

'Stand-out Boys': early intervention in schools

SUMMARY

Boys underachievement has been a concern for some years, and while there have been many strategies and interventions attempting to close the gender achievement gap they have tended to be classroom-based and within Secondary education (11-16).

This description gives the reasons behind a reception class (4-5-year-olds) intervention targeting boys that 'stand out' in their first year at school. This intervention targets boys in reception and year one who 'stand out' because of their behaviour and aims to develop the skills they require to learn and achieve within the classroom. However, the approach not only targets the boys, but their parents and the teachers whose classes they are in. The approach has a strong evidence-base and uses recent neurological findings of gender and general development, as well as a more 'practical skills' model, that parents and teachers are more willing to engage with than other approaches.

This initiative has been trialled and evaluated in Lewisham (South London) Primary Schools, funded by the Paul Hamlyn Foundation (2012-14), and aims to integrate the approach into other interested Primary's.

What we are trying to solve

Girls continue to outperform boys at all levels of education in the UK from Key Stage 1 to higher education (ONS, 2011). Boys are four times more likely to be permanently excluded from primary school than girls (DfE, 2011a) and at least four times more likely to be diagnosed with Attention Deficit Hyperactivity Disorder (NICE, 2008). Aged five, girls are ahead of boys in all seven of the Early Years Profiling measures with 68 per cent of girls achieving six or more points compared to 50 per cent of boys (DfE, 2011b). There is at least a 10 per cent achievement gap between boys and girls from Early Years through to A Levels. Boys are heavily overrepresented in the bottom 20 per cent; only a quarter of this quintile are girls (DfE, 2011c).

Of course, this does not refer to all boys. Connolly (2004), analysing achievements concerning gender, social class, race and ethnicity concluded that while they are all significant individually, it is cumulatively where they develop the problems above.

Cassen & Kingdon (2007), delving into the National Pupil Database, concluded that 'low achievement may start in the home. A difficult home life or unsupportive parents can give a child a poor start.' They also suggest that if these difficulties are identified early enough, and treated effectively, underachievement can be counteracted. Morris, Nelson & Stoney (1999), reviewing the literature, found that it was the cumulative impact of risk factors, including poverty, low achievement and poor school attendance that led to poor outcomes for young people. Ripley & Yuill (2005) and Cross (2009), found a significant link between underachievement and poor verbal and communication skills.

Schools have been reporting an increasing number of children arriving without very basic skills (even allowing for some children arriving in school at an ever-younger age), whether this is language (National Literacy Trust, 2005) or being potty trained (ATL & ERIC, 2012). There have been concerns about the level of primary school exclusions since the mid-1990s (see Parsons, 1994, and Ofsted, 2009) and more recently there have been reported exclusions as young as Reception class (see TES, 2008 and Guardian, 2009).

Moffitt (2003) has made a distinction between 'early starters' and 'adolescent limited' in terms of antisocial behaviour trajectories, with the 'early starters' having the most negative long-term prognosis. Moffitt argues that if this is not arrested early then the behaviour becomes automated leading to peers and adults rejecting these children.

In a summary of the evidence of pupil behaviour in schools in England (DfE, 2012), it was found that 'low-level frequent disruption' is the most common pupil misbehaviour. In an online survey completed by 1,945 primary school teachers, Derrington (2008) found that almost half encountered 'low-level disruption' (such as inappropriate talking, calling out, being out of their seat and having difficulty following instructions) regularly, but only from a 'small handful of pupils'. Two-thirds of these teachers believed that pupils' behaviour has deteriorated during the time they have been teaching. These findings reinforce previous and more recent studies and surveys – see for example Wilkins *et al* (2006) and the Association of Teachers and Lecturers (2011).

We have concluded from these studies that if we are to address behaviour-related difficulties which impact negatively on children's achievement then we will need to take into account home-life as much as school. It is also apparent that early identification and intervention is more likely to be effective. We have also concluded that underachievement; behavioural difficulties and related issues of exclusion and anti-social behaviour are disproportionate within some boys, but not all.

