

Inspiring
Scotland



Grounds for Learning

11-18 Secondary School Play

The research behind play in schools

Matt Robinson
October 2014

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The **11-18 Play in Secondary Schools** project is funded by Inspiring Scotland through the Go2Play fund and prepared by Matt Robinson, Outdoor Learning and Development Officer at Grounds for Learning (GfL).

This report comprises of three elements:

- 11-18 Play In Secondary Schools – **The research behind play in schools**
- 11-18 Play In Secondary Schools – **Views and voices from Scottish schools**
- 11-18 Play In Secondary Schools – **Inspiration and ideas**

Enquiries, feedback and comments should be made to Grounds for Learning at gfl@ltl.org.uk or www.ltl.org.uk/scotland.

Why secondary schools?

First of all, don't take 'play' to mean anything idle, wasteful or frivolous. This is 'play' as the great philosophers understood it: the experience of being an active, creative and fully autonomous person.

Pat Kane, The Play Ethic

For most early years and primary children in Scotland, outdoor play is a regular and significant part of the school day and their learning experience.

Our early years staff understand the important role of play in nurturing children's physical, social, emotional and cognitive development. A child's early learning experience is stimulated by, and guided by inquisitive, free play. There is an understanding that the outdoors offers a deeper and broader stimulus and more space physically and mentally than indoors can.

In line with national guidance and good sense, our Scottish primary teachers have been re-introducing good quality outdoor play experiences in a variety of engaging and creative ways. Many primary children now experience opportunities to be active, curious, social and experimental in well-developed play spaces, and supported by excellent policies. These experiences then spill back into the classroom, complementing the work done there and encouraging our teachers to further use the experiences outside the classroom.

Schools who have invested in such play practices have found that the change in thinking and attitude has been larger than the physical changes to the playground. To watch children play in a space that occupies and diverts the mind, challenges the body and allows opportunities for quiet personal or social space, is to see the potential of our children as creative, confident, responsible, resilient and effective learners. The evidence and case for free play is clear and demonstrable.

At first look, our secondary age children's experience of play is radically different. This should not be surprising, as our children's mental, social and physical development into teenage years will mean different expressions of play. To understand adolescent play practice and benefits, we need to understand the stages of adolescent development and the driving forces behind them.

However, much of the difference in play experience is down to us, those in charge of the policies, attitudes promoted and spaces provided. To visit the average Scottish secondary at a break or lunch can be an enlightening experience. 'Playgrounds' are often of the bleak tarmac variety. They feature large open spaces with wind whistling through, with a few seats scattered around, laid out to look good on an architect's plan or to save some budget at the end of a build. In many, the choice of being outside is rejected, and legions sit on stairs indoors, interacting with others via social media.

The affordance of play is limited by the many rules and peers social codes. Engagement can be lacking, boredom is prevalent. By the time our pupils need to relax between revision sessions and exams, or their lifetimes work, they may

struggle to remember the pleasure and benefit that is to be gained from mastering physical activity or the de-stressing nature of fresh air and green space and the benefits from spending time in purposeful activity.

It's curious that the educational principles and wellbeing benefits that we think are so important in early years and primary years, evaporate in six weeks of summer holiday as our pupils' transition. It is equally interesting that the research into play is clear and unequivocal - play benefits health & well-being, behaviour and academic achievement.

Too many of our children are still made to spend time dull and uninspiring outdoor environments at school, and missing out on life-enhancing experiences.

And so this brings us to the starting point of this study. Are we really embracing the possibilities and benefits that play can bring to our adolescents in schools? As Grounds for Learning, we believe that play is one of the key elements that will make Scotland the best place to grow up in.

What is play?

Throughout this paper we define play as an activity that is freely chosen and directed by the participants. It is child led and managed, activity chosen for its own self, not for the sake of other outcomes or end. Once a culture of play is established, it should require the minimal of adult intervention to support the play that ensues.

What is Break?

