week. However, these are more likely to be attended by people whose lives are already affected by these disabilities. Hence, knowledge and understanding of disabilities appears to be contained within the very network that is already aware. Accordingly, if Furneaux’s
(1988:98) concept of society’s acceptance of difference is to be considered, then raising awareness early and within an educational setting could be an effective avenue in which to explore. As Wade and Moore (1992:24) suggest, we are not born with attitudes, rather they are learned; this learning taking place initially within the family and home and then extending to school and a wider social world. The Health and Wellbeing Experiences and Outcomes of the Curriculum for Excellence provide a natural opportunity in which to explore such attitudes;

Mental and Emotional Wellbeing
I understand that my feelings and reactions can change depending upon what is happening within and around me. This helps me to understand my own behaviour and the way others behave.

(Curriculum for Excellence Outcomes and Experiences
HWB 0-04a / HWB 1-04a / HWB 2-04a / HWB 3-04a / HWB 4-04a)

Social Wellbeing
I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.

(Curriculum for Excellence Outcomes and Experiences
HWB 0-10a / HWB 1-10a / HWB 2-10a / HWB 3-10a / HWB 4-10a)

According to Humphrey (2003:132-135), the self-esteem of children with Dyslexia can be significantly affected by peer attitudes, predominantly through bullying and teasing. Additionally, children with ASD have also been the target of bullying in school, with figures reported in the Autism Toolbox (2009:108) suggesting that 40% of children in England and Wales and over a third of children in Scotland have been bullied. More generally children with additional support needs tend to be more vulnerable targets sometimes due to their lack of social skills. A range of successful anti bullying policies were investigated by Humphrey with one of the common factors being the commitment to changing attitudes, “through assemblies, personal and social education, and tutorial work”. The Autism Toolbox (2009:108) states that as part of the social curriculum,
the impact of autistic behaviours on both bullying and emotional well being should be addressed. Bullying can often lead to low self esteem which can, in turn, affect both academic and social progress.

*While the priorities of the class teacher are often seen as teaching and learning there is none the less a need to consider emotional factors. The young person who has very low self esteem is likely to progress only very slowly...Early failure to thrive can result in a lasting feeling of low self esteem, with accompanying poor motivation which can persist into adulthood.*

(Crombie, 2002:238)

This is reflected in HMIe (2008:11) where parents of Dyslexic children claim that inadequate support led to, "*significant social, emotional and behavioural difficulties in their children.*" Self esteem can affect those who face barriers to academic learning, as well as those whose academic skills are age appropriate but whose social skills are underdeveloped.

*...most more able children with autistic disorders have a very low self esteem even if they are of high ability. They have all experienced many failures in social interaction and are sensitive to the laughter and scorn of their age peers when they behave in a naive way.*

(Wing, 1996:160)

This would suggest that these peers demonstrate a lack of awareness and understanding of how the child's life is affected by their hidden disability. Waterhouse (2000:183) maintains that lack of knowledge of a child's hidden disability can lead adults to misjudge that child's ability. Their attitude, in turn, can be adopted by the child's peers, affecting their interaction with the child. Rose and Shevlin (2004:156-161) refer to one young woman with Dyslexia who felt that she could not ask for peer support for her difficulties due to her anxieties of their perceptions of her intelligence. Waterhouse (2000:183) adds that 'these perceptions' can remain with the child throughout their lives, and can be exacerbated by others with whom they come into contact. Again, this may indicate that children's lack of awareness and understanding of an individual's hidden disability can be detrimental to that individual's health and wellbeing. Moreover, the lack of knowledge and understanding of hidden
disabilities amongst adults in society can affect the individual within the home, school and the workplace.

The National Autistic Society (2010:4) recognise the difficulties people with ASD face finding employment, often due to their lack of social and communication skills. This, coupled with the fact that employers may have little awareness and understanding of ASD, has resulted in the number of people with the condition in full time employment, reported by the NAS, as being as low as around 15%.

Furthermore, a study by Rack (2005:2) investigated the incidence of hidden disabilities within the prison population. Results suggest that the prevalence of hidden disabilities (Dyslexia, Dyspraxia, Dyscalculia, ADD/ADHD and ASD) amongst offenders is 20% in one UK prison. Although there is no evidence to suggest that having a hidden disability leads to criminal activity, there is however a disproportionate representation amongst the prison population, varying from Reid and Kirk’s reported 50% (in Rack, 2005:1) to the 4% reported by Rice, Hall and Connel (in Rack, 2005:1). This would imply that the likelihood of committing a criminal offence could be attributed to environmental factors rather than to the hidden disability itself.

There are other groups within our society who may also suffer from low self esteem due to discrimination and lack of acceptance, e.g. the travelling community and ethnic minority groups. Much has been accomplished within Scotland by way of embracing diversity through the recent high-profile campaign, ’One Scotland, Many Cultures’ and through educational resources, such as those provided by UK charity, ’Show Racism the Red Card’. The Scottish Government’s, A Guide to Getting it Right for Every Child (2008) stresses that:

...children and young people should feel valued in all circumstances and practitioners should create opportunities to celebrate diversity.

The six equality strands referred to in the Scottish Government’s Disability Equality scheme (2008) are: age, disability; gender; race; religion and sexual orientation. Of
these, religion is explicitly covered within the Curriculum for Excellence Experiences and Outcomes. However, whilst the other five strands could be taught through the Health and Wellbeing Experiences and Outcomes, they are not specifically referred to and therefore this could result in some schools omitting to cover some or all of these equality strands.

It would appear that there is currently no campaign at a national level which aims to raise awareness and understanding of hidden disabilities. As part of the Rose and Shevlin (2004:156-161) Encouraging Voices project, which aimed to find out the views of young people from a range of minority groups, one young man with Asperger’s syndrome commented, “Now I am more confident because more people understand me.” This young man’s assertion of greater confidence perhaps corroborates Furneaux’s (1988:98) call for a need for change in attitude which she considers should be taught at an early age. The review of the literature has highlighted that awareness raising of the 6 equality strands is occurring sporadically throughout the nation; however there appears to be more of an emphasis on race and religion.

The main purpose of this research is to ascertain whether workshops and assemblies with primary school children would raise awareness and understanding of certain hidden disabilities, namely Dyslexia and ASD.
3. Methodology

3.1 Research Aim

To ascertain if highlighting specific hidden disabilities will encourage children to:

- Be more aware of differences and diversity - have an understanding of ASD and Dyslexia and the diversity and individuality within these. To be aware that there are many other hidden disabilities.
- Be more accepting of others' individuality - by trying to understand the impact of ASD and Dyslexia on everyday situations and relating this to their own experiences to help develop empathy.
- Develop a more open minded, non-judgemental outlook - becoming responsible citizens by using their new found knowledge in the wider community to assess situations before possibly forming inaccurate conclusions.

In order to answer the research question we sub-divided it into six objectives. Our first objective was:

3.2 Objective One

To establish the views of parents with children with Dyslexia and ASD and, where possible, children with these hidden disabilities - their views of society's awareness and understanding, how they have been affected by the hidden disability and their views on the value of workshops to mainstream primary pupils.

Should we have found a strong opposition to carrying out workshops and assemblies from these parents and children then we would have had to reconsider aspects of the research.

We identified research questions for the above sample and, from these, compiled questionnaires (Appendices 1 and 2). Following meetings and discussions with representatives from both Dyslexia Scotland and the Lothian Autistic Society (LAS)
the questionnaires were distributed on our behalf, both manually and electronically. On receipt of completed questionnaires, we identified both quantitative and qualitative data. There was a 78% return rate on the initial questionnaires. The quantitative data was tallied, transferred into percentages and turned into graphs. The qualitative data was analysed and quotes from both parents and children were used to highlight key points.

3.3 Objective Two
To establish the views of the sample groups of parents and children in mainstream primary schools – their awareness and understanding of hidden disabilities (Dyslexia and ASD) and how valuable they considered the delivery of workshops within mainstream schools would be.

We selected five Local Authorities in which to undertake the research and planned to visit two schools in each Local Authority. We wrote to the Directors of Education requesting permission to visit schools (Appendix 3) as well as contacting colleagues, then Head Teachers (Appendix 3), from a variety of schools within these Local Authorities. Four of the five Local Authorities granted us permission to conduct the research; we therefore visited nine schools, two from each of three Local Authorities and three from another. We restricted ourselves by limiting our choice of schools to those in which we had contacts. Retrospectively, opening this up to a wider number of schools may have accelerated the process. The schools were all located in towns, although these were of varying sizes and socio-economic backgrounds. The school rolls ranged from approximately 110 - 380 pupils, some with composite classes. Two of the schools were Roman Catholic; the remaining seven were non-denominational.

At the same time as the school selection process was underway, we identified research questions for the above sample and, from these; compiled an initial and a follow up questionnaire (Appendices 5 and 6) to obtain a direct comparison of knowledge, understanding and viewpoints. As we wanted to ascertain the views of both
When we collected and analysed the data, it become apparent that some minor adjustments would have simplified the process. In hindsight, numbering each question would have made it easier to manage the analysis of quantitative data. Additionally, removing the option of, “I know someone with...” from questions 1, 2 and 3 and making this a separate question in its own right, would have given us a better insight into parent/carer/child’s initial knowledge and understanding. This became apparent when some of the sample gave two answers, whereas others ticked only the option, “I know someone with...” (Appendices 5 and 6). Retrospectively, the wording of the 5th and 10th questions on the initial questionnaire (Appendix 5) and the 4th question on the follow up questionnaire (Appendix 6) could have been amended. On several occasions, the question ’Do you think it is important to teach other children about hidden disabilities?’ may have been misinterpreted as pertaining to highlighting the hidden disabilities of individual peers, rather than relating to raising awareness of hidden disabilities in general. For example, one Primary 3 child responded that, ‘Nobody needs to know everything about you as people might talk about you and that's not nice”.

Once the schools were identified, we arranged a pre workshop visit to discuss the day in more detail. We wanted to keep teachers’ work to a minimum and to ensure the day
would run smoothly and so compiled a checklist (Appendix 7). All correspondence (including questionnaires) was printed on coloured paper. This was partly due to it being easier to read for individuals with Dyslexia but also to help teacher and parents/carers to locate the documentation easily. We requested four children from each year group (P4-7) who would be confident to present an assembly and be able to work co-operatively in a group. This was to reduce time spent teaching these skills rather than concentrating on the task in hand. In one school a Learning Assistant accompanied one pupil for support. For ethical reasons and to avoid anyone feeling uncomfortable, we asked that children involved in the workshops did not themselves have Dyslexia or ASD. Whilst we did not specifically request a proportionate representation of gender, the workshops included a well-balanced boy/girl ratio. The limitation of the aforementioned sample was composite classes in some schools, which resulted in, at times, a disproportionate number of a certain year group attending the workshop.

We prepared a parental consent form (Appendix 8) which schools distributed along with the initial questionnaires. In addition to the pupils chosen to participate in workshops, we also requested the same questionnaire be distributed to a random selection of four children from each year group (P1-P7).

During the pre workshop visit we arranged for the necessary equipment and space to be made available to us on the day. In some instances this required schools to re-arrange specialist time and/or location.

In conjunction with identifying schools and compiling questionnaires, we created Dyslexia and ASD workshops (Appendices 9 and 10), assemblies (Appendices 11 and 12) and optional CPD sessions (Appendices 13 and 14).

On receipt of the initial questionnaires (352 out of 468 - 75%) the quantitative data was tallied and turned into percentages. It was evident that children’s knowledge of hidden disabilities was limited, in particular in relation to ASD. This is highlighted by the following graphs:
Figure 1: Initial knowledge of Hidden disabilities - Child

Figure 2: Initial knowledge of Dyslexia - Child
With this in mind, coupled with the overwhelming percentage of the sample (90% of children and 97% of parent/carers) considering the knowledge of hidden disabilities to be of importance (figures 4 & 5), we deemed that continuing with the research would be worthwhile.
3.4 Objective Three

To deliver workshops to groups of Primary 4 - Primary 7 pupils and to support these children in presenting an assembly to the rest of the school.

3.4.1 Both Workshops

What do these people have in common? task

Both workshops began with a selection of slides containing people with disabilities. The Dyslexia workshop showed a variety of famous people with Dyslexia and children were required to discuss, in groups, what they had in common. Similarly, the ASD workshop used a slide showing people with physical disabilities and then a second showing people with hidden disabilities. Again, pupils were required to discuss, in groups, what the people in each slide had in common. We wanted the children to appreciate that whilst someone may have a hidden disability, it does not mean that they are hindered in all aspects of their lives. In the Dyslexia workshop it was hoped that by showing slides of famous people with disabilities, the children would have an opportunity to discuss how successful these people have been despite their disability. Likewise, the slides in the ASD workshop were also used as a stimulus for discussing that not all disabilities can
be seen. As Brown (1998:51) stresses, open discussion of diversity can help develop respect and appreciation.

3.4.2 Dyslexia Awareness Workshop

Visual/Auditory Memory Games

In pairs children took part in both visual and auditory memory games (a word form of 'Kim's Game' and auditory sequences of numbers - forwards and in reverse). This activity was selected to help children develop an understanding of both visual and auditory memory so that they could experience what it may feel like to be Dyslexic. Children and adults with Dyslexia can have challenges with both short and long term memory including:

- Difficulty remembering instructions; difficulty remembering numbers in sequence; difficulty remembering something if doing something else at the same time or distracted; may have difficulty remembering facts and dates; may have difficulty remembering appointments.

(Peer and Reid 2003:23)

With this in mind we also created a drama scenario (Appendix 15) to enable children to develop empathy with those Dyslexics who face this challenge. The familiar contexts of school and home were used.

Blurred Words Activity

As a whole group pupils were shown slides with visually distorted words and were asked to consider how this may feel if text was always seen this way. A discussion then followed on the benefits of colour and font style used to alleviate visual stress. It is believed that as many as 50% of people with Dyslexia suffer from some form of visual stress -

There is a growing body of evidence indicating that visual factors are associated with Dyslexia. This can take the form of visual distortion of letters, blurring, letters merging into each other and missing lines or words when reading.

(Peer and Reid, 2003:12)
Lateral Thinking Puzzles

In groups children were given a lateral thinking puzzle to solve. This was to demonstrate that whilst many people with Dyslexia find Maths challenging, particularly elements which involve memory skills, many Dyslexics have a particular strength in problem solving. Therefore this activity gave children the opportunity to realise that Dyslexia can have positive aspects.

*It is frequently acknowledged that some Dyslexic pupils are gifted problem solvers. This means that conceptually able Dyslexic pupils, who are able to compensate for their weaknesses for internalising maths facts, may be very good or even excellent at maths.*

(Kay and Yeo, 2003:11)

Matching Activity

In pairs pupils were tasked with matching famous Dyslexics with statements of the challenges they faced. This demonstrated that whilst these people faced barriers in their lives, they went on to excel in their field. This incorporated a wider range of people from the Famous Dyslexics slide show, including inventors that the children may have encountered during school projects as well as more current celebrities, such as Jamie Oliver and JK Rowling. This task was adapted from a Dyslexia Scotland activity and required further modification as some of the language was too advanced for this age group.

3.4.3 ASD Awareness Workshop

Communication Task

In pairs, children were given Task Cards (Appendix 16) which instructed them to communicate with their partner without using any words or showing their partner the card. Their partner was required to establish what was being communicated and then feedback to the group how this felt.

We wanted the children to experience the frustration of trying to communicate and be communicated to without using words so that they could, to an extent, appreciate what it may feel like, on a daily basis, for someone with ASD. Moreover, those with ASD
often have the additional challenge of misunderstanding their own and others' emotions (Waterhouse, 2000:191). To encourage children to identify with this challenge, part of the task was for pupils to express an emotion (frustration and embarrassment) for their partner to interpret, again without using any words.

**Drama Scenarios (Appendix 16)**

**Scenario 1 - In the Supermarket**

We wanted to use a scenario based outside of school as 87% of parents of children with ASD surveyed said that they felt their parenting skills had been judged, due to a lack of awareness and understanding of ASD in society.

**Scenario 2 - The Classroom**

This scenario aimed to highlight difficulties faced in the classroom. One aspect of this was where a pupil was unable to establish eye contact with the teacher. (Waterhouse, 2000:60). The other element addressed was peers engaging in unhelpful behaviour by laughing at the pupil with ASD. As this conduct conflicts with the Curriculum for Excellence outcome, "...I can help to encourage learning and confidence in others." HWB 2-IIa, we wished to challenge it and discuss this openly.

**Scenario 3 - Lining up at School**

The way in which children with ASD can place high importance on situations which may seem insignificant to others was addressed in this scenario. As this can be a fairly common occurrence and one which peers and adults may find difficult to understand, we hoped that this would instigate a discussion of possible solutions.

