

# **Physical activity and children**

## **Review 8**

### **REVIEW OF LEARNING FROM PRACTICE: CHILDREN AND ACTIVE PLAY**

Final Draft

**NICE Public Health Collaborating Centre – Physical activity  
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# **Executive Summary**

## ***Introduction and methods***

This review is the eighth in a series designed to help develop guidance on a public health programme aimed at promoting physical activity, play and sport for pre-school and school age children in family, pre-school, school and community settings.

This review focuses on children's active play, and draws upon practical examples; practitioners' views; children's views; and case studies.

It investigates the following topics:

- What practitioners think works to support and increase children's active play
- What parents think about active play and risk
- What young children say encourages and discourages their participation in active play
- Practical advice about how play can help develop core skills.
- How the adverse effects of cold and wet weather can be overcome

Suitable material was identified through an iterative search of material in the National Play Library, supplemented by web searches and re-interrogation of the previous search results from the other reviews.

## ***Summary points***

### **Views of practitioners**

1. There is strong support for the principle of ensuring that children in the foundation stage are given the opportunity for regular outdoor play as part of the school day.
2. Outdoor play should provide opportunities for movement and challenge, and opportunities to play safely with natural elements
3. Children's play in outdoor space can be optimised through a number of practical measures such as: seeing the indoor and outdoor spaces as one environment; providing materials specifically for physically active play; making links to the curriculum; provide for diverse active activities; planning to take account of issues such as weather, light, wind direction.
4. The indoor environment can also be optimised for active play, through providing sufficient space; allowing freedom to move from one area to another; providing good opportunities for energetic physical movement; dividing space into active and quiet zones.
5. Adults can help to facilitate active play through: creating the right context for play in which children feel secure and still have the necessary freedom and autonomy to explore through free play; observing play and understanding children's interests, in order to guide the provision of resources and environments for play; interacting appropriately and intervening only when necessary; creating the right environment for play including materials and resources for play, as well as the actual place to play.
6. Practitioners may limit the amount of outdoor play offered to children due to a number of assumptions: that the outside is dangerous; that higher adult:child ratios are needed outside; that educators are merely supervisors outdoors, and that no learning happens outside; that the weather is a barrier; and that being outside is somehow less healthy. All of these assumptions can be tackled to increase active play outdoors.

7. There appears to be a strong consensus among practitioners that there should be much more out of hours use of school grounds.
8. For older children, play facilities are most valued when they are close at hand. If a facility is more than a few hundred metres away, regular use declines dramatically.

### **Risk**

9. Risk is an essential and healthy element of children's play. Risk-taking behaviour often involves mastering new tasks or conquering fears, and is an integral part of young children's drive to expand their physical prowess and independence. The key issue is to balance the risks with the potential benefits, and to understand what types of risks are acceptable.
10. There is concern that the perceived 'blame culture' and increase in litigation have led to play facilities which offer no challenges and which will not contribute much to a child's development. They can become so boring that children seek excitement elsewhere often at much greater danger to themselves and other people.
11. Parents are most concerned about stranger danger; anti-social violence; and traffic.
12. Perceived risks appear to be unrelated to the real level of risk. For example, fear of strangers is a strong perceived risk among many parents, even though the real risk appears to be low.

### **Children's views**

13. Children say that they like physically active outdoor and indoor pursuits; meeting with their friends; quiet activities; being able to choose from a range of activities.
14. Barriers to active play outdoors include fears for their own safety, in particular being bullied; dirty, unkempt play areas and parks; the lack of things to do; and traffic.

15. Young children say they like having playmates and other children to meet; having spaces and opportunities for play; being able to do what they want to do; and having fun.
16. 83% of children aged 4-14 like playing sport and hanging out with friends. However, 73% want to play more sport and 69% want to have more friends to play with.
17. Children say the nature of the local environment had a strong effect on their play. In rural areas children spoke more about playing near woods and streams, and in the cities the focus was more on parks and green spaces.
18. Younger children have concerns over strangers abducting them whilst they were playing in their street and also of older children who could commit crime. Older children are more concerned about fighting with other young people and bullying. Both older and younger children were worried about getting mugged in the streets and areas near their homes.
19. Children have varied experiences of playing outside with various boundaries or restrictions set by parents.
20. Older children said that adults can be a barrier to young people's play: either 'grumpy neighbours' or the police. Younger children said that teenagers were a barrier to their play in the streets and local area.
21. Teenagers have very positive views about the opportunities afforded by wild adventure space for active play.

### **Core skills**

22. It is well acknowledged that physical education contributes to the development of core skills. However, there appears to be much less consensus on the role of play in developing core skills.
23. Core skills can be developed through natural active play, especially when the play is determined by the children themselves.
24. The role of the play practitioner may be less about planning complex programmes to focus on core skill development, but instead facilitating active play.

## **Seasonality**

25. There is often reluctance by parents and professional carers to also go outside and supervise children playing outdoors in poor weather.
26. It appears that practitioners are put off by the weather more than children.
27. There are many examples of ways that this has been tackled, through encouraging children to spend time outside independently or under supervision in all weathers; encouraging parents and carers to allow their children to be outside; and encouraging nursery and teaching staff to spend time outside with children as part of their formal and informal activities.
28. There is a great deal of experience of a positive approach to bad weather, much of which has been incorporated into the UK Forest Schools movement, building on its origins in Sweden

# **1. Introduction**

The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has been asked by the Department of Health (DH) to develop guidance on a public health programme aimed at promoting physical activity, play and sport for pre-school and school age children in family, pre-school, school and community settings.