We also refer to break and lunchtime throughout this work. This simply is the periods of time allocated for children to be in the playground or inside school, without direct teacher control. These time periods are also used for meeting the needs of the children – toilet breaks, purchasing or consuming food etc.

It is worth noting for readers outside the UK that it is usual for schools and parents here to give permission for older pupils to leave the school site during the longer lunch break, either to eat at home or purchase food outside the school canteen system.

The Right to play

Play is fundamental to children and young people's quality of life, Play is now recognised in the The United Nations Convention on the Rights of the Child, Article 31 and the Charter for Children's Play confirms this.

As part of the Scottish Government's responsibility for implementing Article 31, there are a number of practical policies and guidance in place. These include the Curriculum for Excellence, GiRFEC and the Children's and Young Peoples Bill

We want Scotland to be the best place to grow up. A nation which values play as a life-enhancing daily experience for all our children and young people; in their homes, nurseries, schools and communities.

Scottish Play Strategy of 2014

In 2013 the Scottish Government accepted the 'One Planet Schools' working groups recommendations, almost entirely. Our Government policy then is that children should encounter nature in their school grounds on a daily basis. This policy is complementary of the 'Learning for Sustainability' agenda of the Curriculum for Excellence.

The Scottish government therefore expects education managers and leaders in school to demonstrate their commitment to increasing and developing play opportunities, and practitioners to defend and support every child's right to play.

The responsibility to play

"Children's play belongs to children; adults should tread lightly when considering their responsibilities in this regard, being careful not to colonise or destroy children's own places for play through insensitive planning or the pursuit of other adult agendas, or through creating places and programmes that segregate children and their play."

Lester and Russell (2010)

This strength of policy however could present us with a problem: how to ensure that the play our children experience is not driven by the policies and attitudes of adults, but by the needs and choice of our children. Our Natural Play Project (Play Practices) is demonstrating that engaging with schools and authorities is successfully changing cultures and attitudes with great success – and that much can be done without the need for large budgets and large-scale changes to physical environments.

While there have always been forward-thinking teachers and educators who have led the way by making and using great spaces for children in schools, less progress has been made in translating this knowledge, or those examples, into general practice and design.

Senses of Places, designing Scotland's future schools (2006)

The other half of our Natural Play Project - Play Spaces - has also highlighted the challenges in the pressures of budgets, policies and attitudes that need to be addressed. The affordance of play is often significantly impacted by those whose decisions influence, but are not directly in working with children. A recurring theme is adult concerns overriding the perceived benefits of play. In addition, the cost and capacity to maintain more creative and engaging play spaces requires ongoing commitment.

A creative playground is only half a creative space; it's also a creative attitude. And we're changing attitudes as much as we're changing spaces.

Jay Beckwith

In adolescent years, the search for identity, experience and meaning leads to play behaviours that can sometimes be at odds with adults expectations. This will require us to examine what play really looks like to adolescents and accept that this may need adjustments in our thinking.

Finally, we may need to support some of our children to reacquaint themselves with the enjoyment and benefits that active, free play can bring. It is a fact of our time that we will need to support many children in developing their play skills. We need to help some children and parents to understand that free time away from adults, engaging with nature, experimenting with social play and undertaking physical activity as things to embrace, and that they will lead better lives as a result.

The benefits of play

Investing in children's play is one of the most important things we can do to improve children's health and wellbeing in Scotland.

Harry Burns, Chief Medical Officer for Scotland

Aside from the child's right to play, we need to re-enforce and remind ourselves of the benefits of play to the children participating. Much of the research, literature and imagery of play is aimed at younger ages, of children from birth to 11.

There is however an excellent body of research evidence that supports the benefits of play for children aged 11-16, as well as adults in life. This report's aim is to summarise some of that evidence, to underpin the policy with theory and evidence.

Physical Literacy & Physical Activity

Physical literacy is moving with confidence and competence in a wide variety of physical activities in multiple environments that benefit healthy development of the whole person.