**Scenario 4 - The Playground**

Children with ASD can find it extremely difficult to make friends and so we believed this drama scenario to be important in highlighting this to primary school pupils. According to Arthur (2004:9), "there are at least five different categories of left-out children." He suggests that, "habitually left-out children are perhaps the most
problematic group as they have poor social skills and have difficulty interacting with other children. Generally, children with ASD would fall into this category.”

**Sensory Overload Task**

Pupils were asked to copy down information from the board whilst we surprised them by providing a sensory overload. This included: switching lights and torches on and off; playing loud, 'annoying' music and instruments; wafting the smell of TCP sprayed onto tissues and air freshener around the room and tickling the backs of hands with feathers. The children had to concentrate on the task in hand whilst attempting to block out this sensory overload. This task was designed so that the children could begin to experience, first-hand, the challenges that pupils with autism may have to contend with in the classroom on a daily basis. The National Autistic Society claims that, “Many people with an autism spectrum disorder (ASD) have difficulty processing everyday sensory information such as sounds, sights and smells. This is usually called having sensory integration difficulties, or sensory sensitivity. It can have a profound effect on a person’s life.” Therefore, we planned to use this task as an introduction to the concept of sensory sensitivity and then discuss this further with the children.

**Story of Jack (Appendix 17)**

The workshop was rounded off with a story based on a primary school-age boy with ASD. We decided to use this method of delivery, reading the story whilst children viewed related pictures, in an attempt to simplify the explanation of a complex condition. All aspects of the workshop were encompassed within this story set within a meaningful context of a school.

**3.4.4 Assemblies**

In an attempt to capture the attention of the audience and accommodate all learning styles we planned an interactive start to the assembly followed by a drama scenario. The factual slides were accompanied by interesting visuals in an attempt to make the information more accessible to all. The Story of Jack (Appendix 18) was also included
in the assembly as we considered this to be especially helpful for Primary 1-3 pupils. We included slides of famous people with either Dyslexia and ASD. Brown (1998:52) advocates the need to, “...reflect continually on our own attitudes, feelings and practice and seize opportunities to learn about and appreciate a variety of lifestyles and the contribution that...people with disabilities...have made and are making to human progress.” The assembly concluded with a slide showing many other hidden disabilities and a reminder to children that hidden disabilities may be a private matter for some.

3.4.5 Delivery of Workshops and Assemblies

Workshop one was delivered before morning break, to 12 pupils (3 from each, Primary 4 - Primary 7). Workshop two took place between morning break and lunch, with a different 12 pupils (3 from each, Primary 4 - Primary 7). Workshops were delivered to incorporate a variety of learning styles, using a PowerPoint presentation, drama, discussion and active games. Pupils were required to work in mixed-age pairs and groups and to change partners for each activity. Sections of the workshops were filmed to allow analysis of the discussions at a later date. The draw backs were that not all comments were captured and that children were, on occasion, distracted by the presence of the camera. In addition, the analysis of this data was time consuming.

After lunch, all 24 children gathered together to rehearse the assembly, providing them with the opportunity to practise their own part in the assembly, as well as listening to and learning from the other workshop group. Pupils were offered the choice of the part they would like to read. Each part was numbered and children sat in order. The pupils were encouraged to watch the prepared assembly PowerPoint (Appendices 11 & 12) during the rehearsal so that they knew what was being shown whilst they were presenting their part.

The assembly was presented to the whole school (Primary 1 - Primary 7) and one school chose to invite their nursery class. As children entered and left the hall, music by famous Dyslexic artists was played. The presentation lasted approximately 20 minutes,
after which the children were given certificates (Appendix 18) along with their follow up questionnaires (Appendix 6). The follow up questionnaires for the random sample were given to our school contact to distribute. Class Teachers were provided with an observation log (Appendix 19) to note any change in pupil behaviour as a result of the workshop/assembly.

Working in schools required us to be flexible in relation to:

- **Timing** - different schools had different break times. In some schools, the infant department left earlier than the upper school resulting in time constraints for practising and delivering the assembly. The Dyslexia workshop generally lasted slightly longer than the ASD workshop and so there was some necessity to change the order in which the workshops were delivered. Additionally, some of the discussion generated, resulted in alterations to workshop activities as did the late arrival of pupils to the workshop, for a variety of reasons;

- **Absences** - caused alterations to group numbers and dynamics, e.g. in one school P7 were on a skiing lesson and so only 3 P7 pupils were able to attend the workshops. In another school, the P7s attended the morning workshops but were unable to deliver the afternoon assembly due to a football tournament. The assemblies were designed to give all children an opportunity to present information and the text was differentiated to accommodate a range of reading abilities. In some instances, such absences affected the delivery of the text;

- **Sample group** - this had to change on some occasions as children had not returned the permission slips by the day of the workshop. Some schools telephoned parents/carers for permission, in other schools we worked with reduced numbers and on three occasions children were substituted. Whilst we initially requested 3 children from each year group (P4-P7) in some of the smaller schools this was not possible due to composite classes. Pupils in certain schools were more willing and able to organise themselves into groups and pairs thus enabling us to effectively deliver the workshop. Although we had
requested confident individuals, we did encounter a few children who were reluctant to present at the assembly;

- **Location** - this varied greatly between schools, due to size of accommodation and the workshop and assembly space being used for other purposes on the day;
- **Equipment** - we ensured that we had our own laptops, pen drives and all necessary resources for the workshops and assemblies. We encountered a number of technological challenges, e.g. projectors and microphones.

### 3.5 Objective Four

**To evaluate the impact of the workshops and assemblies on the sample groups.**

Class teachers collected the follow up questionnaires from their pupils and gave them to the school contact, who returned them to ourselves. On receipt of completed questionnaires (39%) we identified both quantitative and qualitative data. The quantitative data from the follow up questionnaires was tallied, transferred into percentages and turned into graphs. These graphs consisted of a 'before' and 'after' in addition to a graph showing a direct comparison between the two. The qualitative data from both initial and follow up questionnaires was analysed and a balanced selection of quotes used from both parents/carers and children. Due to the amount of qualitative data, we created documents headed with each question to organise the quotes we had selected. Some of the children's quotes were scanned onto the computer. We then identified other categories to analyse, which were:

a) workshop v random comparison, to establish the impact attending the workshop would have in comparison to attending the assembly only;

b) year group analysis - an analysis of the sample who attended the assembly only (P1 - P7) and a P4 - P7 analysis of those children participating in the workshop, to establish whether there was an optimum impact age;

c) a direct child to child comparison using initials added to questionnaires by Class Teachers. Although we managed to compare these to some degree, unfortunately many initials were missing as were some follow up questionnaires.
3.6 Objective Five

To identify any change in pupil behaviours/attitude in the 2 week period following the workshops and assemblies.

Observation logs (Appendix 19) were collected from Class Teachers (23 returned), these were then examined for relevant information relating to changes in pupil behaviours/attitudes. Should this research be replicated, a follow up visit to schools may be beneficial in gathering further data and establishing the longer term impact on pupil behaviours and attitude.

3.7 Objective Six

To establish views of school staff as to the value of delivering the workshops and assemblies in schools.

As part of the observation log, we asked staff to comment on their views of the value of such workshops and assemblies. This was to give us a balanced viewpoint but again, only a small number (23) of these were returned.
4. Findings and discussion

This section contains findings from both qualitative and quantitative data and will analyse the results with reference to aspects reported within the literature review. Our findings and discussion will be presented in relation to each aim.

4.1 Objective One

To establish the views of parents with children with Dyslexia and ASD and, where possible, children with these hidden disabilities - their views of society’s awareness and understanding, how they have been affected by the hidden disability and their views on the value of workshops to mainstream primary pupils.

4.1.1 Dyslexia Scotland Questionnaires

Questionnaire data from members of Dyslexia Scotland whose children have Dyslexia.

**Question**

How aware do you think adults in society are of Dyslexia?

![Bar chart showing levels of awareness of Dyslexia among adults in society]

*Figure 6: Levels of awareness of Dyslexia amongst adults in society*
Question

How aware do you think children in society are of Dyslexia?

This graph indicates that our sample of parent members from Dyslexia Scotland believe that only 5% of children in society have no awareness of Dyslexia. However, our school sample showed a much higher percentage of children (28%) having no awareness of Dyslexia.
Question

Has your child experienced bullying due to lack of awareness and understanding of Dyslexia?

![Figure 8: Experiences of bullying amongst children with Dyslexia](image)

Responses

Yes

44% of the sample group claimed that their child had been bullied due to a lack of awareness and understanding of Dyslexia. Types of bullying included: verbal abuse; cyber bullying; accusations of laziness and being, “used as a scapegoat.” One parent noted that, in response to name calling, their daughter had become aggressive whilst another set of parents acknowledged bullying their own son, “to a degree having huge arguments about the quality of his work and forcing him to read.”

HMIE (2008) maintain that staff who teach children as young as pre-school age should have sufficient knowledge of the early indicators of Dyslexia in order that they can provide appropriate intervention strategies. However three years on from this report, parents from the sample group continue to show concern stating that there is a lack of early identification, intervention and teacher training in Dyslexia. Since these comments, Dyslexia Scotland has launched an assessment toolkit which has been disseminated throughout local authorities. Whilst it is currently too early to ascertain
the effectiveness of this new tool, this may be an area for future research. This quote may suggest that lack of awareness and understanding could lead to lack of empathy within the classroom.

Classmates sneering when teacher insisted that my daughter read in front of class. Called names and had very few friends.

(Dyslexia Scotland parent)

In a 2010 Dyslexia Scotland presentation, Sir Jackie Stewart made reference to his own embarrassment at being made to read aloud as a child in class. Given the current availability of information on the subject, it could be argued that this information is perhaps not being accessed by all those working with Dyslexics. Sir Jackie maintained that Formula One racing "saved" him. As with many Dyslexics, a talent in a non-academic area can help them elude bullying, as noted by the parent of this boy.

No - My son is a great footballer. He is popular with his team mates.

(Parent, Dyslexia Scotland)

Question

Have you or your child ever felt the need to defend your child's intellectual ability due to the lack of awareness and understanding of Dyslexia?

![Chart showing the results of the question: 83% said yes, 17% said no.]

Figure 9: Intellectual Ability questioned through lack of awareness and understanding
Responses

Yes

A large percentage of parents felt the need to defend their child’s intellectual ability reporting that teachers were surprised at the abilities their children demonstrated in different situations, such as orally demonstrating their knowledge and showing full potential when given extra time in examinations. One parent commented that when only written work is considered then children are often placed in the lowest groups. When referring to their son, another parent felt that, “Since his diagnosis we felt happier defending him to his peers as we can now give a reason for his problems.” There is now scope, within A Curriculum for Excellence, for children to present their work in a variety of ways thus allowing them the opportunity to display their true ability. Therefore situations such as these should hopefully be less commonplace in the future. Furthermore, SQA recognises a need for extra support for those with additional support needs, e.g. Dyslexia, in the form of extra time, online exam papers, readers and scribes.

Question

Do you think that workshops with primary school children, explaining the nature and effects of Dyslexia, would help raise their awareness and understanding of Dyslexia?

Responses

100% of the sample answered yes.

Yes - Workshops for parents, teachers and young people urgently needed.

Although this question sought the views of our sample group on workshops with primary school children, many responses highlighted a need for opportunities for parents, teachers and families to also attend workshops, with one parent claiming:

Yes, there needs to be more information for pupils, staff and families of pupils with dyslexia, dyspraxia, ADHD, ADD and other learning differences. Many children are bullied because they are different. If
this continues into secondary school and beyond can become a psychological problem and children become disengaged from learning.

According to Crombie (2002:238) continuation of such issues can impact self esteem and motivation into adulthood. Such despondence may also contribute to the disproportionate amount of offenders with hidden disabilities (Rack, 2005:2).

Some parents suggested that workshops highlighting Dyslexia may help children appreciate some of the issues faced by those with Dyslexia. Through participation in the workshop activities and subsequent discussions many children did demonstrate empathy and a deeper understanding of such challenges.

**Question**

If your child is able to make a comment on the above question, please use this box to record their thoughts/concerns

From the questionnaires returned, a small number of children responded – all believed that raising awareness of Dyslexia would be beneficial:

*I think that I could tell people in school how I have trouble with things.*

*My handwriting is slow, I want to do my best people should know that it takes me longer to read and write things down and I can’t see when I make spelling mistakes.*

*It would be good if more people understood about Dyslexia - I think some children in my class may be Dyslexic but the teachers don’t realise.*
**Question**

In your opinion, does others' lack of awareness and understanding of Dyslexia affect your child’s self-esteem?

![Pie chart showing responses to the question](image)

**Responses**

**Yes**

78% of parents felt that their child’s self esteem was affected by others’ lack of awareness and understanding of Dyslexia, with one commenting how her daughter considers herself, “a failure...and wonders why people are so mean to her.” Another parent was adamant stating, “Definitely, any child who feels different to his peers is or can be affected emotionally,” whilst this parent claimed that, “Until she was tested she believed she was stupid and always hated reading out in class as the others laughed at her. No-one wanted to be her friend.” As Humphrey (2003:132-135) claims that negative peer attitudes can have considerable impact on lowering a child’s self esteem, it would stand to reason that positive peer attitudes could contribute towards raising a child’s self esteem. Peers can only do this if they have an awareness and understanding of what Dyslexia actually is and how it can affect others. To the majority, this must be explicitly taught.
Following the hidden disabilities workshop one Primary 7 child responded:

Do you think it is important to teach other children about hidden disabilities?

Yes

Please tell us why: So that when people see someone struggling they will not judge them or make fun of them.

(P7 child)

Hence, instances such as these could be reduced by generating awareness and understanding of hidden disabilities amongst peers.

Other parents noted that low self esteem was exhibited through refusing to go to school, self harming and feelings of loneliness and humiliation. Another issue highlighted was the common occurrence that younger siblings can often academically exceed their Dyslexic brothers or sisters causing feelings of failure and tension in the household.

A further concern is that lack of awareness and understanding can affect self esteem beyond the school environment, such as social groups and networks, with one boy feeling that he had to leave cub scouts as peers were laughing at his written work. In addition, it was remarked upon that difficulty in accessing electronic communications, such as texting or using MSN, can lead to social isolation as Dyslexic children feel embarrassed about their spelling and grammar.

Whilst some children may be ‘aware’ of Dyslexia, the depth of understanding of associated difficulties could be questioned, as demonstrated in this quote:

The higher up school a child gets the issue becomes worse as the other children cannot understand why they (children with Dyslexia) can’t spell or read simple words. Just last week my son was put in a position when working in a group activity where the other group members were calling over other kids in the class to laugh at what he had written. This is despite them being aware that he is Dyslexic.

(Parent, Dyslexia Scotland)
No

Of the 17% of parents who felt that their child's self esteem had not been affected by others' lack of awareness and understanding, one parent commented that their child was now beyond the point of caring what others may think, taking, "his frustration out at home (homework!) - bullies his sisters and tries it on with us!"

4.1.2 Lothian Autistic Society Questionnaires

Questionnaire data from members of Lothian Autistic Society whose children have ASD.

Question

How aware do you think adults in society are of ASD?

![Bar Chart: How aware of ASD are adults in society - views of parents/carers of children with ASD]

Figure 11: Level of awareness of ASD amongst adults in society

The parents/carers of children with ASD thought that 6% of the adults in society had no awareness of ASD, however 13% of our school sample group acknowledged that they had no awareness of the condition.
Question
How aware do you think children in society are of ASD?

![Bar chart showing awareness levels of ASD](image)

Figure 12: Level of awareness of ASD amongst children in society

Parents/carers of children with ASD felt that 47% of children in society had no awareness of ASD, whereas the actual figure from our school sample was 64%. This varies greatly with the figures of parents/carers of children with Dyslexia who believed that 5% of children in society had no awareness of Dyslexia. Given that approximately 1 in 100 children are on the Autism spectrum (National Autistic Society), there is likely to be at least one child with ASD in every school. Therefore, it is very probable that the children in our sample have come into contact with children on the Autism Spectrum but have perhaps been unaware.
Has your child experienced bullying due to lack of awareness and understanding of ASD?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>47%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 13: Experience of bullying in children with ASD

From the LAS sample group, 33% of their children attended mainstream education, 47% special education, 13% Language units attached to mainstream schools and 7% other, such as split or shared placements. The Autism Toolbox states that one third of children with ASD in Scotland have been bullied. However, figures from our sample group show more than half of children with ASD have experienced bullying.

Responses
As only one third of this sample group attended mainstream education, some parents felt that their children were, “protected somewhat” by their school environment but could be viewed as being more vulnerable in social situations outwith school. One parent stated that her child had not been bullied so far but there was, “beginning to be an issue when his younger sibling brings friends home and they think he is weird.” Other parents commented on bullying incidents, such as “name calling and low level pushing” during tennis classes and in the park. These comments again reflect the difficulties faced outwith an educational setting and demonstrate a need for awareness raising.
amongst the wider community. All too often children can be used as a source of ridicule as this parent stated:

Yes...because he has a lot of strength and appears to be "cocky" children like to start fights with him or to get others to fight with my son - they find it amusing when he loses control.