There has been a commonly held view within early years that boys come into school trailing girls particularly in communication and fine motor skills, and that boys 'catch-up' when they are aged eight and nine (Bidulph, 2003) and Palmer (2009). However, recent studies suggest that an increasing number of boys are not catching up, with a third of 11-year-olds ... still not doing well enough in the three Rs. One in 10 boys leaves primary school with the reading age of a seven-year-old; one in 14 boys leaves primary school with the writing age of a seven-year-old (DfE, 2012).'

From our observations within primary schools and from these trends we have developed an intervention that aims to ensure that boys who 'stand out' within KS1 (Reception and Year One in particular) because of their behaviour and lack of learning-related skills are targeted as early as possible.

What is behind what we did?

The project's approach draws from the literature in the following areas:

a. Early intervention

Early assessments of child development have shown to be reliable indicators of future outcomes. So, for example, scores at 22 months can be accurate predictors of educational outcomes at 26 years (Plewis, 2004) and assessments of boys aged three have indicated those at risk of criminal convictions (Hawkins *et al*, 2000).

The causal link between poverty and low educational achievement is strong and well established. Goodman & Gregg (2010) report 'that educational deficits emerge early in children's lives, even before entry

into school, and widen throughout childhood.' Even by the age of three, there is a considerable gap in cognitive test scores between children in the poorest fifth of the population compared with those from better-off backgrounds. This gap widens as children enter and move through the schooling system, especially during primary school years.

Analysis of the Millennium Cohort Study (2012) showed big differences in cognitive development between children from rich and poor backgrounds at the age of three, and this gap widened by age five. There were similarly large gaps in young children's social and emotional wellbeing at these ages.

While there is, of course, a risk of labelling children before they are walking and talking, these early assessments can be very effective indicators for the need of early intervention. The evidence also suggests that the earlier the intervention the more effective it can be in 'breaking generational cycles of underachievement and disadvantage (Allen, 2011a).'

Gross (2008) makes a strong case for seeing the first 10 years as a window of opportunity to enable children to catch up quoting Feinstein and Bynner (2008), who found that children who were poor performers at the age of five, but managed to become high performers by the age of 10, were as successful in adulthood (looking at factors such as educational success, wage levels and criminality) as if they had never been underperforming at age five.

Early intervention has become an important element of the current government's thinking, at least in part because of its potential for financial savings (see Allen & Duncan Smith, 2008 and Allen, 2011b). Taylor (2012), the government's 'expert advisor on behaviour' has recently encouraged schools to address lateness and absences in Reception classes, highlighting that these early patterns are thought to lead to later truancy and absenteeism.

b. Nature, nurture or both?

It is hard to address issues related to behaviour without running up against the nature or nurture debate in the literature. However, more recent developments in brain scanning and neuroimaging have allowed

neuroscientists to observe changes in the brain as a result of action and activity and have generally concluded that babies' brains become connected and operational as a result of the right stimulation (Shore, 1997 and Stiles & Jernigan, 2010).

The dynamic relationship between nature and nurture directly affect the way that the brain is 'wired'. Repeated experiences lead to stronger connections and pathways being formed and the brain becoming more permanently structured.

The longer that areas of the brain are left unconnected, the harder it is to link them up and the more difficult it is to create these pathways. So, if a child has not been spoken to regularly, the longer this continues the harder it becomes to spark and connect and if left for too long, the neurons will die away. Of course, what also happens is that babies/children develop other ways of coping. So, if a child develops a series of finger points, grunts and other ways of communicating rather than speaking, then the speech sparks and links have to be stimulated while the alternative habits will need to be stopped and replaced. The longer the habit has been in place the harder it will be to break and replace.