Margaret Whitehead

The term physical literacy is applied to many fundamental movement skills that our children usually acquire through early childhood and primary school age. These skills are fundamental to a person's ability to take on the challenges of life – walking down streets, climbing on a bus, managing stairs and coping with varied or slippery walking surfaces for example.

Mastery of these skills leads to confidence and competence, boosting general health and wellbeing (physical, mentally, socially and emotionally). There is now growing evidence that a number of our children at secondary starting age lack basic balance, co-ordination and agility skills, as well as advanced skills such as catching or striking objects (Campbell, 2013).

Suitably stimulating playgrounds offer subtle and engaging ways of developing physical literacy. We know that providing a range of facilities and opportunities has a direct effect on children's activity levels at break. In fact, one study suggests that we can boost physical activity at break by three times, through introduction of more facilities (Haug, 2008)¹.

This physical activity increase through playground facilities is backed up by Grounds for Learning's own research that is ongoing into the 'Natural Play Project' in

primary schools in Scotland. Early results show a significant increase in moderate physical activity and movements that build physical literacy, through the provision of stimulating physical spaces and changes in play culture in staff and pupils.

We also know that the lack of physical spaces to stimulate play in secondary schools is a significant factor in the drop in measured physical activity and play that occurs. Furthermore, the culture of play and support of opportunities for physical activity at break has been highlighted as fundamental². This study goes on to suggest that the education of teachers and increasing affordance is central to increasing physical activity at break.

Changes in attitudes of staff and improvements in physical spaces, will help pupils put aside their concerns of body image, self-esteem and peer pressure and become more active (Hyndman, 2012). Interestingly, some studies show that girls are more likely to take part in this informal physical education than a PE lesson. They are happy to walk, dance and jump etc. in social groups³, and the changes to playground spaces and affordance can achieve as much as an excellent PE department.

This provision for increasing physical activity and physical literacy development needs to be balanced against the developmental stages of adolescents, where social interaction and personal images greatly affect choices in play and relaxation. Opportunities for free play should not dictate physical activity for all.

Social Development

Play allows us to develop alternative to violence and despair. It helps us learn perseverance and gain optimism.

Dr Stuart Brown

Break time for adolescents is first and foremost, an opportunity for social interaction without direct adult supervision. This then clearly is free play. The social (and physical) play that our adolescents engage with then needs to be seen in their contexts. As adults we may struggle with some of the forms of social play. There will be striking differences in the pupils as they progress developmentally, and our playgrounds and culture needs to support this.

Peter Gray in 2011 suggested that the opportunity to risk take (in a social context as well as physically) allows our children to learn how to manage their emotions and 'try out' new ways of interacting with others. Therefore, a good school playground that offers opportunity for risk in all its forms, actually offers deep learning in a social context.

² Moving Physical Activity Beyond the School Classroom: A Social-ecological Insight for Teachers of the facilitators and barriers to students' non curricular physical activity. Hyndman, Telford, Finch, Benson, 2012

³ Influences on young people's physical activity in Scotland: a socio-ecological approach, Louise Michelle Kirby, September 2013

You can discover more about a person in an hour of play than a year of conversation.

Plato

Through play and interaction our children learn skills of communication such as negotiation, co-operation and sharing as well as coping skills such as perseverance and self-control. School grounds that support smaller areas that support the opportunity for small groups of pupils to interact. These discreet spaces allow for pupils to demonstrate their emerging physical, social or intellectual skills to an audience of those whom they trust (Hughes, 2009).

The desire for smaller, discreet but visible spaces is reflected in a number of studies (McKendrick, 2005) (Hyndman, 2012) and in approaches to school playgrounds elsewhere in Europe.

It is clear that our current provision of flat, open spaces of hard surfaces (Baines, 2006) does not support this social agenda, and that significant benefits and changes in pupil behaviour can be gained through physical changes to playground spaces and general attitudes towards the affordance of play in secondary schools.