(Lothian Autistic Society Parent)

Such situations are illuminated by Wing (1996:157&160) who provides an insight into the reaction of peers to the behaviours displayed by children with ASD. Scenarios similar to these were dramatised and discussed by children in the workshops.

**Question**

Do you ever feel your parenting skills are being judged due to lack of awareness and understanding of ASD in society?

![Figure 14: Misjudgement of parenting skills](image)

**Responses**

The vast majority of parents felt their parenting skills had been judged with some stating that members of the public intimated their disapproval of their handling of behaviour when in fact their actions were necessary to ensure routine and to reduce stress for their autistic children. Had these on-lookers had some prior knowledge or awareness of ASD then perhaps they would not have been so quick to judge, and could
have avoided exacerbating an already stressful situation. Other parents commented upon the, “*strange looks*” received when their child became noisy or displayed behaviours deemed inappropriate by others. A similar scenario was acted out by the pupils during the workshop drama scenes. At the time, this generated much discussion and subsequent dialogue was extended in the home, as noted below:

(Child) explained the supermarket example. I had been thinking of implications of autism in school but she made me think of probs in home life.

(P6 parent)

This demonstrates that a pupil who attended a workshop has shared her new found knowledge in the wider community (with her parent). The sharing of such knowledge by pupils to the wider community formed part of our investigation, and more information can be found regarding this under the findings of Objective four.

In addition to strangers commenting on parenting skills, even other family members were said to have judged parents as being “*too soft*” and needing “*to impose greater discipline*”. One parent, herself, admitted that prior to finding out her daughter was on the Autism Spectrum she, “*definitely judged others and did not have a clue about ASD*”.

There were some optimistic views that awareness and understanding of ASD had increased in the past 10 years. However it remains true that 13% of our school sample group of parents/carers admitted to having no awareness of ASD.

**Question**

Do you think that workshops with primary school children, explaining the nature and effects of ASD, would help raise their awareness and understanding of ASD?

**Responses**

87% of those questioned considered workshops to be worthwhile whilst 13% had mixed views. Amongst these mixed views it was suggested that using ‘Circle of Friends’ could help address issues if required by an individual class. Arthur (2004:5-9) advocates the
use of Circle of Friends, particularly with reference to 'habitually left-out children' who are unsure how to interact with their peers as a consequence of their poor social skills. It could however be argued that whilst 'Circle of Friends' is a successful approach, it still remains that the underlying causes of underdeveloped social skills associated with ASD require further explanation to pupils. A noticeable difference in "acceptance and tolerance" was observed following a teacher presentation to a P1 class showing how ASD affected one of their peers. This LAS parent explained that her child went on to form friendships with pupils who had previously been, "wary mainly due to his speech development and tics". Again, this demonstrates that individual class work is a worthwhile exercise however this should not just be confined to a class which includes a pupil with a disability. Likewise, it would not be deemed appropriate to teach about race or religion to only classes which included children from that race or religion. Another suggestion was for all forms of disability to be explored through the Curriculum for Excellence as:

Children have an innate ability to identify anyone who is different/doesn't fit the 'norm' and to single out as a result. We have a responsibility to challenge that and to raise awareness of and celebrate individuality and unique talents.

(Parent, Lothian Autistic Society)

Whilst disability in general could be explored through the Curriculum for Excellence HWB experiences and outcomes, it is not explicitly included and so could easily be omitted in some schools. Charities such as Playback ICE are currently piloting a Personal and Social Development programme predominately focusing on physical disability.

A further suggestion was to create opportunities, "to integrate (pupils attending mainstream settings with those in special education) whilst being given the appropriate support." This idea would fit well with the Curriculum for Excellence strand:
Social Wellbeing

I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.

(Curriculum for Excellence Experiences and Outcomes
HWB 0-10a / HWB 1-10a / HWB 2-10a / HWB 3-10a / HWB 4-10a)

Children from mainstream schools could visit a variety of educational settings and vice versa. However, ‘appropriate support’ is the key to this statement and could only be achieved if staff and children have a suitable level of awareness and understanding of the disability.

Of the 87% of parents who believed awareness raising workshops to be worthwhile, this particular response encapsulates the difficulties faced by those with hidden disabilities:

I also believe that the awareness in adults needs increasing globally - if my son was in a wheelchair or had a guide dog he would be treated differently - this must have a huge impact on day to day life if you are constantly misunderstood just because you may not be visually different and thus possibly can’t communicate effectively to explain why.

(Parent, Lothian Autistic Society)

The theme running throughout many responses is that, in addition to workshops for primary age children, these should be extended to include: secondary school pupils, teachers, public service workers and other adults. Ford (1996:75-76) advocates that:

It is important that those who may come into professional contact with people with learning disabilities are educated in the importance of treating people with learning disabilities as people first and addressing the fact that they have a type of disability second. An awareness by the general public would also go a long way towards making life more enjoyable and fulfilling for the individuals concerned.

A valid point made by an LAS parent was that, “it is unreasonable to expect them (peers) to ignore unusual behaviour with no explanation”. Children, particularly when they are older, can question behaviours which to them may appear incomprehensible.
As one Primary 7 child commented before the workshops/assemblies, “...I would like to help but I can only help if I know about it.” During the workshops pupils were given the opportunity to experience some of the difficulties faced by people with ASD (Appendix 16). This was considered to be an essential component of the workshops, allowing children to develop empathy and strategies they could use within and outwith the school environment. After participating in the workshop, one Primary 7 pupil demonstrated this new knowledge:

![Image of a hand-written note with questions about Autism Spectrum Disorder (ASD)]

The vast majority of pupils participating in workshops and/or assemblies did share their knowledge and experiences with parent/carer. This is a positive finding which indicates that this is one avenue in which a wider network can be reached.

Figure 15: Percentage of children sharing learning with parent/carer
Finally, the need for awareness to be raised at an earlier stage than adulthood was raised by a number of parents of children with both Dyslexia and ASD.

**Question**

*If your child is able to make a comment on the above question, please use this box to record their thoughts/concerns.*

One young adult responded to this question, considering it to be, "*a good idea because it will help people understand what it is*". Had the sample been widened, perhaps into the ASD adult population, it may have included the opinions of more children with ASD currently or previously educated in mainstream settings. The opinions of Dyslexic children were established and considered to be a valuable addition to the findings.

**Question**

*In your opinion, does others’ lack of awareness and understanding of ASD affect your child’s self-esteem?*

![Figure 16: Self esteem affected by others’ lack of awareness and understanding - ASD](image)

47% of LAS parents reported that their child’s self-esteem was not affected by others’ lack of awareness and understanding, in comparison to 17% of those Dyslexia Scotland parents posed with the same question. An explanation of this difference
could be due to the severity of the ASD, with one comment being that their child was, "too severe to notice". As previously stated from the LAS sample group, 33% of their children attended mainstream education, 47% special education, 13% Language units attached to mainstream schools and 7% other, such as split or shared placements.

Of the 53% of LAS parents who believed their child’s self esteem had been affected due to others’ lack of awareness and understanding of ASD, some commented upon the negative reactions of others and that, "some people only seem to focus on his weaknesses." Brown (1998:63) stresses that:

*The generally accepted principle, 'build on what children can do' is particularly relevant and important because disabled children need to have their abilities focused on, not their disabilities.*

Others commented on the ongoing, “stigma attached to disability”. This is despite the current objectives of Scotland’s Disability Equality Scheme (2008-2011) which aim to break down barriers and reduce discrimination. It is apparent that some parents still believe much is yet to be done in this area.

In one case frustration and anger with peer and teachers was considered to have led to, “a lack of confidence in his own abilities and a need for reassurance that he could achieve”. A parent/carer of a Primary 6 pupil who had attended the workshop stated how they felt that their, "child had greater understanding of frustrations and challenges faced daily (by those with hidden disabilities)". Should more children be given the opportunity to experience what it may be like to have a hidden disability then it could be argued that they would then demonstrate a deeper empathy as expressed by this child.
4.2 Objective Two

To establish from the sample groups of parents and children in mainstream primary schools - their current level of awareness and understanding of hidden disabilities (Dyslexia and ASD) and their views on how valuable the delivery of workshops within mainstream schools would be.

**Question**

What do you know about disabilities/hidden disabilities?

**Figure 17: Parent/carer and child knowledge of disabilities**

**Figure 18: Parent/carer and child knowledge of hidden disabilities**

20% more children stated that they knew someone with a disability in comparison with a hidden disability. This difference could be attributed to a lack of knowledge of the term, 'hidden disability' or may be due the fact that physical disability is more obvious and therefore they may in fact know someone with a hidden disability but be unaware of this.


**Question**

**Have you heard of Dyslexia?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Parent/Carer</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have not heard of Dyslexia</td>
<td>2%</td>
<td>28%</td>
</tr>
<tr>
<td>I have heard the name but not sure what it means</td>
<td>5%</td>
<td>29%</td>
</tr>
<tr>
<td>I know the meaning of Dyslexia</td>
<td>53%</td>
<td>24%</td>
</tr>
<tr>
<td>I know someone with Dyslexia</td>
<td>40%</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Figure 19: Prior knowledge of Dyslexia parent/Carer and Child*

Although just over half of adults and around a quarter of children stated that they knew the meaning of Dyslexia, the majority of these responses made reference to just a small part of Dyslexic difficulties, namely reading, writing and spelling, showing a limited breadth and depth of knowledge. Until recent times the definition of Dyslexia was rather narrow in comparison to Scotland’s current cross party definition (Appendix 20). Additionally, there were misconceptions amongst the responses as to the meaning of Dyslexia, such as this Primary 5 pupil’s comment, “Does it mean someone who uses bad language?”.  

**Question**

**Have you heard of Autism Spectrum Disorder (ASD)?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Parent/Carer</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have not heard of ASD</td>
<td>13%</td>
<td>64%</td>
</tr>
<tr>
<td>I have heard the name but not sure what it means</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>I know what it means</td>
<td>39%</td>
<td>5%</td>
</tr>
<tr>
<td>I know someone with ASD</td>
<td>25%</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Figure 20: Prior knowledge of ASD Parent/Carer and Child*
This table shows that there is still a long way to go in raising awareness of ASD, given that 64% of children and 13% of adults in the sample group were unaware of the condition. It is apparent that a greater number of people know more about Dyslexia than ASD, which could be attributed to the prevalence of Dyslexia in comparison to that of ASD. Additionally, the term Dyslexia has been recognised for longer than the relatively recent term Autism Spectrum Disorder.

A large proportion of the responses were similar to those from the previous question in that although the sample group stated that they knew the meaning of ASD, they demonstrated a limited breadth and depth to their knowledge. Areas of focus tended to be repetitive behaviours and communication issues. A Primary 5 child commented, "There is a nice boy in my class with autism. He gets extra support from a teacher. I like to help him and play with him. He likes to make things for people. He's my friend." This pupil appears to have an awareness of the condition and this may explain the demonstration of empathy and understanding of the support needed. Rose and Shevlin (2004:159) state, "...the lack of knowledge about disability can have a negative effect on peer interaction." Whereas it would seem here that having some awareness has had a positive effect on the relationship between these two children.

**Question**

**Do you think it is important to know about hidden disabilities?**

![Figure 21: Importance of knowledge of hidden disabilities - Parent/Carer](image)
An overwhelming number of parents/carers and children considered it important to know about hidden disabilities. Of those who did not, the parent of one Primary 3 child said that her child was unsure if it was important to know about hidden disabilities as he was not familiar with this term.

The question may have been misinterpreted by some as being related to an individual rather than general awareness raising of different hidden disabilities, as this Primary 5 child noted:

Should the research be replicated at any time then it would be recommended that this question be re-worded. During both workshops and assemblies it was stressed that the right to privacy was of paramount importance and an individual’s choice as to whether to discuss their hidden disability or not.
A Primary 4 child initially felt it unimportant to know about hidden disabilities, "so that you treat people all the same way". Jordan (2011) states:

*Treating people equally does not mean treating people in the same way but treating them differently to provide equal access. To do otherwise is to discriminate.*

The child changed their mind after attending the assembly by stating, "Yes - then you can give people extra help." It would appear that attendance at the assembly has brought about a shift in the child's attitude.

In the responses given by the 97% of parent/carers and 90% of pupils who believed it important to know about hidden disabilities, a variety of themes emerged.

The concept of social and emotional inclusion rather than solely physical inclusion was explored by this Primary 6 child, who stated that:

"If we get to know what it is like we might be able to try and communicate with them and understand their feelings and they might feel people aren't ignoring them."

When creating the ASD workshop, a principal aspect was to have the children experience firsthand some of the issues faced by those with the condition. Therefore a drama scenario was included which demonstrated a child in the playground being left out and pupils were challenged to think of ways in which they could improve the situation for that child.

Some parents suggested that workshops would go some way in reducing "ignorance" and to help, "prevent teasing and ridicule from children and adults alike". This comment suggests that adults can be just as likely as children to cause offence to, or upset those with hidden disabilities, perhaps due to their lack of awareness and understanding. A parent from the Dyslexia Scotland sample group reported how they felt they had 'bullied' their own child about his quality of work prior to a fuller understanding of the condition. A number of parents from across the sample groups
recognised a need for greater awareness and understanding of hidden disabilities amongst the adult population, some referring to themselves.

Some comments demonstrated a consideration of future life stages, such as employment and how a person’s, "well being and job prospects“ can be affected by the attitudes and actions of those around them. Within the, Towards an Autism Strategy for Scotland (2010) there is mention of providing disability awareness to employers. The Supported Employment Framework for Scotland (2010) further adds the need for a staged approach in assisting those with disabilities into work and in providing job support and aftercare. Whilst support may be provided in, “Finding out about the workplace environment, co-workers and the ‘supports’ a person might need”, does this include employers and co-workers’ understanding of disabilities? This Primary 6 child recognises the need for such understanding:

Some parents felt it important to know about hidden disabilities to enable them to support friends and family members, in addition to passing on knowledge to their own children. A Primary 2 parent agreed with raising awareness in principal but questioned the age group of those who would be involved, claiming that, “young children should not be made to worry about them (hidden disabilities) at a young age”. Whilst young children should not be ‘made to worry’ about hidden disabilities, the reality is that children with both physical and hidden disabilities attend mainstream nurseries and schools and are in contact with non-disabled pupils on a daily basis. Therefore, to avoid uncertainty and wariness, an age appropriate explanation could be deemed beneficial. In contrast to the previous quote, a Primary 5 parent remarked on the fact that
children can sometimes be overprotected and that workshops and assemblies would “definitely” be of benefit.

Both these parents were keen to avoid discrimination. One was concerned that raising awareness may cause discrimination, whilst the other believed this would reduce discrimination.

(Yes)... but not when it becomes a discriminatory issue. (P4 parent)

(Yes) To help prevent discrimination. (P4 parent)

As the aim of the workshop was to raise awareness of hidden disabilities in general and not to single out any one child, sensitive delivery of the workshop would be essential to avoid any discriminatory matters.

The following comment provides a different perspective on why it is important to know about hidden disabilities, adopting a view which is in opposition to that of the legislation, Standards in Scotland’s Schools etc., Act 2000 which states the rights of all children to be taught in mainstream schools.

So that children with these kind of problems could be helped earlier in the special school and (the) class could avoid unnecessary disruption.

(P4 Parent)

It could be argued that appropriate support provided by staff and peers with relevant knowledge and understanding may help to ‘avoid unnecessary disruption’.
4.3 Objective Three
To deliver workshops to groups of Primary 4 – Primary 7 pupils and to support these children to present an assembly to the rest of the school.

4.3.1 Dyslexia Workshop

Famous Dyslexics
The first activity generated a lot of discussion amongst the children who were surprised at the number of celebrities with Dyslexia. Following the explanation of Dyslexia one Primary 5 boy commented:

*I thought it was all bad. It’s like having a disadvantage and an advantage.*

This type of remark was made at every workshop and it would appear that most of the pupils who had heard of Dyslexia had viewed it only in a negative light. The workshop highlighted the more positive aspects and allowed the children to consider these. It is hoped that these pupils will retain this knowledge and use it in the classroom and/or community to regard people in a more holistic way, e.g. a peer who finds spelling a challenge but has exceptional artistic ability. One child concluded at the end of the workshop, “They might not be good at reading and writing but good at creative things.”

Memory Games
During the memory games sections of the workshop the children engaged in activities to test both their visual and auditory memory skills. They were on task throughout and some reported that they found the visual memory game more challenging, whereas others were more challenged by the auditory memory game. The children contributed to the discussion surrounding the fact that some Dyslexics have difficulties with their short term working memory.