In terms of our model of working, this suggests that intervention (experience) can quickly have an impact on children's behaviours and habits if it is consistent and repetitive. Neuroscience also suggests that children's brains have more 'plasticity' and therefore the earlier the intervention the more impact it is likely to have.

c. NEW theories about gender

Early years and primary education have generally understood gender differences as biology- and physiology-based. However, there has also been a commonly held view that girls have an initial cognitive advantage due to their reaching physical maturity at an earlier age, but that boys overtake girls in the teenage years (Shelton, 2007). Brain size; right and left sides of the brain; differences in bridging structure between left and right; communication, spacial awareness and fine motor skills; different rates of maturation; differences in language development; hormone differences and bursts of testosterone (for boys) have all been

highlighted as gendered (see for example Gurian, 2001; Kilmartin, 2006; and Macoby, 1998).

Within early years, in particular, these biological understandings have tended to be taken as fact leaving many practitioners with a view that nothing can be done about boys' general slow development except wait for them to catch up. So when by far the majority of children who have speech delay are boys, this is just taken as biological and developmental-based and therefore something that will change given time.

This has led to some discussion about whether boys go to school too early, with suggestions that because boys' fine-motor and cognitive skills develop more slowly, seven is a much more appropriate starting age (Bidulph, 1998). One extension of the biological understanding is that if boys and girls are brain-different, surely they learn at different paces and in different ways, which has, in turn, spawned a significant literature on gendered learning styles (see for example Noble & Bradford, 2000 and Bleach, 1998).

While these have been the commonly held views, the fact that delay is only the story for some boys, not all, is rarely addressed. Developments in neuroscience have undermined the nature/nurture debate and in turn many of the commonly held views about gender difference (Fine, 2010). While the interaction between genes and experience is still not understood (see Rutter 2010), the preoccupation with nature or nurture has receded to be replaced by an interest in how these interact, rather than which one is dominant.

d. Filling in some gaps

We have recently carried out two investigations in an attempt to identify boys and the barriers that emerge early in boys lives to their achievement.

There has always been a view in the early years that boys come in behind girls and 'catch up' when they are 7 or 8. This year provides 5 years of levelling data in primary, so one of our schools allowed us to look at their data for year 6 (year 1 to 6 data) and year 5 (reception to year 5).

While there was very little evidence of a catching up across either cohort, some interesting trends emerged when we looked at the top 20% and the bottom 20%. The top 20% of boys progressed the same as the top 20% of girls with at least two sub-levels per year and not surprisingly this was a steady progression.

In contrast, the bottom 20% had more boys (no surprise there), but progress was erratic and certainly no indication of 'catching up' in fact the bottom 20% in reception and year 1 were the bottom 20% in year 5 and 6. The school received a good with outstanding features in its last inspection.

The second investigation we carried out started with the identification of boys who are already underachieving in year 6 (across four schools). Most were in level 2 territory, and not with a diagnosis or identified learning difficulty. We purposely went for those that exhibited challenging behaviour within the classroom and had difficulties engaging with the curriculum.

We read their previous reports and looked particularly at their reception and year one end of year reports. What emerged were combinations of characteristics that significantly contributed to their current behaviour (in year 6). Five were recurrent:

High physical (always keen to go out and confident climbers)
Low verbal (limited vocabulary and/or reluctant to use what they have)
Non-compliant (reluctant to do what was asked even when it was the most basic instruction "everyone to the carpet please")
High Emotion (usually angry and/or sulky)
Poor social skills with other children.

e. Skills-based approach

Our skills-based approach has drawn from Piaget's constructivism (extracting knowledge and meaning from an interaction between experiences and ideas); Vygotsky's (and of course others') brand of learning occurring when speech and practical activity interact; Kolb's and Lewin's models of experimental learning; kinesthetic learning styles; and a straightforward life skills approach, where the focus is on the product (skills learned) and not the process of learning.

It also helps the boys as we are teaching skills (such as concentration and self-control) through simulation, rehearsal, offering a challenge and practice leading to habit. Too often professionals use approaches and methods with boys that they find difficult. For example, some talk-based approaches expect reflection on behaviour, a skill set that many of the boys targeted seem either to lack or have not fully developed.

f. Focus on parents and teachers

Most initiatives targeting boy's behaviour within schools are targeted at only the boys. This is despite the strong evidence that suggests that changes at home come into school while changes at school do not always go home. Parents are a critical part of making changes in the classroom. Ofsted (2009) looking at the exclusion from school of children aged four to seven concluded that: 'Relationships with parents were pivotal in preventing or reducing exclusions.' Izzo *et al* (1999) found that the more parental involvement there was in children's schooling the more significant were the improvements in school functioning.