One piece of research that warrants further investigation was into the use of peer play rangers in China (Cui, 2012), that achieved changes in pupil activity level, as well as increased the variety and quantity of activities other than sedentary indoors.

Mental Health & Wellbeing

The opposite of play isn't work. It's depression. To play is to act out and be wilful, exultant and committed, as if one is assured of one's prospects.

Brian Sutton-Smith

In undertaking this research, the evidence on our adolescent's mental health and wellbeing has been troubling to read. If there was one priority area where our school grounds and affordance of play can impact our children's lives, this is it.

We know that our children now are more anxious and depressed than at any other time in modern history, with many forms of mental health disorder increasing (Twenge, 2000). We know that 1 in 10 children are affected by mental health issues, and that this increases in adolescent years. The rate of adolescent self-harm has seen a 70% increase, and rates of depression and disorderly conduct doubled towards the end of the millennium. (Young Minds UK, 2013). Accompanying this is a growth in hyper kinetic disorders (ADHD) and conduct disorders, with an accompanying fourfold increase in drug treatments in ten years (Freedom of information request, 2012).

Some of these alarming increases are now showing a slowing down in growth, however the underlying causes are back on the increase post 2008 financial crisis (Nuffield Foundation, 2013).

Three reports (Nuffield Foundation, 2013) (Twenge, 2000) (Gray, 2011) suggest that the reduction in free play, outdoors as a significant factor in the decrease in our children's mental wellbeing. Twenge and Gray relate this reduction in free time to play to a cultural shift, removing the children's ability to choose and feeling a loss of control:

Children who do not have the opportunity to control their own actions, to make and follow through on their own decisions, to solve their own problems, and to learn how to follow rules in the course of play grow up feeling that they are not in control of their own lives and fate. They grow up feeling that they are dependent on luck and on the goodwill and whims of others, a frightening feeling indeed when one realises that luck goes both ways and that others are not always dependable.

(Gray, 2011)

First used by Richard Louv in his book 'Last Child in the woods', many of the mental health issues are related to 'Nature Deficit Disorder'. The National Trust picked up on this in their 2012 report 'Natural Childhood' as an echo of one of their founder's key messages – that to experience nature is a deep human need, of benefit to our mental wellbeing.

The sight of sky and things growing are fundamental needs, common to all men.

(Octavia Hill), founding member of National Trust

Our colleagues working in the area of restorative mental health also confirm the power of accessing green spaces and physical exercise, indeed there are good resources, case studies and toolkits to support those working in the field (Forestry Commission, 2012).

Natural places are singularly engaging, stimulating, life-enhancing environments where children can reach new depths of understanding about themselves, their abilities and their relationship with the world around them.

Tim Gill

Time spent in natural places also reveals the complexity of the natural world, and fosters a sense of wonder at the creatures, the processes and the resilience of nature. The same processes in nature also reveal themselves in the risks and consequences that young people can choose to accept or reject while outdoors.

The less children play outdoors, the less they learn to cope with the risks and challenges they will go on to face as adults... Nothing can replace what children gain from the freedom and independence of thought they have when trying new things out in the open

Tanya Byron

Risk is a theme picked up by a number of studies with regard to mental health and wellbeing. We know that to choose to take on physical, social and emotional risks has a long term impact on our ability to manage our emotions (Gray, 2011). Gray suggests that for our children to manage the fear and anger than engaging with risk brings, is a deep and long lasting process that benefits not only mental health and wellbeing, but our personal ability to build relationships and hold intrinsic motivation in life.

If the rise in anxiety and depression are linked to a decline in sense of personal control, then play would seem to be the perfect remedy.

Peter Gray

Finally, play brings children in to contact with the joy that physical activity and social engagement (Gray, 2011). If we are to encourage lifelong habits of activity and strong communities, we need our children to have intrinsic motivation to play. The passion with which children speak about their break times and play demonstrates the power of enjoying an activity. This joy has a significant effect on our mental health and wellbeing, being able to lift emotions and encourage mindfulness of our emotions (Forestry Commission, 2012).