Blurred Words Activity
As a whole group pupils were shown slides with visually distorted words and were asked to consider how this may feel if text was always seen in this way. This generated some
questions, with one child enquiring as to whether Dyslexics see words in this way all the time. Another pupil considered challenges which may be faced outwith school, wondering if the ability to read the price of food would be affected by Dyslexia. This, in turn, led to a more in-depth discussion where it was re-emphasised to pupils that not all Dyslexics were affected by visual stress. The children were asked to reflect on their experiences in reading groups when a peer may be taking some time to decode a word and how they react to this. Most children admitted to 'helping' such peers by just telling them the word. We asked them to take into account the possibility of visual distortion and how this could be a contributing factor. Pupils were then challenged to think of more effective ways to deal with this situation. Amongst the suggestions were giving more time and being more patient. During the plenary session, this familiar scenario was often alluded to as something the children could use back in the classroom.

**Lateral Thinking Puzzles**
In groups children were given a lateral thinking puzzle to solve. This was to demonstrate that many Dyslexics have a particular strength in problem solving and enabled the children to use the concept of 'thinking outside the box'. Whilst many pupils gave a standard answer, a few gave more creative responses demonstrating what can be a natural ability for Dyslexics.

**Matching Activity**
In pairs pupils were tasked with matching famous Dyslexics with statements of the challenges they faced. This created much discussion particularly with regard to how Dyslexia was perceived in the past and how people were misjudged as a result of this. They were especially intrigued when they discovered that JK Rowling was Dyslexic and questioned her ability to write such exceptional novels as many of them related Dyslexia as displaying difficulties with reading and writing. This gave us the opportunity to discuss possible strategies Dyslexics may use to reduce barriers which may hinder their progress.
Drama scenario

The children appeared very enthusiastic about the drama and actively engaged in both presenting and discussion. The drama explored memory of instructions and self esteem. The pupils were able to recognise the challenges faced by the child in the scenario as a direct result of having experienced the memory games and subsequent discussion. They were also able to identify what the adults in the situation could have done differently to help the child. Again, during the plenary, children commented on having learned that, “It isn’t just getting words jumbled up, you can forget things too,” demonstrating their awareness that poor short term memory can also affect those with Dyslexia.

4.3.2 ASD Workshop

Communication Task

In pairs, children were given Task Cards (Appendix 16) which instructed them to communicate with their partner without using any words or showing their partner the card. Their partner was required to establish what was being communicated and then feedback to the group how this felt. Pupils reported feeling annoyed, confused, angry and frustrated during this task, one commenting, “It was like they didn’t really understand you.”

Being actively involved in the task helped extend their thinking, with one child enquiring as to whether people with ASD could communicate with sign language. This allowed us to explore the idea of the Autism Spectrum in more detail and to discuss alternative methods of communication. Furthermore, the concept of body language was considered at this point, allowing us to explain that children with ASD can find this difficult to interpret. Moreover, through attempting to communicate an emotion during the task, the children were able to experience a further challenge encountered by those with ASD i.e. difficulties understanding their own emotions and those of others. This appeared to be the most demanding task of the workshop with pupils experiencing firsthand the changes in their own behaviour and emotions as a result of a barrier, thus
allowing them to consider the behaviour of others when faced with a similar obstacle. This reflects the Curriculum for Excellence:

**Mental and Emotional Well-being**

*I understand that my feelings and reactions can change depending upon what is happening within and around me. This helps me to understand my own behaviour and the way others behave.*

*(Curriculum for Excellence experiences and outcomes HWB 2-04a)*

**Drama Scenarios**

The drama scenarios explored a range of situations within and outwith school, including the supermarket, classroom and playground. Children were again enthusiastic to participate and join in subsequent discussion. After practising and presenting their drama scenarios, each group explained the situation to the rest of the workshop, leading to a discussion of preventative measures and solutions. Amongst suggestions was the idea of children offering help rather than staring or laughing, suggesting that they, “*can help to encourage learning and confidence in others.*” This is a requirement of HWB 2-11a Curriculum for Excellence Mental and Emotional Well-being experiences and outcomes.

In the playground scenario pupils put forward a variety of solutions, such as inviting the child with ASD to play with them, asking if they can join in with the child’s game or showing an interest in what the child was engaged in. When asked why they thought the child may be engaging in such behaviour, pupils commented that the child may be ‘feeling lonely’, ‘have no friends’ and may also be finding it ‘difficult to communicate’. The latter comment demonstrates that the pupil has made a connection between the earlier communication task and a situation which could occur in the playground, displaying altruistic behaviour going some way to achieve the following outcome:

*I understand that people can feel alone and can be misunderstood and left out by others. I am learning how to give appropriate support.*

*(Curriculum for Excellence Mental and Emotional Well-being experiences and outcomes HWB2-08a)*
One child felt that the teacher in one of the drama scenarios should have been aware of the fact that the child with ASD may find it difficult to maintain eye contact. This understanding by the workshop child came as a result of a discussion surrounding a slide in an earlier part of the workshop.

**Sensory Overload Task**

During this activity, the children complained that they could not concentrate on the task. This was due to the environment which had been purposefully created to provide a sensory overload. Children were asked how they felt during the activity and one boy commented that he had been annoyed because he could not focus on the written task. The children were introduced to the concept of sensory sensitivity which appeared to capture their interest greatly, generating numerous questions, many of which could have been further explored and learning consolidated had there been more time. There could be scope here to extend this learning into the home with an activity that could be undertaken jointly with their parent/carer. The pupils were then asked to consider a child with ASD who may also be affected by sensory sensitivity and how they might react to school environments and activities such as the lunch hall, playground and PE. As these were familiar settings to the children, and having just encountered their own sensory overload, they were able to identify and empathise with children with sensory sensitivity.

**Story of Jack**

The idea of rounding off the workshop with a story gave the children the opportunity to reflect back on all the aspects covered. Many follow up questionnaires contained references to the story and it was evident that the children had learned effectively through this medium.
4.3.3 Assemblies

From the nine schools visited just one child felt that they were not confident enough to speak in front of the school at the assembly. Whilst some children preferred a smaller part others enthusiastically offered to read the larger roles. The interactive start to the assembly was well received in some schools however in others, more encouragement was needed for audience participation. As the assembly included Primary 1 - Primary 3 pupils, the Story of Jack was re-told by the workshop children as a more simplistic way of explaining a fairly complex issue. This was noted as being highly successful by a Primary 1 teacher whose children instigated a conversation about the story following the assembly. Slides of famous people were used to demonstrate that success is possible despite having a hidden disability. A number of other hidden disabilities which can affect the lives of both children and adults were also mentioned. To conclude, we ensured that children were aware that although some people may be happy to talk about their hidden disability, others prefer to keep this private and this should be respected.
4.4. Objective Four

To evaluate the impact of the workshops and assemblies on the sample groups.

**Question**

*What do you now know about hidden disabilities?*

![Bar chart](image)

The significant findings which can be seen on the above graph are that there is a 38% increase in children who now know 'a lot' about hidden disabilities and a 40% decrease in those who previously knew 'nothing'.

**Responses – assembly only**

There were some younger children, albeit a small number, whose awareness and understanding of hidden disabilities was increased solely through the child-led interactive assembly. One Primary 2 child commented, "I know a lot because of the assembly. I know what a hidden disability is." Additionally, the parent of a Primary 1 child acknowledged that their child had a better awareness and understanding of hidden disabilities following the assembly.
Some parents noted that whilst they themselves had not learned anything new from information shared by their children, their children had. One Primary 3 parent remarked that their, "child seems to understand that more children have this than he previously thought" whilst another Primary 4 parent commented that their child had learned more, "particularly about Dyslexia".

**Responses – workshop and assembly**

Following participation in a workshop and assembly one Primary 5 child explained how she appreciated the, "different problems," experienced by those with hidden disabilities. This comment was echoed by a Primary 4 parent who stated, "That by understanding disabilities children can learn what others have to cope with, whether the condition can be seen or not." Following discussions between parents/carers and their children, one Primary 5 parent considered the frustrations associated with a lack of understanding of behaviours exhibited by some people with hidden disabilities. As acknowledged by another Primary 5 parent, this may lead to those with hidden disabilities being judged wrongly.

Having an awareness that there are many other hidden disabilities was part of the research aim. Other hidden disabilities were discussed during the workshops and made reference to during the assemblies. Such discussions led to children mentioning hidden disabilities, such as asthma, hearing impairment and epilepsy.

**What do you now know about hidden disabilities?**

I know nothing
I know a little
I know a lot
I know someone with a hidden disability

Please tell us what you now know There is many hidden disabilities such as Tourette's, Dyslexia, ASD.

(Primary 7 child)
In one school a parent reported to the Headteacher that her daughter had undertaken some independent internet research on other hidden disabilities following her attendance at the assembly.

**Question**

What do you now know about Dyslexia?

**Responses – assembly only**

**Before and After Year Group Comparison of those who know nothing about Dyslexia**

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1</td>
<td>94%</td>
<td>55%</td>
<td>-39%</td>
</tr>
<tr>
<td>Primary 2</td>
<td>73%</td>
<td>28%</td>
<td>-45%</td>
</tr>
<tr>
<td>Primary 3</td>
<td>46%</td>
<td>9%</td>
<td>-37%</td>
</tr>
<tr>
<td>Primary 4</td>
<td>44%</td>
<td>0%</td>
<td>-44%</td>
</tr>
<tr>
<td>Primary 5</td>
<td>41%</td>
<td>0%</td>
<td>-41%</td>
</tr>
<tr>
<td>Primary 6</td>
<td>0%</td>
<td>7%</td>
<td>+7%</td>
</tr>
<tr>
<td>Primary 7</td>
<td>3%</td>
<td>0%</td>
<td>-3%</td>
</tr>
</tbody>
</table>

*Figure 24: Before and After Knowledge of Dyslexia – Year Group Comparison*

These figures show that each year group increased their knowledge from knowing nothing to knowing a little or knowing a lot, with the exception of Primary 6. Due to the small return rate in Primary 6, this anomaly relates to one child only. On the initial questionnaire, this child ticked the response, ‘Yes I have heard the name but I am not sure what it means.’ Subsequently, in the follow up questionnaire, the child said that they knew nothing about Dyslexia even though, ‘Yes I have heard the name but I am not sure what it means,’ was still an option.

Some responses following attendance solely at the assembly reflect an understanding that numerical challenges can also be part of Dyslexia. This factor was not previously mentioned by the sample group prior to the assembly. One parent of a Primary 7 pupil
reported that their child had shared new knowledge of Dyslexia as being, “...difficulties with jumbled up letters, difficulties with reading, writing, spelling and maths. Often mixed up and confused with simple things like the alphabet.” Part of the assembly had a focus on the advantages of Dyslexia and that many Dyslexics are gifted and talented in areas such as the expressive arts. This was an aspect of the assembly which had a notable impact on a number of children, such as this Primary 6 child:

![Handwritten note](image)

Whilst several parents acknowledged that they had not learned anything new from their child, this particular Primary 3 parent/carer mentioned a new level of empathy shown by their child, stating, “he seemed to understand how hard it must be to get work done if the words are "jumbled up".

**Responses – workshop and assembly**

**Before and After Year Group Comparison of those who know nothing about Dyslexia**

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 4</td>
<td>26%</td>
<td>0%</td>
<td>26%</td>
</tr>
<tr>
<td>Primary 5</td>
<td>27%</td>
<td>0%</td>
<td>27%</td>
</tr>
<tr>
<td>Primary 6</td>
<td>4%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Primary 7</td>
<td>8%</td>
<td>0%</td>
<td>8%</td>
</tr>
</tbody>
</table>

![Table](image)

**Figure 25: Before and After Knowledge of Dyslexia - Workshop Participants**

All children showed a heightened awareness and understanding of Dyslexia following the workshops, no child stating that they knew nothing. The initial awareness and understanding of Dyslexia was greater in the Primary 6/7 age group, indicating the
probability that the older you are the more likely you are to have some level of awareness of Dyslexia.

Children who attended the workshops and their parents/carers demonstrated a greater depth and breadth to their knowledge, recognising that Dyslexia encompasses more than just reading and writing challenges. One Primary 7 parent/carer cited, “I now understand that it can also affect a person’s confidence”. The inability to follow multiple instructions was a further characteristic discussed as well as difficulties with numbers and sequences. Positive aspects, such as this Primary 4 parent/carer comment that, “There are good and bad sides to Dyslexia, e.g. good imagination”, were noted along with the realisation that these could also be hindered, e.g. by being “unable to put it into words or write it down”. They also commented on how common Dyslexia is, expressing their surprise at how many famous people were highlighted in the workshops/assemblies as having Dyslexia and that these famous people included authors, inventors, singers and actors, amongst others. The following information shows the breadth of knowledge now displayed by this Primary 4 child:

As this Primary 5 child observes, being Dyslexic is not indicative of intelligence level.
Should this message permeate throughout society, perhaps this would go some way in removing the stigma attached to such hidden disabilities.

**Question**

**What do you now know about ASD?**

**Responses – assembly only**

**Before and After Year Group Comparison of those who know nothing about ASD**

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 1</td>
<td>88%</td>
<td>76%</td>
<td>-12%</td>
</tr>
<tr>
<td>Primary 2</td>
<td>77%</td>
<td>55%</td>
<td>-22%</td>
</tr>
<tr>
<td>Primary 3</td>
<td>74%</td>
<td>54%</td>
<td>-20%</td>
</tr>
<tr>
<td>Primary 4</td>
<td>77%</td>
<td>3%</td>
<td>-74%</td>
</tr>
<tr>
<td>Primary 5</td>
<td>82%</td>
<td>16%</td>
<td>-66%</td>
</tr>
<tr>
<td>Primary 6</td>
<td>43%</td>
<td>9%</td>
<td>-34%</td>
</tr>
<tr>
<td>Primary 7</td>
<td>64%</td>
<td>0%</td>
<td>-64%</td>
</tr>
</tbody>
</table>

*Figure 26: Before and After Knowledge of ASD – Year Group Comparison*

According to the above figures, raising awareness of ASD through an assembly only appears to have been more successful in the Primary 4-7 age range. This could be attributed to the more complex nature of ASD and/or the fact that this assembly took place at the end of the afternoon, following the Dyslexia assembly when younger children’s attention span may have diminished.

The more complex aspects of ASD, e.g. sensory sensitivity, limited emotional understanding and need for routine were explained through a narrative (Appendix 17) using a character in the hope that the children could relate to him. These responses show that this appears to have been a successful method of delivery as they directly refer to the text:
...people with it don’t feel, hear, smell, see and taste the world the way I do...

(Primary 4 child)

You don’t want other people touching your things. Not very good at sharing. Unsure of other people’s emotions.

(Primary 5 child)

However one Primary 4 child was still unsure as to what ASD was following the assembly. Had this pupil attended the workshop perhaps their understanding would have been greater. Alternatively, reinforcement via a peer tutor (those attending the workshop having a question and answer session), follow up lesson(s) and/or an information pack to take home and share with parents/carers may have been beneficial. The LAS expressed an interest in developing such a pack.

Responses – workshop and assembly

<table>
<thead>
<tr>
<th>Year Group</th>
<th>Before</th>
<th>After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary 4</td>
<td>77%</td>
<td>3%</td>
<td>74%</td>
</tr>
<tr>
<td>Primary 5</td>
<td>61%</td>
<td>0%</td>
<td>61%</td>
</tr>
<tr>
<td>Primary 6</td>
<td>56%</td>
<td>3%</td>
<td>53%</td>
</tr>
<tr>
<td>Primary 7</td>
<td>47%</td>
<td>0%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Figure 27: Before and After Knowledge of ASD – Workshop Participants
Most children showed a heightened awareness and understanding of ASD following the workshops. Although 6% of pupils stated that they knew nothing, this could be attributed to these children having participated in the Dyslexia workshop rather than the ASD workshop. The initial awareness and understanding of ASD gradually increases with age however in comparison with the initial awareness of Dyslexia, percentages are far greater. This may be due to the smaller numbers of those diagnosed with ASD and that it is a more recently recognised condition.

Although this Primary 5 child was part of the workshop and assembly experience, they were unsure what ASD meant at the end, commenting as follows:

One explanation for their lack of understanding of ASD could be attributed to the fact that they attended the Dyslexia workshop and helped deliver the Dyslexia part of the assembly. As such, they may have been focused on learning their own lines, rather than concentrating on listening to the ASD part of the assembly. This could be resolved through follow up work and/or an information pack as previously noted.

Comments made by those participating in workshops and assemblies were similar to those given by assembly attendees only, however, provide a more detailed insight into ASD. A Primary 6 child exemplified her knowledge of sensory sensitivity, noting that, “The senses are affected - a tap to us can be sore and talking quietly can sound really loud to a person with ASD,” demonstrating that involvement in workshops can lead to a deeper understanding. Parents of workshop children displayed an increased breadth to their knowledge by providing more examples in their follow up responses:
Notice change immediately. Like routines. May not eat food if, for example, a chip touches a pea they will not eat it, but will eat each food type individually.