Carter-Wall and Whitfield (2012) in their review of the literature found that when interventions focused on parental involvement and had 'a clear focus on providing information, support and advice to parents and children', they had a more positive impact.

The EYFS Statutory Framework (p10) states:

'Close working between early years practitioners and parents is vital for the identification of children's learning needs and to ensure a quick response to any area of particular difficulty. Parents and families are central to a child's well being and practitioners should support this important relationship by sharing information and offering support to learning in the home.'

Our experience (within our ABC programme) is that parents engage much more readily when their son's development, and not their parenting, is the focus and if it is made very clear to parents how important they are in the process of enabling their sons to develop the required skills.

Family background and previous experience are secondary to what is observable within the classroom and the wider school setting. The rationale for this is that getting involved too much in 'background' too often distracts us from our main task of sorting out what is happening in the classroom and the school as a whole. Identifying the skills sets that boys lack and finding ways to develop these keeps our focus narrow. Concerns about whether we are addressing symptoms or problems are important, but we will address these later.

This approach also makes it easier for parents, by focusing on their sons' skills (and not on their parenting) and finding tangible skills-based solutions without having to look at family dynamics or deficiencies.

g. Context is everything

From our observations and projects targeting boys, we are of the view that, with some boys, context is everything. A conversation with a boy on his own can lead to a lot more being said than if he is with his friends. Within secondary school staff rooms the same boy can be described as 'actively involved, with opinions, but a bit challenging' through to 'difficult, with attitude and non-compliant' by different teachers on the same day. We have also been told by mothers, when their boys are around seven years old, that he will negotiate the behavioural pattern at the school gates, often asking for his mum to kiss and hug him while in the car (or even at home), but allowing him to walk into school alone. This suggests the development of a 'public' and 'private' split for some boys, where the public way they are perceived becomes a stronger consideration (Lloyd, 2004).

What we have learned

This project is a culmination of three of our initiatives. It borrows from our programme targeting parents who have sons (About Boys Course); our courses supporting boys in Key Stages 1 & 2 with behavioural issues, and those helping teachers to get the best out of boys.

We are approaching the issue with a strong understanding of gender. Not as a stand-alone issue (ethnicity, poverty and social exclusion are also very important – see Connolly, 2004), but informed by what 'works'

with boys. We are drawing from over 20 years' experience of working directly with boys and developing some simple techniques that parents and teachers have found very useful in both understanding and engaging with boys, especially those boys who have difficulties controlling their behaviour.

What we have delivered

Critical elements of the intervention

1. Early intervention and prevention (addressing the issue as early as possible by identifying children who stand out and are not settling in school).
2. Co-ordinated approach (involving parent, teacher and targeted child) with regular reviews.
3. The use of practical strategies (to build the required skills sets) developed within previous BDP projects.
4. A skills-based approach (rather than therapeutic or behaviour management).
5. An approach informed by an understanding of gender and more recent neuroscience findings in terms of brain plasticity and how behaviour changes.

We initially identify boys who stand out in the classroom because of their behaviour and their difficulties in engaging fully with their learning.

Through targeting these boys we expect to teach them the skills they need to focus on their learning. If this happens across all classes in Key Stage 1 this will not only impact on the lower school, but also ensure that children go up through Key Stage 2 (and beyond) with fewer behaviour problems and stronger learning habits.

With most schools reporting an increasing number of children arriving lacking very basic skills, we have found schools both receptive to the project's aims and approach.