Risk in Play

Only those who will risk going too far can possibly find out how far they can go.

T. S. Eliot

Taking risks is clearly of benefit to our adolescents. We know that there are many social and mental health and wellbeing benefits to taking risks.

We also know that teenagers are predisposed to take risks (Burnett, 2010) (Gray, 2011). When faced with a lack of positive risks such sporting activities, artistic & creative abilities, travelling, making new friends, or entering competitions (academic or athletic), adolescents will take any risk. This is not a lack of judgement about the risk, but simply needing to take risks.

Adolescents with a sedentary lifestyle will also take more negative risks (Gordon-Larsen, 2006) such as smoking, alcohol, delinquency, drugs and sexual intercourse.

We also know that when elements of physical risk are introduced into school playgrounds, the incidence of accidents and injuries does not rise as we might fear (Bundy, 2009) (Play Safety Forum, 2012).

If we never took a risk, our children would not learn to walk, climb stairs, ride a bicycle or swim; business would not develop innovative new products, scientists would not experiment and discover, we would not have great art, literature, music and architecture.

Lord Digby Jones

In addition, the fear of taking risks stifles creativity – and stems from never having experienced risks and failure. Schools have an opportunity to boost academic achievement and creativity, offering deep learning opportunities free of teachers.

There is therefore a strong argument that schools should support more positive risk taking, in all its forms, as a way of reducing negative risks. Practically this means providing a playground space that supports genuine physical risk taking activities. It also means providing opportunity for more social interaction and creative art activities.

This also means re-addressing our risk management systems in the education setting, as many decisions on risk are made on the basis of avoiding liability or as reactions to one-off incidents that may or may not have happened (Brown, 2014)

Academic Achievement

Creativity becomes more visible when adults try to be more attentive to the cognitive process of children than to the results they achieve in various fields of doing and understanding.

Loris Malaguzzi

Nature presents the young with something so much greater than they are - it offers an environment where they can easily contemplate infinity and eternity.

Richard Louv

Spending time outside, in green space, or in physical activity is known to boost children's concentration and brain function.

Physical activity can have short term benefits (Council on School Health, 2012) (Hillman, 2009) and is even more pronounced in children with ADHD (Kuo, 2008).

Access to green spaces and nature has a similar effect, however its effects can last for longer and are boosted simply by being able to see nature through a window or on a screen (Kaplan, 1989)

Research in the UK also suggests that moderate physical activity, on a regular basis throughout a child's school career can also boost academic performance considerably (Booth, 2013). While this study was based on PE lessons, others suggest that the walk to school and break time are equally valid and should be a part of every schools efforts to boost academic achievement (Kirby, 2013).

As highlighted earlier in this report, many of the social and mental health and wellbeing benefits of play and risk taking also support increased academic achievement. Central to this are the ability to work effectively with others and the resilience to knowingly take learning risks in academic and cultural opportunities.

Our kids don't play

Anthropologists and observers report children play from dawn until dusk, in every country across the world. This extends from birth to teen years, across genders and cultures. Yet many studies show the decline in play across all ages, with the biggest reduction in adolescent years⁴.

Peter Gray, 2011

Our contact with Scottish schools and pupils for this study threw up some negative attitudes towards adolescent play. More than one school who refused to take part in the study commented 'our children don't play'. A few pupils at the schools visited commented that they 'don't really do anything at break' or that 'they [adults] wouldn't want us to [play]'

This attitude is not unique, and reflect many of the expectations that are placed on our children.

Studies show that there is a decrease in time available for free play, in school and out. This in part is due to the increase in adult directed activities such as music lessons, sports coaching and academic tutoring.