(Primary 4 parent)

From information from child, I know it affects senses and a person can react differently to sound/touch etc than we would.

(Primary 6 parent)

Social and emotional behaviours associated with ASD were amongst the aspects explored in the workshops through discussion, drama and interactive activities. The drama scenarios evoked much thought amongst the children as to how these behaviours may arise, such as through frustration, as this Primary 5 child remarked:

Moreover, children began to understand how difficult social etiquette and relationships can be for those with ASD. They considered how someone with ASD may find ”...it hard to have and start a conversation” in addition to having a lack of awareness of others’ body language and feelings. One Primary 4 child mentioned, ”difficulty making friends” whilst a Primary 5 child appreciated the need to say a child’s name to reduce confusion when initiating conversation. Furthermore, through discussion with their children, parents appeared to empathize more with the social and emotional challenges faced by those on the spectrum. One Primary 4 parent commenting:

I understand more about how the way they handle emotions can look strange to others and should be understood rather than be considered a problem.

Similar to previous responses regarding Dyslexia, the positive aspects of ASD discussed during the workshop were noted, with a Primary 7 parent stating that it was,
“Very interesting to hear about the talents an individual can have even though they suffer from ASD.”

**Question**

Do you think it is important to teach other children about hidden disabilities?

![Pie chart](image)

**Figure 28: Importance of Teaching Other Children About Hidden Disabilities**

Following workshops and assemblies 96% of children (an increase of 6%) now believe it important to teach other children about hidden disabilities.

**Children attending assembly only**

Of the children attending the assembly only, one astute Primary 1 child explained that it was important to teach others about hidden disabilities, “Because if they know about hidden disabilities when they are little then they will know about them when they are grown up!” This suggests that should we be taught about hidden disabilities in childhood then this knowledge and understanding may stay with us into adult life.

One of the main points of our research aim was to ascertain whether workshops and assemblies would develop "a more open minded, non-judgemental outlook”. One child considered it important to be taught about hidden disabilities as it may prevent a child being misjudged as, “being naughty”. This response addresses the aforementioned
research aim in that not all situations should be taken at face value and that perhaps a more analytical approach should be adopted.

Many children thought it was important for others to have an awareness of hidden disabilities to help prevent ridicule due to their lack of understanding.

**Children attending workshop and assembly**

The children who attended both workshop and assembly appear to have a deeper understanding of the impact of ASD and Dyslexia on everyday situations, thus helping them to develop empathy. Some felt that it was important for children to learn about hidden disabilities so that they could appreciate, "what other children go through" as well as helping them to understand behaviours associated with hidden disabilities and the underlying reasons. One Primary 4 child put this simply, "If I don't know then I can't understand."

During the workshops, pupils were asked to reflect on their own classroom experiences of reading groups. Some children considered that they 'helped' their peers by saying the word for them rather than allowing them extra time to decode the word themselves. Following a discussion as to the reasons why a child may falter whilst reading, e.g. visual stress, pupils were able to empathise and understand the need to give thinking time as this Primary 7 pupil demonstrates:

```
Do you think it is important to teach other children about hidden disabilities?
No
Yes
Please tell us why: Because if someone is stuck and they can't read a word, you do not shout at them and say hurry up you either help them or don't shout at them etc.
```

Many children considered that a heightened awareness of aspects of hidden disabilities, such as social naivety, unusual behaviours or reading difficulties, could help reduce instances of bullying. Figures reported in the Autism Toolbox (2009:108)
suggest that 40% of children with ASD in England and Wales and over a third of children in Scotland with ASD have been bullied.

Whilst 2% felt that it was not important to teach other children about hidden disabilities, none made specific comment as to why. A further 2% remained unsure, such as this Primary 6 child below:

![Image of a handwritten note]

**Question**

**Following today’s workshops and assembly on hidden disabilities, has your child shared anything with you that they have learned?**

...the workshops have opened up a lot of discussion with my daughter. She found them fascinating and thoroughly enjoyed learning so much. Thank you.

(Primary 6 parent)

![Pie chart showing percentage of child sharing learning with parent/carer]

Figure 17: Percentage of children sharing learning with parent/carer

70
The vast majority of pupils shared learning with their parents/carers following attendance at workshops and/or assemblies. As shown in the following graphs, certain age groups had a propensity to discuss their workshop/assembly experiences with their parents/carers.

![Bar chart showing percentage of pupils who talked about the assembly with their parent/carer](chart.png)

**Figure 29: Year Group Comparison – Discussing Assembly with Parent/Carer**

91% of pupils in Primary 4 talked to their parent/carer about the assembly. This figure dipped by 21% in Primary 5 and steadily increased back to 91% in Primary 7. One explanation for the drop in Primary 5 could be that many 9 year olds have lost the excitement and enthusiasm of the infant years in reporting their day to their parents/carers and perhaps by Primary 7 can enter into a more mature dialogue, especially with regards areas of interest.

The interest demonstrated by 82% of Primary 3 children could indicate a need for participation in a workshop differentiated for the needs of younger children.
Of those who responded, 100% of P4 pupils discussed the workshop with their parents/carers. Again a slight dip occurred in Primary 5/6, rising again to 94% in Primary 7. The percentage of Primary 7 children sharing their learning may suggest that the transition year is a prime time during which to deliver these workshops, perhaps as part of the transition to high school programme. It may be interesting to investigate this further to establish as to whether Secondary school pupils follow a similar pattern.

4.5 Objective Five
To identify any change in pupil behaviours/attitude in the 2 week period following the workshops and assemblies.

Question
Have you noticed any differences in behaviour?

This seems to have been a very effective event which has had a considerable impact on able-bodied and "disabled" children well done.

(Headteacher)
The return rate of the observation logs (Appendix 19) was poor and coupled with the two week time constraint; it was difficult to establish the initial and long term impact on pupil behaviours and attitude. A follow up visit to schools may be beneficial in clarifying this, interviewing both staff and pupils. Two teachers noted no changes within their classrooms.

At one school a teacher reported a parental concern regarding her child who wears tinted glasses being asked if she was Dyslexic. The aim of the research was to raise awareness and understanding of hidden disabilities in general, rather than highlight individual cases. Moreover, if celebrating diversity and reducing stigma and taboo were embraced more by society then people may perhaps feel less threatened by such questions. Furthermore, the assemblies and workshops reflected the undernoted Health and Wellbeing A Curriculum for Excellence outcomes and specific reference was made to privacy during both.

_Social Wellbeing_
I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.

(Curriculum for Excellence Health and Wellbeing Experiences and Outcomes HWB 0-10a / HWB 1-10a / HWB 2-10a / HWB 3-10a / HWB 4-10a)

One Primary 6 Class Teacher stated that one of her pupils who was not involved in the workshops or questionnaires, "was very positive about the experience - recognised his dyslexic difficulties and was happy they (dyslexic difficulties in general) were being explained to his peers."

The assemblies and workshops generated some discussion afterwards. Within school one Class Teacher reported, "...children were keen to discuss disabilities after the assembly and were keen to share experiences of family/friends who had a disability of some kind (not just dyslexia and autism)". Discussions also extended outwith school as a Support for Learning Teacher noted, "...child went home and told parent all about assembly and how she could help other children now as she understood more. " Again,
the opportunity for pupils to share an information pack at home and for staff or peers to provide follow up lesson(s) could extend the discussion thus deepening knowledge and understanding.

Approximately 65% of those children responding to the follow up questionnaire mentioned helping others. These class teachers observed their pupils taking their learning a stage further in, "supporting lower attainers more," and being "more understanding of 2 children in my class with autism," following the workshops and assemblies. A follow up visit may provide a further insight as to whether this type of altruistic behaviour is continuing.

4.6 Objective Six

To establish views of school staff as to the value of delivering the workshops and assemblies in schools.

Question

What benefits do you think there might be in holding workshops with primary school pupils, explaining the nature and effects of hidden disabilities?

A variety of benefits were recorded by staff, such as workshops and assemblies may provide an opportunity to: help pupils understand what their peers may be experiencing; reduce instances of bullying and teasing those with a hidden disability; explore the reasons why some children may be treated differently; investigate ways in which pupils can support one another. One Class Teacher claimed that, "Understanding important as first step in tackling discrimination."

As one Class Teacher noted, "the fact that these disabilities are hidden and can't always be seen will help everyone look at things differently and be more patient ...". The view that workshops and assemblies would provide pupils with the opportunity to experience some of the challenges faced by peers with hidden disabilities was shared by a number of teachers, one stating it would help children "understand why things may be different for them (children with hidden disabilities)."
Further benefits of workshops and assemblies discussed by Class Teachers included the belief that pupils may “gain an insight into others’ perspectives on life/learning” thus developing the skills and strategies involved in helping and supporting peers with hidden disabilities. As one teacher suggests this could be successful if peers welcomed the support.

In one school the Primary 1 children were keen to discuss the assembly afterwards, highlighting that whilst these pupils are very young, they still have the capacity to achieve a level of understanding on what some may consider to be a complex issue.

A concern was raised by one Primary 3 Class Teacher, who enquired, “…but how do ASD pupils react to an assembly/workshop like these?” One young adult (from the LAS sample group) with ASD questioned as to whether awareness raising assemblies and workshops would be beneficial stated, “I think it’s a good idea because it will help people understand what it is.” According to Wing (1996:164) each child’s awareness of their condition can differ depending on their individual personality and temperament. With this in mind, it is very difficult to answer this question as the children can find it a challenge to make a connection between ASD and themselves, unless such connections have been explicitly explained. On the other hand, a number of comments from Dyslexic children (who are arguably more likely to identify themselves with their condition) have been positive in relation to delivery of workshops and assemblies, with a Primary 6 pupil stating, “I have Dyslexia. People should know, it helps people to understand others’ difficulties.” One Class Teacher considers a benefit of such workshops and assemblies to be, “Encouraging to children with disabilities and lets them know it’s ok to talk about it.” The concept of stigma attached to hidden disabilities was mentioned on a number of occasions. Therefore, it could be argued that encouraging open discussion would help to reduce such taboos as encouraged by an illustration of good practice in HGIOS quality indicator 5.6 (HMIE, 2007:32), “We discuss equality issues openly and constructively.”
One Class Teacher felt that on the whole, “if a child has been in the class from the beginning most children are very accepting and generally understanding.” Whilst acknowledging that this statement is very often the case, many factors may alter the status quo, e.g. children joining the class, children getting older, becoming more aware of fairness and beginning to question why others appear to be treated differently or act differently. Some of these examples were outlined by other Class Teachers, one considered the workshops to be of value stating, “It was really good for them to understand the reason why some children may behave differently, or get treated differently e.g. leaving the classroom earlier.” Some children, particularly in the upper years, may view such allowances as preferential treatment. However with direct teaching about diversity, children’s attitudes towards these situations can be changed for the better.

The more that people are aware we do not all fall into ‘one category’ the better. Lessons learned in early life could be embedded forever.

(Class Teacher)
5. Conclusion

It would appear from the results that workshops and assemblies highlighting specific hidden disabilities encourage children to be more aware of differences and diversity. It is evident that participation in the workshops has resulted in a deeper and broader understanding of ASD and Dyslexia and the diversity and individuality within these. These results have been established by undertaking a number of key objectives.

5.1 Objective One

To establish the views of parents with children with Dyslexia and ASD and, where possible, children with these hidden disabilities - their views of society's awareness and understanding, how they have been affected by the hidden disability and their views on the value of workshops to mainstream primary pupils.

In relation to society’s awareness of Dyslexia and ASD, the sample group of parents considered that most children had little awareness of Dyslexia and 47% of children had no awareness of ASD. A high number of parents of children with ASD felt that their parenting skills had been judged through lack of awareness and understanding. Furthermore, 83% of parents of Dyslexic children reported that they had had to defend their child’s ability to teachers and peers. Just over half of all parents questioned reported that their child had been bullied. The ASD sample may have been affected by the fact that not all of these children attended mainstream education. Had this been the case then the instances of bullying may have been higher. According to the sample group, a substantial number of children with Dyslexia have been affected by low self esteem. The figures for children with ASD were lower and this could be attributed to the fact that some were educated in a specialist setting along with the possibility that, due to the nature of ASD, they may have been less self aware.

100% of parents with Dyslexic children believed that awareness raising workshops would be valuable for not only pupils but teachers and families (recommendations 1, 3 and 4). The vast majority of parents of children with ASD felt that the workshops
would also be worthwhile and should be extended to High Schools (recommendation 2) and the wider community, including public services (recommendation 4). This view is shared by Wade and Moore who suggest that the attitude of adults can also change.

*Attitude change is not confined to children. Adults too, through social interaction, have opportunities to either update their knowledge and understanding of disability...*

(Wade & Moore, 1992:24)

Although no parents dismissed the workshops, some questioned whether other awareness raising workshops had been trialled previously and, if so, how successful these had been.

**5.2 Objective Two**

To establish from the sample groups of parents and children in mainstream primary schools - their current level of awareness and understanding of hidden disabilities (Dyslexia and ASD) and their views on how valuable the delivery of workshops within mainstream schools would be.

From our sample group, 28% of children and 2% of adults had never heard of Dyslexia compared with 64% of children and 13% of adults having never heard of ASD. Furthermore, the breadth of knowledge from those stating they knew the meaning of Dyslexia and ASD was limited. An overwhelming number (97% of parent/carers and 90% of children) felt that the delivery of workshops within mainstream schools to be of value. In addition, parent/carers highlighted the need for a greater awareness and understanding amongst the adult population.

**5.3 Objective Three**

To deliver workshops to groups of Primary 4 - Primary 7 pupils and to support these children to present an assembly to the rest of the school.

Both workshops saw pupils actively engaged in a variety of age appropriate tasks set in relevant and meaningful contexts. This led to much discussion and a diverse range of questions were posed by the pupils. Moreover, the children offered suggestions to help
with some of the challenges faced by those with Dyslexia and ASD. Their knowledge was extended and they gained a deeper understanding of these specific hidden disabilities. Throughout the activities and subsequent discussions many pupils expressed empathy towards those with Dyslexia and ASD, using their new found knowledge to help explain behaviours and situations. The assemblies provided the opportunity to deliver the key points of the workshops to the whole school. Differentiated roles supported the children in presenting this confidently. The four capacities of the Curriculum for Excellence - Confident Individuals, Responsible Citizens, Effective Contributors and Successful Learners - permeated both workshops and assemblies. The following model demonstrates the process through which a child may develop their awareness and understanding of hidden disabilities.
5.4 Objective Four

To evaluate the impact of the workshops and assemblies on the sample groups.

Most children’s awareness and understanding of ASD and all children’s awareness and understanding of Dyslexia had increased, following the workshops. Although 6% of pupils stated that they still knew nothing about ASD, this could be attributed to these children having participated in the Dyslexia workshop rather than the ASD workshop.

It is evident from the follow up questionnaires that some children now know about other hidden disabilities. Many pupils attending the assemblies only, seem to have
attained a greater breadth of knowledge whereas those participating in the workshops appear to have also deepened their understanding. Figures show that pupils in year groups Primary 4-7 displayed a greater increase in knowledge after attending the ASD assembly than those in year groups Primary 1-3. In contrast to the increase in knowledge of ASD, the figures for Dyslexia were more evenly spread amongst the year groups. 96% of children felt that teaching other children about hidden disabilities is deemed to be of importance (recommendation 1). 83% of children shared their learning with their parent/carers, with some discussing their new found knowledge with extended family members. The optimum year groups for sharing such learning were Primary 4 and Primary 7. In contrast, the least likely to share this information was Primary 1. The vast majority of children attending the workshops discussed their workshop/assembly experience with their parent/carers, again the optimum year groups being Primary 4 and Primary 7.

5.5 Objective Five

To identify any change in pupil behaviours/attitude throughout the school in the two week period following the workshops and assemblies.

It was difficult to establish the initial and long term impact on pupil behaviours and attitude due to the low return rate of the teacher observation logs and the time constraint of two weeks (recommendations 6 and 7). Two teachers reported no changes within the classroom. All other responses were positive including children with hidden disabilities themselves welcoming open discussion. Such discussion took place both in and outwith the school environment. Some class teachers advised of an increase in altruistic behaviour within the classroom.
5.6 Objective Six

To establish views of school staff as to the value of delivering the workshops and assemblies in schools.

The majority of school staff considered the delivery of workshops and assemblies to be worthwhile (recommendation 1). However one questioned the necessity of such workshops/assemblies stating that children generally show acceptance if the child has been in their class since the beginning of Primary school. In contrast, some believed it important to highlight the possible reasons behind certain behaviours whilst others felt that this would go some way towards reducing bullying, teasing and the stigma often associated with such hidden disabilities. One teacher questioned how children with hidden disabilities would react to such workshops and/or assemblies. Responses from those with hidden disabilities welcomed the opportunity of heightening awareness and understanding of such disabilities.