We have of course been very wary of overstating what we are dealing with. Parents and indeed teachers of five- and six-year-old boys are often concerned about labelling boys, which is a concern we share. We talk to both teachers and parents about boys who stand out, who have not settled and who need to learn skills that will enable them to make

the most of the classroom. We want to raise parents' awareness enough so they can address the development of skills without over-concerning them that there might be something 'wrong' with their son. We talk about 'preventing' future difficulties and 'addressing this now, to avoid bigger issues later'. Language has been important, but has also needed to be defined.

A child who 'stands out' is one who we will notice within 10 minutes of impartial observation in a classroom. This might be because they are asked to stop doing things by the teacher more often than others. Asked to stop, but don't; find themselves in conflict with others; playing alone; reluctant to engage with others; say very little when others talk directly to them and do not contribute to conversations during play and become upset too easily. They may be able to do some of these some of the time, but not consistently. We give children three weeks to settle into the classroom routine before asking teachers to identify those who stand out.

'Has not settled in the classroom', means that the child hasn't started to make friendships with other children and does not have a relationship with adults in the room. This child is reluctant or unable to give and take; unable or unwilling to negotiate, and does not look comfortable for significant periods.

After a conversation with a teacher about identifying a child who stands out and what makes them do so, we observe them in the classroom and sometimes the playground. We have tended to focus on four particular areas:

1. Discipline and boundaries (ability to take instructions from the Teacher and act upon them in several settings such as during carpet time; free play; playground; structured table activities);
2. Relationships with adults (ability to engage with adults in an appropriate way, within play and more formal instructions);
3. Relationships with other children (ability to play; deal with conflict; learn with others; take turns; communicate; and concentrate on an activity alone);
4. Communication with a broad enough vocabulary with other children and with adults enabling learning to develop.

While other issues were raised by teachers and observed in the classroom may be addressed, a number of boys who stand out, do so for reasons within these four distinct categories.

After contrasting our observations with the teacher, we will meet with parent/s and discuss the areas we have seen in the classroom. We then ask whether they are seeing the same at home. Our primary focus is the classroom as this is the very narrow context we are interested in, however parents' views and experiences are very important.

Teachers (especially during Key Stage 1) are more reluctant to raise concerns with parents until or unless there are major incidents to discuss. If and when these occur, it is easy for the parent to become more defensive, which can easily lead to a poor relationship between school and parents.

The assessment culminates in the identification of skills the boy needs and how these will develop. Neuroscience and an understanding of plasticity help's us understand that repetition and consistency are critical elements if habits are to form. We have done this in part by addressing the issues in three closely related ways:

1. To involve parents (primarily because evidence suggests that changes at home come into school, but changes at school do not necessarily go home). This implies that if discipline (for example) is changed at home, then it will be seen quickly within the school;
2. To support teachers in the way they address the behaviour of targeted children. The classroom (and playground) are where these children find it difficult to operate, and therefore we think teachers must play a critical role in developing these skills;
3. While we may take children out of the classroom for specific sessions there will always be very practical. Children generally in Key Stage 1 find reflection and anything outside of their experience difficult to learn from. The children that stand out find this particularly so. We set practical challenges to help children experience different ways of responding.

After a thorough assessment process, three to four specific areas are identified. These may be parents delivering appropriate methods of discipline (often their methods are either too harsh or too soft); teaching

boys self-control techniques, and providing teachers with methods to ensure boys understand what is expected of them. Our project outcomes are the targeted boys, their parents and schools.

For the boys: an increase in their skills for learning (based on the skills deficits identified); an increase in their achievement levels; a significant reduction in the number of behaviour-related incidents within both the classroom and the playground.

For the parents of boys: an increase in their confidence both to understand their sons and to deal with their behaviour and learning (discipline and boundaries; motivation and communication); an increase in their involvement and engagement with their sons' learning in and out of school (parental involvement is a known critical factor in children's achievement).

For the school: increased engagement of targeted boys (and their parents) in their classroom learning; a significant reduction in classroom incidents; less teacher time spent on behaviour-related incidents and a significant reduction in senior staff time spent on targeted boys' behaviour and the consequences of this behaviour.