Today, in Scotland, it can be challenging to find groups of children of any age outside playing, in gardens, streets, parks and playgrounds. There are many complex social reasons for this, but the main issues seem to be a fear of molestation of children by strangers and the increase in traffic and traffic speeds.

Finally, we find our teenage children's attention taken by the computer games, television and online social interaction. This set of activities competes with traditional forms of free play that were outdoor, physical and social in nature. These indoor, sedentary activities also assist parents to avoid their fears about playing outdoors and fit into the smaller time periods available for free play.

The Space and Time to Play

The research on the amount of time given to play in schools ('break time') is clear, and supported anecdotally by visiting a local secondary school. Many secondary schools are nervous of longer break times being allocated, due to concerns of pupils with too much free time causing problems.

(Pellegrini, 2008)

School playgrounds are one of the few places that all children visit, on a regular basis, that are free of traffic and fears of strangers. Yet, the attitudes that have led to an increase in sedentary and 'screen based' play at home appears to pervade our schools.

Many schools in the UK have shortened school break and lunch periods. The reasons for this are varied. Studies show that there are many concerns from teachers that spare time at lunch or break leads to an increase in incidents and poor behaviour (Baines, 2006). In one rural area of Scotland the shortening of lunch break was driven by cost savings on school transport and lighting of school buildings. A number of schools questioned or visited for this study illustrated that for many secondary school pupils, there is barely enough time at break to undertake the practical functions of eating, toileting etc. This was already highlighted by (Baines, 2006) as a trend that was appearing and recognised it was worse amongst secondary schools. In light of our current financial pressures on councils, many in Scotland are considering compressing school days (via shorter breaks).

There appears to be very little up to date research into the availability of online play and social interaction in schools at break time. Anecdotally, there appears to have been a rapid and massive move towards pupils spending lunch and break times using mobile devices, computer rooms and learning resource centres to go online as a form of play. This is an area that needs more research.

It appears that our schools are in the midst of a huge change in culture regarding play. They have a student population who may never have experienced and learned what free play really is at home. In addition, the prioritisation due to increasing academic and financial pressures the time to play has reduced to a minimum.

There is also pressure on the space allocated to school grounds, and we know that in 2005, nearly 20% of Scottish secondary schools were reporting loss in their school grounds space in the last decade. 20% also reported that their grounds were too small for the purposes of learning and play.

In England the Basic Need policy is resulting in diminishing playground sizes, as populations increase. For those schools that already have restricted space, the practicalities of taking on more pupils becomes an even harder and more complex one. Many schools may feel that the only option they have is to place additional permanent or temporary classroom buildings onto their school play grounds or playing fields. This solution, whilst alleviating the capacity issue, means that many children are left with little or no space in which to learn and play outdoors.

We also know that the physical space provided is dominated by flat, hard surfaces in open spaces. Grass and 'all weather' pitches are becoming more common, but often weather or rules prevent the use of these spaces to pupils.

A policy to play

No secondary school we spoke to at the start of this process had a formal play policy that reflected the value of play at break, although all did have a series of expectations and rules in place for pupils at break.

Conclusion

Although there is more research, and hence wider acceptance, of the value of play at break and lunch for younger children, the research we do have on play for 11-18 year olds in secondary schools is clear.

Pupils who have a positive play experience at school will benefit from:

- Increased mental and physical health and wellbeing, at school and onwards through life.
- Increased social interaction and social skills, therefore building better relationships with each other and their communities.
- Increase their creativity, resilience and confidence as learners and citizens.
- A gain in intrinsic motivation to lead active and socially engaged lifestyles for life.

There is a weight of evidence to support these bold statements, and it is telling that the research is from all around the world.

The prize of healthier, happier and motivated children and young people who achieve more, is clearly worth working towards.

What play is not is a magic answer to all ills and challenges in school. What it can be is a rich experience for our children, undertaken with joy, excitement and freedom.

From this flows many benefits, from which pupils will benefit from, and in doing so assist them to be better learners and more successful citizens.

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