Overall the concept of delivering workshops and assemblies was received positively amongst parents and teachers alike. Those participating in the workshops/assemblies did so enthusiastically and the increased levels of awareness and understanding were evident throughout the follow up questionnaires. Such workshops and assemblies may go some way in achieving, “better awareness by teachers and pupils on disability discrimination/issues” as advocated by the Scottish Government’s Disability Equality Scheme 2008.
6. Recommendations

The findings of this research have highlighted a number of recommendations.

1. All Primary school children should be given the opportunity to participate in Hidden Disabilities workshops and pupil-led assemblies. This would assist schools in addressing the HGIOS quality indicator 5.6 (HMIe, 2007:32) which, “relates to the steps taken by the school to promote and ensure a strong sense of equality and fairness...”

These could be further enhanced by providing the following:

(a) An evaluation/learning sheet where one section is used by the pupils to summarise their learning and another used by the children to evaluate the workshop;

(b) Posters provided for schools to display following the workshops/ assemblies in the format of the four capacities of the Curriculum for Excellence and how the workshop activities and the assembly relate to these;

(c) Follow up lesson plans and resources;

(d) An information pack to take home and share with parents/carers. The Lothian Autistic Society has already expressed an interest in developing such a pack.

2. Workshops on hidden disabilities should be offered to High School pupils. Such workshops should be incorporated into the transition process from Primary to Secondary.

3. Whilst staff Continual Professional Development (CPD) was offered in addition to the workshop/assembly day, not every school participated in this aspect as it was optional. As many parents of children with Dyslexia/ASD commented on staff training, it would be worthwhile:
(a) conducting a survey to identify the percentage of school staff who has attended CPD on Dyslexia and/or ASD. This survey could also include other hidden disabilities;

(b) Ensuring initial teacher training programmes include sufficient training in hidden disabilities.

4. Workshops on hidden disabilities should be offered to parents, families and the wider community.

5. A consideration for further investigation would be to ascertain as to whether empathy is gender related. We were unable to explore this as due to anonymity; questionnaires were initialled rather than full names being used.

6. Should this research be replicated the Observation Logs (Appendix 19) could be redesigned to ease teacher workload in order to encourage a higher return rate. This may be achieved by using a tick box style format asking teachers and other school staff to look out for particular behaviours.

7. The Observation Logs covered changes noted in attitudes and behaviour during the two week period following the workshops and assemblies. Should this research be replicated, a follow up visit to schools may be beneficial in order to identify any further change in behaviours and/or attitudes over a more prolonged period.
7. References


British Dyslexia Association
http://www.bdadyslexia.org.uk


Dyslexia Scotland
http://www.dyslexiascotland.org.uk/the-facts


National Autistic Society *The Sensory World of Autism*

National Autistic Society *Statistics: How many people have autistic spectrum disorders?*


Playback ICE http://www.playbackcompany.net/


Additional Support for Learning Act (Scotland) 2009 http://www.scotland.gov.uk/Topics/Education/Schools/welfare/ASL


The Scottish Government (2008) *Getting it Right for Every Child*
http://www.scotland.gov.uk/Topics/People/Young-People/childrensservices/girfec/Practitioners/PrinciplesandValues/Q/editmode/on/forceupdate/on


8. Appendices

1. Dyslexia Scotland questionnaire
2. Lothian autistic society questionnaire
3. Letter to Director of Education
4. Letter to Head Teacher
5. School initial questionnaire
6. School follow up questionnaire
7. Teacher check list
8. Parental consent form
9. Dyslexia workshop PowerPoint
10. Autism Spectrum Disorder PowerPoint
11. Dyslexia assembly PowerPoint
12. Autism Spectrum Disorder assembly PowerPoint
13. Continuing Professional Development PowerPoint - Dyslexia
15. Dyslexia workshop plan
16. Autism Spectrum Disorder - workshop plan
17. The story of Jack - text
18. Child certificate
19. Staff observation log
20. Scotland's current cross party definition of Dyslexia
Appendix 1

As part of a research project, approved by the General Teaching Council Scotland, on certain hidden disabilities, we would appreciate your help in completing this questionnaire. If you are completing this electronically, please alter the colour of the text to indicate your chosen response. Please feel free to add a continuation sheet for any additional comments you may have.

How aware do you think adults in society are of Dyslexia?
Very aware and have a good understanding
Have some awareness and understanding
Have little awareness and understanding
Have no awareness and understanding

How aware do you think children in society are of Dyslexia?
Very aware and have a good understanding
Have some awareness and understanding
Have little awareness and understanding
Have no awareness and understanding

Has your child experienced bullying due to lack of awareness and understanding of Dyslexia?
Yes No

Please tell us more

Have you or your child ever felt the need to defend your child’s intellectual ability due to lack of awareness and understanding of Dyslexia?
Yes No

Please tell us more
Do you think that workshops with primary school pupils, explaining the nature and effects of Dyslexia, would help raise their awareness and understanding of Dyslexia?

Yes [ ] No [ ]

Please tell us more

If your child is able to make a comment on the above question, please use this box to record their thoughts/concerns.

My child’s thoughts

In your opinion, does others’ lack of awareness and understanding of Dyslexia affect your child’s self-esteem?

Yes [ ] No [ ]

Please tell us more

Thank you for spending the time to complete this questionnaire. It is hoped that doing this will benefit you and your child.

Kirsten Duncan  Caroline Bingham
Support for Learning Teacher  Class Teacher
Appendix 2

As part of a research project, approved by the General Teaching Council Scotland, on certain hidden disabilities, we would appreciate your help in completing this questionnaire. If you are completing this electronically, please alter the colour of the text to indicate your chosen response. Please feel free to add a continuation sheet for any additional comments you may have.

How aware do you think adults in society are of ASD?
Very aware and have a good understanding □
Have some awareness and understanding □
Have little awareness and understanding □
Have no awareness and understanding □

How aware do you think children in society are of ASD?
Very aware and have a good understanding □
Have some awareness and understanding □
Have little awareness and understanding □
Have no awareness and understanding □

Has your child experienced bullying due to lack of awareness and understanding of ASD?
Yes □ No □

Please tell us more

Do you ever feel that your parenting skills are being judged due to a lack of awareness and understanding of ASD in society?
Yes □ No □

Please tell us more
Do you think that workshops with primary school pupils, explaining the nature and effects of ASD, would help raise their awareness and understanding of ASD?

Yes [ ] No [ ]

Please tell us more

If your child is able to make a comment on the above question, please use this box to record their thoughts/concerns

My child’s thoughts

In your opinion, does others’ lack of awareness and understanding of ASD affect your child’s self-esteem?

Yes [ ] No [ ]

Please tell us more

Please indicate which educational setting your child attends

Mainstream class [ ] Language base/unit [ ] Special Education [ ]

Mixed placement [ ] Other (Please tell us more) [ ]

Thank you for spending the time to complete this questionnaire. It is hoped that doing this will benefit you and your child.
Appendix 3

Dear ,


As part of the GTCS teacher research programme myself and another teaching colleague have been accepted to undertake a piece of action research and are writing to seek your permission to carry out this research in two schools within your Local Authority. We have already gained Head Teacher approval in one of your schools and are currently in negotiations with another. The following contains further information regarding our project.

As part of our research we aim to visit 10 schools throughout Lothian and the Borders, who have not actively raised awareness of Dyslexia and ASD. These schools will participate in a one day programme of events aimed at increasing awareness and understanding of hidden disabilities, with a specific focus on Dyslexia and ASD. The aim of our research is not to highlight individual children with Dyslexia or ASD, but rather to raise awareness and understanding of these hidden disabilities.

We plan to run a workshop with 12 children (P4-7) taking part in active lessons, which aim to increase understanding of Dyslexia and a similar workshop session involving 12 different children with a focus on ASD. The day will end with all 24 children presenting a whole school assembly and will be followed by a staff CPD session directly after school.

The programme addresses Curriculum for Excellence outcomes and experiences within Health and Wellbeing: Mental and Emotional Wellbeing and Social Wellbeing.

Acknowledges diversity and understand that it is everyone’s responsibility to challenge discrimination.

Mental and Emotional Wellbeing

- I understand that my feelings and reactions can change depending upon what is happening within and around me. This helps me to understand my own behaviour and the way others behave.
  HWB 0-04a / HWB 1-04a / HWB 2-04a / HWB 3-04a / HWB 4-04a

- I know that friendship, caring, sharing, fairness, equality and love are important in building positive relationships. As I develop and value relationships, I care and show respect for myself and others.
  HWB 0-05a / HWB 1-05a / HWB 2-05a / HWB 3-05a / HWB 4-05a

- I understand that people can feel alone and can be misunderstood and left out by others. I am learning how to give appropriate support.
  HWB 0-08a / HWB 1-08a / HWB 2-08a / HWB 3-08a / HWB 4-08a

Social Wellbeing

- As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others.
I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all.

The programme will also address HGIOS 3, quality indicator 5.6 Equality and fairness

- Approaches to inclusion
- Promoting equality and fairness
- Ensuring equality and fairness

The GTCS were very positive in their response to the research and made comment on, “the idea that Primary pupils are central to the project” and that it, “could prove very informative and beneficial to the Scottish education community”

As we plan to commence the first batch of workshops after the February break, we would very much appreciate your response by then. Should you wish to discuss this further we would be delighted to answer any questions you may have.

Thank you for your support and we look forward to hearing from you.

Yours sincerely
Appendix 4

Dear

Raising awareness of hidden disabilities: Dyslexia and ASD in primary school children – A whole school Approach.

As part of the GTCS teacher research programme we have been accepted to undertake a piece of action research.

As part of our research we are looking for 10 schools throughout Lothian and the Borders, who have not actively raised awareness of Dyslexia and ASD, to participate in a one day programme of events raising awareness of hidden disabilities with a specific focus on Dyslexia and Autism Spectrum Disorder (ASD).

We plan to run a morning workshop with 12 children (P4-7) taking part in active lessons which raise awareness of Dyslexia and a similar afternoon workshop session involving 12 different children with a focus on ASD. The day will end with all 24 children presenting a whole school assembly, followed by a whole staff CPD session.

The programme addresses Curriculum for Excellence outcomes and experiences within Health and Wellbeing: Mental and Emotional Wellbeing and Social Wellbeing.

Acknowledge diversity and understand that it is everyone’s responsibility to challenge discrimination.

Mental and Emotional Wellbeing

- I understand that my feelings and reactions can change depending upon what is happening within and around me. This helps me to understand my own behaviour and the way others behave. 
  HWB 0-04a / HWB 1-04a / HWB 2-04a / HWB 3-04a / HWB 4-04a

- I know that friendship, caring, sharing, fairness, equality and love are important in building positive relationships. As I develop and value relationships, I care and show respect for myself and others. 
  HWB 0-05a / HWB 1-05a / HWB 2-05a / HWB 3-05a / HWB 4-05a

- I understand that people can feel alone and can be misunderstood and left out by others. I am learning how to give appropriate support. 
  HWB 0-08a / HWB 1-08a / HWB 2-08a / HWB 3-08a / HWB 4-08a

Social Wellbeing

- As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others. 
  HWB 0-09a / HWB 1-09a / HWB 2-09a / HWB 3-09a / HWB 4-09a

- I recognise that each individual has a unique blend of abilities and needs. I contribute to making my school community one which values individuals equally and is a welcoming place for all. 
  HWB 0-10a / HWB 1-10a / HWB 2-10a / HWB 3-10a / HWB 4-10a
The programme will also address HGIOS 3, quality indicator 5.6 Equality and fairness

- Approaches to inclusion
- Promoting equality and fairness
- Ensuring equality and fairness

The GTCS were very positive in their response to the research and made comment on “the idea that Primary pupils are central to the project” and that it “could prove very informative and beneficial to the Scottish education community”

We would very much like your school to be part of our project and would be grateful if you could let us know by Friday 27th November as to whether or not you would like to participate. Should you wish to discuss this further we would be delighted to come in to meet with you.

Yours sincerely
**Appendix 5**

**Health and Wellbeing Questionnaire**

This side is for your child’s response (if necessary please read and scribe for your child). Please turn over for your response. If you need more space to record your answers please attach a continuation sheet.

*What do you know about disabilities?*
- I know nothing
- I know a little
- I know a lot
- I know someone with a disability

*What do you know about hidden disabilities?*
- I know nothing
- I know a little
- I know a lot
- I know someone with a hidden disability

*Have you heard of Dyslexia?*
- No
- Yes I have heard the name but am not sure what it means
- Yes I know what it means
- Yes I know someone with Dyslexia
  
  Please tell us what you know

*Have you heard of Autism Spectrum Disorder (ASD)?*
- No
- Yes I have heard the name but am not sure what it means
- Yes I know what it means
- Yes I know someone with ASD
  
  Please tell us what you know

*Do you think it is important to know about hidden disabilities?*
- No
- Yes
  
  Please tell us why
Parent/Carer response

What do you know about disabilities?
I know nothing
I know a little
I know a lot
I know someone with a disability

What do you know about hidden disabilities?
I know nothing
I know a little
I know a lot
I know someone with a hidden disability

Have you heard of Dyslexia?
No
Yes I have heard the name but am not sure what it means
Yes I know what it means
Yes I know someone with Dyslexia
Please tell us what you know

Have you heard of Autism Spectrum Disorder (ASD)?
No
Yes I have heard the name but am not sure what it means
Yes I know what it means
Yes I know someone with ASD
Please tell us what you know

Do you think it is important to know about hidden disabilities?
No
Yes
Please tell us why
Appendix 6

Follow up Health and Wellbeing Questionnaire

This side is for your child’s response (if necessary please read and scribe for your child). Please turn over for your response. If you need more space to record your answers please attach a continuation sheet.

What do you now know about hidden disabilities?

I know nothing
I know a little
I know a lot
I know someone with a hidden disability

Please tell us what you now know

What do you now know about Dyslexia?

I know nothing
I have heard the name but am not sure what it means
I know what it means
I know someone with Dyslexia

Please tell us what you now know

What do you now know about Autism Spectrum Disorder (ASD)?

I know nothing
I have heard the name but am not sure what it means
I know what it means
I know someone with ASD

Please tell us what you now know

Do you think it is important to teach other children about hidden disabilities?

No
Yes

Please tell us why
Parent/Carer response

Following today’s workshops and assembly on hidden disabilities, has your child shared anything with you, that they have learned?

No  
Yes

If you answered yes, please answer the following questions.

What do you now know about hidden disabilities?

I know nothing  
I know a little  
I know a lot  
I know someone with a hidden disability

Please tell us what you now know

What do you now know about Dyslexia?

I know nothing  
I have heard the name but am not sure what it means  
I know what it means  
I know someone with Dyslexia

Please tell us what you now know

What do you now know about Autism Spectrum Disorder (ASD)?

I know nothing  
I have heard the name but am not sure what it means  
I know what it means  
I know someone with ASD

Please tell us what you now know
Appendix 7

Class ___

<table>
<thead>
<tr>
<th>Workshop 1</th>
<th>Permission slip returned</th>
<th>Workshop 2</th>
<th>Permission slip returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td></td>
<td>Time:</td>
<td></td>
</tr>
<tr>
<td>Names</td>
<td></td>
<td>Names</td>
<td></td>
</tr>
</tbody>
</table>

Initials of children sent random questionnaires (please could you write initials somewhere on questionnaire to help us match before and after comparison, Thanks)

<table>
<thead>
<tr>
<th>If returned please tick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Appendix 8

Health and Wellbeing Workshop

Your child has been chosen to participate in a forthcoming Health and Wellbeing workshop. This will take place in school, during school hours and will last for approximately 1 hour 30 minutes. All children involved in the morning workshop will then share what they have learned by presenting at a whole school assembly, in the afternoon.

The workshop and assembly form part of a research project approved by the General Teaching Council Scotland, which we are undertaking throughout selected schools in Lothian and Borders. The research project aims to investigate whether the delivery of these workshops will help raise awareness and understanding of certain hidden disabilities. As the research is a comparison of knowledge and understanding before and after workshops, when completing the attached questionnaires, we would appreciate that all questions are answered with your initial responses. After the workshop, your child will bring home a short follow up questionnaire to be completed.

The results of this research will be shared with other educators therefore, we ask your permission for your child to participate and be filmed during the workshop and assembly.

Many thanks for your support in our research.

Kirsten Duncan  
Support for Learning Teacher  
Loanhead Primary School

Caroline Bingham  
Class Teacher  
Edinburgh Academy Junior School

I give permission for my child ................................................................. to take part in a Health and Wellbeing workshop and present at a whole school assembly. I understand that this is part of a research project and that my child may be filmed during the workshop and/or assembly and that any footage will be used only for educational or training purposes.

Signed .............................................................................................................