There is a direct relationship between all of these and the classroom. So, a change in discipline and boundaries at home, will have a direct impact on the classroom. For example, the first three reception / Year 1 boys all experienced over-harsh discipline at home (shouting and threats of hitting even if there was no actual contact) and much more 'talk-based' discipline in the classroom (being asked rather than instructed to do something and the reasons explained). The main problem was the sharp contrast between the two, which made the classroom-style ineffective. We advocated a firm, but softer approach at home AND a firm, but more direct approach in the classroom. The critical element was bringing the two more into line with each other to make them both effective. We are always looking for the critical elements that will have the most impact in the short and medium-term.

We have been influenced by the early intervention literature and particularly Ramey and Ramey (1998) and their efficacy principles. We have focussed on Reception and Year 1; interventions that last up to a term and a half; and those that have a direct impact on child, parent and

the teacher within the very narrow focus of the classroom. While the interventions primarily focus on boys who stand out the fact that many of these were relatively poor verbal communicators; more physical than most; African and African-Caribbean; either bigger or smaller than most and on free school meals could not be ignored. The final principle is ensuring that any gains made in the intervention period are maintained. These have been monitored closely (by the teacher) and where necessary further interventions have been made.

Trefor Lloyd

References

- Allen, G (2011a) Early Intervention: The Next Steps (an Independent Report to Her Majesty's Government). Cabinet Office.
- Allen, G (2011b) Early Intervention: Smart Investment, Massive Savings. The Second Independent Report to Her Majesty's Government. The Cabinet Office.
- Allen, G & Duncan Smith, I (2008) Early Intervention: Good Parents, Great Kids, Better Citizens Centre for Social Justice.
- Association of Teachers and Lecturers and Education and Resources for Improving Childhood Continence (2012) Survey of 848 primary school staff in the UK. Reported in the Independent Newspaper, 7th February 2012, under the headline 'More children 'not toilet trained' by school age'.
- Association of Teachers and Lecturers (2011) Boys' behaviour at school is still more challenging than that of girls, but the behaviour of both is getting worse ATL Press Release London: ATL.
- Bidulph S (1998): Raising Boys, Thorsen's, London
- Bleach K (1998): Raising Boys' Achievement in Schools, Trentham Books, Stoke-on-Trent.
- Carter-Wall, C. & Whitfield, G. (2012) The role of aspirations, attitudes and behaviour in closing the educational attainment gap. Joseph Rowntree Foundation, York.
- Cassen, R and Kingdon, G (2007) Tackling low educational achievement. The Joseph Rowntree Foundation, York.
- Connolly P (2004): Boys and Schooling in the Early Years, Routledge Falmer, London
- Cross, M (2009) Language and Social Exclusion. I CAN Talk Series - Issue 4
- Department for Education (2008) Parenting Support: Guidance for Local Authorities in England (October, 2006). Parental Involvement in Children's Education.
- Department of Education DfE (2011a) Permanent and Fixed Period Exclusions from Schools in England 2009/10.
- Department for Education (DfE) (2011) Early Years Foundation Stage profile by gender (referenced by location of pupil residence).
- Department for Education (2011c) Early Years Foundation Stage Profile Attainment by Pupil Characteristics, England 2010/11.

Department for Education (2012) Pupil behaviour in schools in England. Education Standards Analysis and Research Division. Research Report DFE-RR218.

Department for Education (2012). Government adviser calls for crackdown on primary school absence. July 2012.

Derrington (2008) Behaviour in Primary Schools: Final Report, Channel 4.

Feinstein, I and Bynner, J (2008). "Mobility in Pupils' Cognitive Attainment During School Life" in Oxford Review of Economic quoted in Gross J. Getting in early: primary schools and early intervention. The Smith Institute and The Centre for Social Justice, 2008.

Fine, C (2010) Delusions of Gender, Icon Books, London.

Guardian (2009) Primary schools suspend 14 violent under-fives every day. Rachel Williams, 31 December 2009.