Date ................................................
Appendix 9

Welcome To the Health and Wellbeing Workshop
Ms Duncan
Support for Learning Teacher
Loanhead Primary School

Mrs Bingham
Class Teacher
Edinburgh Academy Junior School

Getting to know each other...
Pair up with someone who is not in your class and who you do not know very well
Find out:
• their name
• class
• 1 thing they are good at
• 1 thing they feel they need help with

Get into 3 groups of 4
• 1 person from each class in each group

• Look at the next slide and decide: What do these people have in common?
What is Dyslexia....

- The word 'Dyslexia' is a Greek word meaning... 'difficulty with words'.
- Some people think it's just about reading and spelling, but someone with Dyslexia can be affected in many ways.

Learning Intentions

I can:

- explain what Dyslexia is
- explain how Dyslexia can affect people
- understand that some people have a hidden disability like Dyslexia

People are born with dyslexia...

- The connections in their brains work in a different way - which can make some things tricky but can also be a very good thing!
- Genetic - Dyslexia can be inherited, which means that other people in a family can have it too.
- Dyslexia is real and people with Dyslexia have had to find different ways to live with it - this can be a challenge.
- Dyslexia is a hidden disability. It is 'hidden' because nobody can tell that someone is Dyslexic just by looking at them.

How can dyslexia affect someone?

- Difficulties reading, writing, spelling.
- Difficulties with maths especially telling the time and times tables.
- Sequences like the alphabet, days of the week, months of the year.
- Sometimes difficulty concentrating.
- Can get letters or numbers mixed up.
- Problems meeting deadlines or being on time.
- Can be quite forgetful.
- Have good and bad days.
- But... can be really good at subjects like art, music, drama, sports, building/designing.

Don't forget the good things dyslexia brings!!

- Inventive thinker, coming up with new ideas!
- Excellent trouble shooters, good at solving problems
- Creative... good at music, art, and drama.
- Good communicators... good at explaining ideas
- Vivid imaginations
- Curiosity... finding out about new things
- Designing... many architects are Dyslexic.
A long time ago schools didn’t understand about dyslexia in the way we do today. Teachers now understand and support children with Dyslexia.

Activities

- Get into pairs - P4 with P7 and P5 with P6
- Memory game 1
- Memory game 2

Can you read these?

Colour and font difference

- Is this easy to read?
- Is this easy to read?
- Is this easy to read?
- Is this easy to read?

Lateral Thinking Puzzle 1

- Jake was standing on one side of the river, and his dog Scruffy was standing on the other side. “Come on Scruffy, come, boy!” shouted Jake. Scruffy crossed the river, ran to Jake, and got a treat for being a good dog. The amazing thing was that Scruffy didn’t even get wet! How did Scruffy do that?
**Answer**

- The river was frozen.
- Stepping stones
- There was a bridge over the river, and Scruffy crossed the bridge.
- River dried up

**Lateral Thinking Puzzle 2**

- How much dirt is in a round hole that is 9 feet deep with a diameter of 3 feet? (Hint: You don't have to do any Maths to get the answer. Just use your head!)

**Answer**

- None. You make a hole by digging out the dirt, so the hole is empty!

**Matching Activity**

- In pairs, your task is to match these famous dyslexics with the obstacles and challenges they have faced.

**Drama Activity**

- Get into 4 groups of 3

- Decide which person will be:
  - the teacher
  - the child
  - the parent
Hidden Disabilities

- Remember there are lots of people in the world who may have a hidden disability.
- Some are happy to talk about it and others prefer to keep it private.
- Our role is to be more understanding, responsible citizens who celebrate diversity.

What did you learn?

- Tell us one thing you learned today.
- How might what you learned today help you to understand people with Dyslexia?
- This afternoon you are going to tell the whole school about Dyslexia at an assembly. Don’t worry - we have it all prepared!

Thank you!
Appendix 10

Welcome To the Health and Wellbeing Workshop
Ms Duncan
Support for Learning Teacher
Loanhead Primary School

Mrs Bingham
Class Teacher
Edinburgh Academy Junior School

Getting to know each other...
Pair up with someone who is not in your class and who you do not know very well.
Find out:
- their name
- class
- 1 thing they are good at
- 1 thing they feel they need help with

Get into 3 groups of 4
- 1 person from each class in each group
- Look at the next slide and decide: What do these people have in common?

What do they ALL have in common?
Learning Intentions
I can:
- Explain what Autism Spectrum Disorder (ASD) is
- Explain how ASD can affect people
- Understand that some people have a hidden disability like ASD

What is Autism Spectrum Disorder?

The Autism Spectrum
Some children with ASD don't go to schools like yours because they are sometimes unable to talk and need more specialist help.

Some children with ASD do go to schools like yours. Sometimes they need a bit extra support from teachers and from you.

What is it like to be a child with ASD?
- See the world differently from others - confusing
- Communication - difficulty having a conversation
- Social situations - difficulty with taking turns and sharing and find it hard to look at you
- Activities and interests - sometimes they have a huge interest in 1 or 2 things - Thomas the Tank or Who, Pokemon

Activities
- Get into pairs - P4 with P7 and P5 with P6
- Choose one person to be the 'communicator'
- Communicator should now open envelope 1 and follow instruction 'a'
- After instruction 'a' swap roles - the new communicator should now open envelope 2 and follow instruction 'b'
- Now repeat for instruction 'b'

Imagine yourself thrown into a foreign country where you speak very little of their language, where you don't understand their customs, and their food tastes like sand.

You have to study astrophysics in a classroom filled with metal-scratching sounds while wearing a shirt made of sandpaper.

Your classmates say you are weird and your teacher says you are lazy.

Wouldn't you cover your ears, scream, or maybe throw a fit?
How did that make you feel?

Drama Activity
- Get into 4 groups of 3
- Decide which person you will be from the drama task card.

Copy this down...
1 in 64 people in the UK are on the Autism Spectrum, say Cambridge University. The National Autistic Society say it is 1 in 100.

Often people on the Autism spectrum do not want to be 'cured'. They just want to be accepted.

However, they do have to live in a world that is confusing to them so we have to help them along.

Senses

Jack
Here is a short story about a little boy called Jack who has ASD.
What did you learn?

- Tell us one thing you learned today.
- How might what you learned today help you to understand people with ASD?
- This afternoon you are going to tell the whole school about ASD at an assembly. Don't worry - we have it all prepared!

Thank you!
As many as 1 in every 10 people suffer from Dyslexia.

What is Dyslexia...
- The word 'Dyslexia' is a Greek word meaning 'difficulty with words'.
- Some people think the 'Dys' is about reading and spelling but some people with Dyslexia can be affected in many ways.
- Dyslexia is hidden disability. It is hidden because nobody can tell that someone is Dyslexic just by looking at them.

People are born with dyslexia...
- The connection in their brain work in a different way - which can make some things tricky but can also be a very good thing!
- Genetics - Dyslexia can be inherited. which means that other people in a family can have it too.
- Dyslexia is real and people with Dyslexia have had to find different ways to live with it - this can be a challenge.

How can Dyslexia affect someone?
- Difficulties reading, writing, spelling.
- Difficulties with maths, especially telling the time and times tables.
- Sequences like the alphabet, days of the week, and months of the year.
- Sometimes difficulty concentrating.
- Can get letters or numbers mixed up.
- Problems meeting deadlines or being on time.
- Can be quite forgetful.
- Have good and bad days.
- But... can be really good at subjects like art, music, drama, sports, building/designing.
Don't forget the good things
Dyslexia brings!!
- Inventive thinker, coming up with new ideas!
- Excellent trouble shooters, good at solving problems
- Creative, good at music, art and drama
- Good communicator, good at explaining ideas
- Vivid imaginations
- Curiosity, finding out about new things
- Designing, many architects are Dyslectic.

A long time ago schools didn't understand about
Dyslexia in the way we do today. Teachers now understand and support
children with Dyslexia.

Kiera Knightley - Actress
Orlando Bloom - Actor

Famous Scientists
Albert Einstein - Physicist
Thomas Edison - lightbulb
Alexander Graham Bell - telephone

Famous Authors
J K Rowling
Agatha Christie

Famous Sports Stars
Sir Steve Redgrave - Olympic Gold Medal Winner
Sir Jackie Stewart - 3 time Formula 1 World Champion
**Dyslexia Awareness Assembly (Words)**

Welcome to our Assembly

*(To the audience)* Hands up if you can read any of this?

*(To the audience)* How does it make you feel trying to read any of this? *(Take 2 answers)*

*(To the audience)* Can you remember this? 438

How about this? 346046985

And now for something tricky! Can you remember this number backwards? 937

Try this one backwards? 35804261

*(To the audience)* How did that make you feel?

*(Teacher, Child and Parent come forward)*

**Teacher:** Good Afternoon Primary 4

**All children:** Good Afternoon Miss.

**Teacher:** Oh before you go, remember you have your project to finish off tonight and your trip letter needs signed. Swimming tomorrow so wear your tracksuit and remember your goggles this week! Have a nice evening - see you tomorrow.

**Child:** See you...

**Teacher:** Oh could you take this letter to the office on the way out and ask them to photocopy it for every teacher in the school?

**Child:** *(weakly)* OK.

*(Child arrives home)*

**Parent:** Nice day at school dear? Now what homework have you got to do? Where’s your PE kit? Now don’t put those dirty shoes there. Anything important to tell me?

**Child:** Important... *(thinks out loud)* finish off.... The office... oh yeah! I need you to sign my trip letter.

**Parent:** What trip letter? I’ve already signed it. It’s in your bag. Did you not give it to your teacher today? What was the last thing I said to you this morning? *(sigh)*

**Child:** *(sigh)* I feel as though I can’t get anything right.
The boy felt that he couldn’t get anything right and remember how you felt trying to remember all these numbers. Children with Dyslexia can often feel like this, but what is Dyslexia? Hands up if you have heard of Dyslexia?

The word ‘Dyslexia’ is a Greek word meaning...difficulty with words.

Some people think it’s just about reading and spelling but it can affect your life in many ways. Dyslexia is a hidden disability. It is 'hidden' because nobody can tell that you are dyslexic just by looking at you.

People are born with Dyslexia.

• The connections in their brains work in a different way - which can make some things tricky but can also be a very good thing!
• Genetic - Dyslexia can be inherited, which means that other people in a family can have it too.
• Dyslexia is real and people with Dyslexia have had to find different ways to live with it - this can be a challenge.

How can Dyslexia someone?

Difficulties with reading, writing or spelling.

Difficulties with maths, especially telling the time and the times tables.

Sequences like the alphabet, days of the week and months of the year.

Sometimes difficulty concentrating.

Can get letters or numbers mixed up.

Problems meeting deadlines or being on time.

Can be quite forgetful and disorganised.

Have good and bad days.

But... can be really good at subjects like art, music, drama, sports, building/designing, problem solving.....

Don’t forget the good things Dyslexia brings!

Inventive thinker - can come up with new ideas!

Excellent trouble shooters - good at solving problems

Creative - good at music, art or drama
Good communicators - good at explaining ideas orally

Vivid imaginations - great story ideas

Curiosity - finding out about new things

Designing - many architects have Dyslexia

A long time ago schools didn’t understand about dyslexia in the way we do today. Teachers now understand and support children with Dyslexia.

Lots of famous and talented people have Dyslexia!

Actors - Keira Knightley and Orlando Bloom

Famous Scientists - Albert Einstein - Physicist, Alexander Graham Bell who invented the telephone and Thomas Edison who invented the light bulb

Famous Authors - J K Rowling and Agatha Christie

Famous sports stars - Sir Steve Redgrave - Olympic Gold Medal Winner and Sir Jackie Stewart, 3 times Formula 1 Champion

Famous Singer/Songwriters - Robbie Williams and John Lennon

We can see then that although some people have Dyslexia, this does not mean that they are not intelligent. As we have seen, many people with Dyslexia are extremely intelligent and have accomplished many great things. These people just need support and understanding from you, me, the teachers, their parents and society in general.
Appendix 12

Autism Spectrum Disorder

In the UK, 1 in every 100 children are on the Autism Spectrum.

What is Autism Spectrum Disorder?

Autism Savant

Asperger's

High Functioning Autism

School Life

Some children with Autism Spectrum Disorder come to schools just like you.

Others go to a special school because they need extra support.

What is it like to be a child with ASD?

- See the world differently from others - confusing
- Communication - difficulty having a conversation
- Social situations - difficulty with taking turns and sharing and find it hard to look at you.

Activities and interests - sometimes they have a huge interest in 1 or 2 things - Thomas the Tank, or Who Framed Roger Rabbit?
Famous People on the Autism Spectrum

Daryl Hannah - Actress

Satoshi Tajiri - creator of Pokemon

Gary Numan - Singer/Songwriter

Dr Temple Grandin - Author & Animal Scientist
Autism is like...

...having nothing but a fork in the land of soup!

Always
Unique
Totally
Interesting
Sometimes
Mysterious

Dyspraxia
ADD
Tourette's

Dyslexia
ADD
Dyscalculia

Diversity
Celebrate
Diversity

is important!

Thank you!
Autism Spectrum Disorder Assembly (Words)

Thank you for telling us about Dyslexia. We are now going to tell you about another hidden disability called Autism Spectrum Disorder. You may have heard of it.

In the UK, 1 in every 100 children are on the Autism Spectrum. That’s a lot of children!

There are different kinds of autism like Savant syndrome, Asperger’s Syndrome, High Functioning Autism and Autism itself. Together it is all known as ASD.

Some children with Autism Spectrum Disorder come to schools just like ours. Others go to a special school because they need some extra support.

So what is it like to be a child with ASD?

They see the world differently from others – it can be a very confusing place for them.

Communication – they can have difficulty starting or having a conversation.

Social situations – they can have difficulty with taking turns and sharing and find it hard to look at you.

Activities and interests – sometimes they have a huge interest in 1 or 2 things like Thomas the Tank, Dr Who or Pokemon.

We’d like to share a story with you to help you understand ASD a bit better.

All the children in our school are different. Some are very tall, some are very short and some wear glasses. One boy can’t speak English very well because he comes from another country where they speak a different language. This year we have Jack in our class. He has a hidden disability called ASD.

The teacher says that Jack hears, sees, smells, feels and tastes things in a different way from us.

When he hears a lot of noise he gets very anxious and covers his ears so he can’t hear. It’s best for us to leave him alone or take him away from the noisiest place.

When the teacher changed her perfume nobody noticed except Jack. He moved away every time she came near him and said, “YUK”!
At school dinners Jack got upset when his peas touched his mince. The school dinner ladies now give Jack peas on a separate plate.

Sometimes when we cry because we have hurt ourselves or we’re feeling sad. Jack laughs. The teacher says that Jack doesn’t understand that we are sad and thinks that we are messing around and joking. Someone now comes to school to help Jack understand other children’s feelings.

Jack always wants to sit on the same chair and at the same table. If someone else sits in his place he gets very cross and very, very worked up. He also likes to do the same things at the same time of day. If our timetable is changed suddenly Jack can get upset. Our teacher now tries to prepare him for any changes like this.

There are many things that I like about Jack. He knows everything about Star Wars. He is a computer whizz kid and he helps me with my Maths when I am stuck.

It’s nice because this shows that we are all really different and we have to understand that we can do some things well but have to work harder at other things. Jack, and other children like him, needs understanding, patience and acceptance.

Just because a person has ASD, it doesn’t mean that they are stupid or dumb or naughty. In fact, many people have made a valuable contribution to society. These people have been diagnosed as being on the autism spectrum:

- Daryl Hannah – actress
- Satoshi Tajiri – creator of Pokemon
- Gary Numan – singer and songwriter
- Dr Temple Grandin – author and animal scientist

We hope that you have learned more about the autism spectrum and how you can be more understanding to those people who find our world a totally confusing place. We will leave you with this Acrostic poem we like.

Today we have spoken about just 2 hidden disabilities ASD and Dyslexia, but there are more that we haven’t mentioned, like Tourettes, ADHD, Dyspraxia, ADD and others. Remember, you don’t know that someone has a hidden disability just by looking at them but we can all help by being a bit more understanding.

Remember – there are lots of people in the world who may have a hidden disability. Some are happy to talk about it and others prefer to keep it private. Our role is to be more understanding, responsible citizens who celebrate diversity.
Welcome

Kirsten Duncan
Support for Learning Teacher
Lornhead Primary School

Caroline Bingham
Class Teacher
Edinburgh Academy Junior School

Aims of today’s session

• To help you understand – what is Dyslexia?
• To help you understand how it feels to have Dyslexia
• The way forward – to provide some strategies and tips

Dyslexia

• In groups of 4, read the statements in the envelope and decide whether you agree or disagree. Place them under the correct heading.

Key Facts

• 1 person in 10 (around 800,000 in Scotland) is thought to be Dyslexic to some degree and of these, 1 in 4, could be severely Dyslexic

• Dyslexia exists in all cultures and across the range of abilities and socioeconomic backgrounds. It is a hereditary, lifelong neurodevelopmental condition.

• Dyslexia can occur at any level of intellectual ability and difficulties can range from mild to severe.

• Individual profiles can be very different, each with strengths and weaknesses.

• Dyslexic people often have natural talents, creative abilities and vision.

• Early recognition, appropriate timely intervention, good structured multi-sensory teaching and additional support for learning contribute to success.

• Undiagnosed, Dyslexia is likely to result in low self-esteem, high stress, atypical behaviour, and low achievement.
Dyslexia Definition 2009

It is not a disorder of visual acuity or motor coordination, but a condition of processing information. Dyslexia is not a disease, but a learning disability. Dyslexics may have normal intelligence and may not be typical of disabilities in their class.

Approximately 50% of dyslexics suffer from some form of visual stress.

- Font style, size (34), colour, line spacing, and large pre-printed worksheets
- Phonological awareness
- Reversing, transposing & inverting - e.g. B for D, in for an and was for see
- Inconsistent spelling - sound rulers, spelling rules
- Writing - frames, mind maps for planning
- Handwriting - variety of writing implements, Tecdemasu

Dyslexia Definition 2009

Greek Word Activity

It's all Greek to me!

Approximately 50% of dyslexics suffer from some form of visual stress.

Reading, Writing and Spelling

- Reading support
- Phonological awareness
- Reversing, transposing & inverting - e.g. B for D, in for an and was for see
- Inconsistent spelling - sound rulers, spelling rules
- Writing - frames, mind maps for planning
- Handwriting - variety of writing implements, Tecdemasu

ICT

- Kidspiration/Inspiration
- Co-writer
- Penfriend
- Clicker 5
- Word Talk
- Comic Life
- Word and Number Shark

ICT cont'd...

- www.bbc.co.uk/schools/typing
- www.tewoonline.org.uk
- Dactyphones
- Franklin spellcheckers
- Alphasmarts, Nese, Asus eee, computers and laptops, memory pens
**Paired Activity**
- In pairs, take turns to tell your partner about your hobbies.
- You CANNOT use the sound ‘s’.

**Further Challenges**
- Word retrieval
- Short-term memory
- Instructions
- Organisation
- Concentration

**Numbers and Sequencing**
- Number skills - remembering number bonds
- Layout e.g. algorithms - a look at examples of algorithsm
- Arithmetic symbols and language
- Directionality - reverse, transposing figures e.g. 56 for 65
- Sequencing - alphabet, days of week, months of year, times tables, telling the time

**Motor Skills & Co-ordination**
- Fine Motor Skills/Handwriting - pencil grasp, sloping lines, brown lines, finger grasp, stress balls/strips
- Gross Motor Skills - Perceptual Motor Programme
- Hand-eye co-ordination & left/right confusion

**Tips and Strategies**
- JC Pizarro - Practical tips for supporting pupils with dyslexia.

**And finally...**
- When I was about 7, I had been labelled ‘dyslexic’. I’d try to concentrate on what I was reading. Then I’d get to the end of the page and find I’d forgotten what I was supposed to read. I would go back, but it would all make no sense. That was when I’d give up, frustrated, drooling.

*To Cruze*
*When I was young in my early grade school days, I never really felt I was dyslexic. I stopped being absolute of my disability. It just made a sense of pride. I had never experienced before. I 2000s I now finally getting it. I’ve always had a hard time reading my books. But this made me feel like I was wrong. Thank you. Yes. This was never thought of as a person. And because of dyslexia and all the dealing in person, I realized I had potential to do great things. Just knowing that I can consider and do things without me, and it makes everything great in my life.*

*Shay Haas*
Appendix 14

Autism Spectrum Disorder
- 1 in 64 children in the UK have ASD - recent study conducted by Cambridge University
- 1 in 100 children in the UK have ASD - National Autistic Society (NAS)
- Whatever the figure, it is a significant number!

Welcome
Caroline Bingham
Class Teacher
Edinburgh Academy Junior School

Kirsten Duncan
Support for Learning Teacher
Loanhead Primary School

Aims of today’s session
- To help you understand – what is ASD?
- To help you understand how it feels to have ASD
- The way forward – to provide some strategies and tips

Autism Spectrum Disorder
- In groups of 4, brainstorm what your initial thoughts are when you hear the term ‘Autism Spectrum Disorder’.

Triad of Impairments

Blue Bottle Mystery
An Asperger Adventure
by Kathy Hoopman
Where did it all go wrong...?
- Be specific – ‘Sun, stop that!’
- Be tolerant of different behaviours, e.g., hand-fapping
- Be aware children not trying to be smart – but accurate (pen/pencil and spitting)
- Be conscious that eye contact may be painful and may distract a child from absorbing information

Choose your words carefully – may be taken literally. What did address her mean?” and “Where was the last straw?”
- Close proximity can be uncomfortable
- Belongings can be extremely important, almost in an obsessive way, e.g., B笛a ruler
- Frustration can build up quickly and lead to loss of control

Think about what you say...
- Just a sec!
- I’ve told you 100 times not to...
- I’ll be with you in a tick 😏
- Pop that on my desk
- That’s a piece of cake
- We’re all dropping like flies around here 😖
- You’ve got everything but the kitchen sink in that bag 😥
- Hold your horse!
- I’ll keep an eye on you 😘
- I’m just pulling your leg 😈

Paired Activity
- Find an elbow partner
- Choose one person to be the ‘communicator’
- Communicator should now open envelope 1 and follow instruction a:
- After instruction a swap roles – the new communicator should now open envelope 2 and follow instruction b
- Now repeat for instruction b

How was it for you?

Sensory Sensitivity
- Hypo
- Hyper
But remember...

- Often people on the Autism spectrum do not want to be ‘cured’. They just want to be accepted.

- However, they do have to live in a world that is confusing to them so we have to help them along.

Final Thought...

"Educating people about difference is key – everyone has a part to play in making the world a fairer place, where difference and diversity are celebrated."

Caroline Underwood
Head of Education at S Gupta
Appendix 15
Dyslexia Workshop - 12 children

1. Getting to Know You - Icebreaker - interview your neighbour & find out: their name, class, 1 thing they are good at and 1 thing they feel they need help with. Be prepared to report back to the group. (10 mins)

2. What do these people have in common? - 3 groups of 4.
   3 slides (children discuss in their group 1 slide at a time and feedback) - 5 minutes per slide (15mins)

3. Powerpoint presentation to explain Dyslexia to the children. (10mins)

4. Dyslexia Awareness Activities -
   a) In pairs - 3 pairs take part in Kim's Game with words whilst the other 3 pairs take part in number Memory Game then swap over (10mins)

   b) Whole group back together (in pairs) to take part in the Blurred Words activity plus Background and Font Changing (5mins)

   c) Split into 3 groups again to take part in: Lateral Thinking Puzzles (10mins)

   d) Paired Activity - Matching famous person to obstacles experienced (15mins)
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Details</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamie Oliver</td>
<td>Famous chef and celebrity</td>
<td>Didn’t do well at school. People though he was ‘thick’.</td>
</tr>
<tr>
<td>F W Woolworth</td>
<td>Famous for starting the ‘Woolworth’ chain of shops</td>
<td>Was told by his employers at the shop that he worked that he was not good enough to serve customers.</td>
</tr>
<tr>
<td>Richard Branson</td>
<td>Famous entrepreneur (someone who comes up with a new idea and turns it into a successful business)</td>
<td>Being dyslexic has helped him in the business world – he sees some things more clearly than other people.</td>
</tr>
<tr>
<td>Ludwig van Beethoven</td>
<td>Famous Composer (someone who writes music)</td>
<td>Achieved his greatest work after the age of 46, by which time he was completely deaf.</td>
</tr>
<tr>
<td>Alexander Graham Bell</td>
<td>Famous for inventing the telephone in 1876</td>
<td>Was told after a meeting with the President, ‘that’s an amazing invention, but who would want to use one of them?’</td>
</tr>
<tr>
<td>J K Rowling</td>
<td>Famous Writer</td>
<td>Was put in the ‘stupid row’ when at primary school, later, as an unemployed and struggling single parent, wrote on scraps of paper in an Edinburgh café.</td>
</tr>
<tr>
<td>Albert Einstein</td>
<td>Brilliant Physicist (type of scientist)</td>
<td>Didn’t speak until he was 4 and didn’t read until he was 7. His teacher described him as ‘mentally slow, unsociable and adrift forever in his foolish dreams’.</td>
</tr>
<tr>
<td>Robbie Williams</td>
<td>Famous singer</td>
<td>Enjoys writing songs and tried to get into reading but just can’t get into that ‘book thing’.</td>
</tr>
</tbody>
</table>
5. Drama scenario  (15mins)

(Teacher, Child and Parent come forward)

Teacher: Good Afternoon Primary 4

All children: Good Afternoon, ______________________

Teacher: Oh before you go ______________, remember you have your project to finish off tonight and your trip letter needs signed. Swimming tomorrow so wear your tracksuit and remember your goggles this week! Have a nice evening - see you tomorrow.

Child: See you...

Teacher: Oh could you take this letter to the office on the way out and ask them to photocopy it for every teacher in the school?

Child: (weakly) OK.

(Child arrives home)

Parent: Nice day at school dear? Now what homework have you got to do? Where’s your PE kit? Now don’t put those dirty shoes there. Anything important to tell me?

Child: Important…. Em…(thinks out loud) finish off…. The office… oh yeah! I need you to sign my trip letter.

Parent: What trip letter? I’ve already signed it. It’s in your bag. Did you not give it to your teacher today? What was the last thing I said to you this morning? (sigh)

Child: (sigh) I feel as though I can’t get anything right.

6. Plenary (5mins)

Resources
Laptop and projector, Powerpoint - famous dyslexics, Pastel paper, Labels, Pencils, Powerpoint - Dyslexia explanation, Kim’s Game - laminated words, Number Memory Game - 3x whiteboard, duster, pen, Blurred Words Activity - Powerpoint slide, labels, Lateral Thinking Puzzles - Selection from lateral thinking puzzle website, http://school.discoveryeducation.com/brainboosters/, Instructions - Written on paper, marker, quoit, beanbag, hoop etc. Paired Matching Activity - laminated cards, Timer.
Appendix 16

Autism Awareness Workshop - 12 children

1. **Getting to Know You - Icebreaker** - interview your neighbour & find out: their name, class, 1 thing they are good at and 1 thing they feel they need help with. Be prepared to report back to the group. 

   (15 mins)

2. **What do these people have in common?** - 3 groups of 4.
   2 slides (children discuss in their group 1 slide at a time and feedback) - 5 minutes per slide

   (15 mins)

3. **Powerpoint to explain about ASD**

   (10 mins)

4. **Frustration** - in pairs, children are given instructions on cards. They have to get their partner to understand the task without speaking or showing your partner the card

   **Tasks**
   a) list of instructions
   b) communicate (without talking) that you do not have a pencil to write with

   Feedback to group and discussion on how frustrating it felt to try and explain to someone and also to understand what someone else is trying to communicate.

   (15 mins)

**Communicator 1 Task Card**

Before your start, find a space in the room

a) Ask your partner to do the following, **WITHOUT USING WORDS (NO MOUTHING OR WRITING WORDS):**
   - Clap their hands twice
   - Touch their toes
   - Turn around
   - Touch their nose
   - Take 3 steps to the left

Write down their favourite colour

b) **Indicate to your partner that you are feeling frustrated** **WITHOUT USING WORDS (NO MOUTHING OR WRITING WORDS)!**
Communicator 2 Task Card

WITHOUT USING WORDS (NO MOUTHING OR WRITING WORDS)

a) Communicate to your partner that you do not have a pencil to write with

b) Indicate to your partner that you are feeling embarrassed WITHOUT USING WORDS (NO MOUTHING OR WRITING WORDS)!

5. Drama scenarios –
   a) Supermarket
   b) School eye contact
   c) Crying at not being first in line
   d) Playing on own in playground

(15mins)

Scenario 1 - (3 people) - In the Supermarket

- Child with ASD
- Parent
- Onlooker

Child with ASD: You squeal, cry and lie on the floor having a tantrum. You want bread but your mum says no and you don’t understand because you always get bread - every time.

Parent: You are getting upset and trying to quietly talk to calm your child but it’s not working.

Onlooker: You hear a squealing and crying noise from the next isle you run to investigate. You see a boy screaming for some bread. He is having a tantrum and his mum is finding it difficult to control him. You stand and stare then start to laugh.

Scenario 2 (3 people) The Classroom

- Teacher
- Child with ASD
- Other pupil in the class

Teacher: You are giving a pupil in your class instructions on how to complete a task. He will not look you in the eye when you speak to him. You tell him, “Look at me when I am talking to you!”

Other pupil: In the class observing this going on. You start to laugh and look at you friends

Child with ASD: You cannot look the teacher in the eye you sit looking at the floor and don’t answer the teacher
Scenario 3 (3 people) Lining Up at school

- Teacher
- Child with ASD
- Other pupil in the class

Other pupil in class: You have been playing outside at playtime and the bell goes to line up. You are first in line but another pupil in your class starts crying because they are not first in line.
Child with ASD: You are crying because it’s hard to cope with not being first
Teacher: You come along to find a child crying you tell them to “Stop being silly it’s not important who is first in line”

Scenario 4 (3 people) The Playground

- Child with ASD
- Pupil 1
- Pupil 2

Pupil 1 & 2: You are playing together in the playground at playtime and you notice a child playing on his own, chatting to a stone. You point, laugh and run away
Child with ASD: You are sitting alone chatting to a stone

6. Autism Awareness Activities -
   a) Writing Task - copy down information from board (we provide a sensory overload)
      sight - switching off, shining torches;
      sound - annoying music/instruments
      smell - TCP sprayed onto tissues & air freshener
      touch - feathers
      (10mins)

   7) Read story from powerpoint called, ‘Jack’ to children to explain further about ASD and discuss.
      (See appendix 11 for script)

Resources
Laptop and projector
Powerpoint - famous autistic people
Pastel paper
Labels
Pencils
Story of Jack
Torches
Sound effects
Feathers
TCP, tissues and air freshener
Laminated task cards for task 5
All the children in our school are different. Some are very tall, some are very short and some wear glasses. One boy can’t speak English very well because he comes from another country where they speak a different language. This year we have Jack in our class. He has a hidden disability called ASD.

The teacher says that Jack hears, sees, smells, feels and tastes things in a different way from us.

When he hears a lot of noise he gets very anxious and covers his ears so he can’t hear. It’s best for us to leave him alone or take him away from the noisiest place.

When the teacher changed her perfume nobody noticed except Jack. He moved away every time she came near him and said, “YUK”!

At school dinners Jack got upset when his peas touched his mince. The school dinner ladies now give Jack peas on a separate plate.

Sometimes when we cry because we have hurt ourselves or we’re feeling sad. Jack laughs. The teacher says that Jack doesn’t understand that we are sad and thinks that we are messing around and joking. Someone now comes to school to help Jack understand other children’s feelings.

Jack always wants to sit on the same chair and at the same table. If someone else sits in his place he gets very cross and very, very worked up. He also likes to do the same things at the same time of day. If our timetable is changed suddenly Jack can get upset. Our teacher now tries to prepare him for any changes like this.

There are many things that I like about Jack. He knows everything about Star Wars. He is a computer whizz kid and he helps me with my Maths when I am stuck.

It’s nice because this shows that we are all really different and we have to understand that we can do some things well but have to work harder at other things. Jack, and other children like him, needs understanding, patience and acceptance.
Health and Wellbeing Workshop

Thank you for taking part in the Health and Wellbeing Workshop and presenting an assembly on hidden disabilities to the whole school.

You made a great contribution to the group.

Well Done!
Appendix 19

Hidden Disabilities Pre-Workshop and Assembly Observation Log

Please use this next section to record any relevant observations you notice during the next 2 weeks, following the workshops and assembly. Please include any positive or negative information and also note if there have been no changes in behaviour. Observations could include: topical discussion; changes in tolerance, empathy and acceptance towards a child with a hidden disability or anything else that you may notice.
Appendix 20

Definition formed in 2009 between Scottish Government, Dyslexia Scotland and a Cross Party Group

Dyslexia can be described as a continuum of difficulties in learning to read, write and/or spell, which persist despite the provision of appropriate learning opportunities. These difficulties often do not reflect an individual’s cognitive abilities and may not be typical of performance in other areas.

The impact of dyslexia as a barrier to learning varies in degree according to the learning and teaching environment, as there are often associated difficulties such as:

- auditory and/or visual processing of language-based information
- phonological awareness
- oral language skills and reading fluency
- short-term and working memory
- sequencing and directionality
- number skills
- organisational ability

Dyslexia exists in all cultures and across the range of abilities and socio-economic backgrounds. It is a hereditary, life-long, neurodevelopmental condition. Unidentified, dyslexia is likely to result in low self esteem, high stress, atypical behaviour, and low achievement.

Learners with dyslexia will benefit from early identification, appropriate intervention and targeted effective teaching, enabling them to become successful learners, confident individuals, effective contributors and responsible citizens.