Goodman A & Gregg P (2010): Poorer Children's Educational Attainment: how important are attitudes and behaviour? Joseph Rowntree Foundation, York

Gross J. (2008) Getting in early: primary schools and early intervention. The Smith Institute and The Centre for Social Justice.

Gurian M (2001): Boys and Girls Learn Differently: A Guide for Teachers and Parents, Jossey-Bass, San Francisco.

Hawkins, D. Herrenkohl, T.I. Farrington, D.P. Brewer, D. Catalano, R.F. Harachi, T. and Cothorn, L. (2000) Predictors of Youth Violence. Juvenile Justice Bulletin, U. S. Department of Justice. April 2000

Izzo, C.V. Weissberg, R.P. Kasprow, W.J. and Fendrich, M. (1999) A Longitudinal Assessment of Teacher Perceptions of Parent Involvement in Children's Education and School Performance. *American Journal of Community Psychology*, 1999, Volume 27, Number 6, Pages 817-839.

Kilmartin, C (2006). The Masculine Self. Sloan Publishing, New York.

Kolb, A.L & Kolb, D.A. (2005) The Kolb Learning Style Inventory—Version 3.1. Hap Group.

Lloyd (2004) Let's Get Changed Lads, WWM, London.

Macoby EE (1998): The Two Sexes: Growing up Apart, Coming Together, Belknap Press, London.

Millennium Cohort Study (2012) The Age 11 Study. Centre for Longitudinal Study.

Moffit, T. E. (2003) 'Life-Course Persistent and Adolescence-Limited Antisocial Behavior: A 10-Year Research Review and Research Agenda', in B. B. Lahey, T. E. Moffit and A. Caspi (eds) Causes of Conduct Disorder and Juvenile Delinquency, pp. 49–75. New York: Guilford.

Morris M, Nelson J & Stoney SM (1999): Disadvantaged Youth: a critical review of the literature on scope, strategies and solutions, Department of Education and Employment, Research Brief 169

National Literacy Trust (2005) Why do many young children lack basic language skills? A discussion paper for Talk To Your Baby campaign February 2005.

NICE Attention deficit hyperactivity disorder diagnosis and management of ADHD in children, young people and adults. NICE clinical guideline 72. (2008).

Noble C & Bradford W (2000): Getting it Right for Boys ... and Girls, Routledge, London.

Ofsted (2009) The exclusion from school of children aged four to seven,

Palmer, S. (2009) 21st Century Boys. Orion, London.

Parsons, C (1994). Excluding Primary School Children. London. Family Policy Studies Centre.

Plewis, I ed. (2004) Millennium Cohort Study First Survey: Technical Report on Sampling 3rd Edition June 2004

Ramey, C.T. & Ramey, S.L. (1998). Early Intervention and Early Experience. Vol. 53, No. 2, 109-120 American Psychologist. APA.

Ripley, K and Yuill, N (2005) Patterns of language impairment and behaviour in boys excluded from school British Journal of Educational Psychology [Volume 75, Issue 1](#), pages 37–50, March 2005.

Rutter, M (2010) Genes and Behaviour (nature-nurture interplay explained). Blackwell Publishing, Oxford.

Shelton F (2007): Too Cool for School? Why are our boys not achieving?16

http://www.grimus.or.at/helden/outcome/United%20Kingdom_english_final_version1.pdf

Shore, R. (1997) 'What have we learned?' in 'Rethinking the brain'. New York: Families and Work Institute, pp. 15-27. For further details visit

www.familiesandwork.org

Stiles, J & Jernigan, T.L. (2010) The Basics of Brain Development. Neuropsychology Review. 2010 December; 20(4): 327–348. Published online November 2010.

Taylor, C. (2012) Department for Education. [Improving attendance at school](#).

Times Educational Supplement, 12th May 2008 Rise in primary exclusions.

Vygotsky, L.S. (1978). Mind in Society. Cambridge, MA: Harvard University Press.

Wilkin, A., Moor, H., Murfield, J., Kinder, K. and Johnson, F. (2006). Behaviour in Scottish Schools. Edinburgh: Scottish Executive Social Research.