## ***1.1. The importance of physical activity***

Increasing activity levels have the potential to contribute to the prevention and management of over 20 conditions and diseases including coronary heart disease, diabetes, cancer, obesity and to improve mental health.

In 2004 the DH estimated the cost of inactivity in England to be £8.2 billion annually – including the rising costs of treating chronic diseases such as coronary heart disease and diabetes. The contribution of inactivity to obesity is estimated to cost a further £2.5 billion each year.

Around 35% of men and 24% of women (aged 16 plus) are physically active enough to meet the current national recommendations (achieving at least 30 minutes of at least moderate activity on 5 or more days a week). Seventy per cent of boys and sixty-one percent of girls aged 2-15 years achieve the recommended physical activity levels (at least 60 minutes of at least moderate intensity physical activity each day). Physical activity among children varies according to age, gender, class and ethnicity.

## ***1.2. Background to this review***

NICE guidance about promoting physical activity among children will use the findings from a number of reviews of evidence. Three reviews have been conducted to provide the general background information to provide the context for considering the effectiveness of interventions:

- A *descriptive epidemiology review*, which reviewed the evidence for the relationship between physical activity and health outcomes in children and adolescents.
- A review of *quantitative correlates*, which identified the factors that had been associated with physical activity in quantitative studies, and quantified the strength of that association.
- A review of *qualitative studies* of children and young people's views of physical activity, sport and play.

Four reviews considered the evidence for the effectiveness of interventions conducted in specific settings or sub-groups:

- Interventions targeted at *children aged under 8*
- Interventions to promote *active travel*
- Interventions among *adolescent girls* (aged 11-18)
- Interventions among *families or within communities*

In addition, an *economic review of selected interventions* was conducted.

These reviews have summarised the evidence of the effectiveness (and cost effectiveness) of interventions in increasing physical activity among children. These provided useful information but overall there was found to be a small number of studies that had evaluated interventions, and many of the studies found were of a low research quality. This was especially the case in the review of interventions among children aged under eight, where only six studies were included in the final review. While there may be a great deal of learning from experiences in promoting physical activity to children aged under eight, it appears that little of this is being captured in the scientific literature describing the evaluation of interventions.

### **1.3. Evidence on children and active play**

The Programme Development Group responsible for developing guidance on children and physical activity identified active play as a key topic of interest. The quantitative correlates review had shown the relationship between the outdoors and physical activity among young children, and the group had noted the importance of aiming to encourage physical activity among young children that they might continue into adult life. However, the interventions reviews showed that there was a lack of published evidence from intervention studies on active play. Therefore to help develop guidance the Programme Development Group requested an additional review that brought together the experiences of practitioners in encouraging active play among children. This builds on evidence from the earlier qualitative and quantitative correlates reviews, which identified a number of barriers and facilitators to physical activity. These did not focus specifically on play, but provided some findings relevant to active play: that activity is correlated to being outside; enjoyment is crucial; and parental support is important.

### **1.4. The nature of this review.**

This review is fundamentally different to previous reviews. As there is a paucity of study evidence on the effectiveness of interventions to promote active play, this review draws upon different types of evidence to help the programme development group make recommendations. This includes practical examples; practitioners' views; children's views; and case studies.

### **1.5. Topics for investigation.**

Discussions with expert PDG members and a preliminary review of some material on active play showed that there were a number of key topics that were central to the issue of children's active play. These included risk and the weather (as potential barriers to active play) and the development of core skills (as a potential rationale for active play). The fundamental aim of this review was to

summarise the views of practitioners and children on what they think works to promote active play. The review therefore focused on five key questions:

1. What practitioners think works: what practical measures do practitioners think works to support and increase children's active play? Are there examples from the field of things that practitioners report working?
2. Risk: what do parents think about active play and risk? Is there any information about parent's perceived risk versus the actual risk children incur?
3. Children's wants; what do young children say encourages and discourages their participation in active play?
4. Core skills: practical advice about how play can help develop core skills.
5. Seasonality: how best can the adverse effects of cold and wet weather on active play be overcome?

### **1.6. *Population groups that will be covered***

All children up to 18 years of age.

### **1.7. *Review team***<sup>1</sup>

This review has been carried out by a team from the Public Health Collaborating Centre (CC) for Physical Activity. The Collaborating Centre is an alliance between the British Heart Foundation Health Promotion Research Group (University of Oxford) and the British Heart Foundation National Centre for Physical Activity and Health (Loughborough University).

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<sup>1</sup> Authors: Nick Cavill and Dr Charlie Foster, with valuable input from members of the NICE programme development group and NICE staff.

## **2. Methodology**

### ***2.1. Type of material included in the review***

The method used is not that of a systematic review but is more akin to qualitative methodology. The aim of the review is to explore views, experiences and learning from the field, and to present findings that might help to clarify or illustrate potential recommendations. We therefore did not select material according to strict inclusion criteria, but instead selected material in a purposive manner, according to its believed relevance and helpfulness. To maximise transferability to UK settings, included material had to have direct relevance to the UK and had to have been published since 2000. The material included was not limited by quality or study design but needed to have been described in sufficient detail to be helpful and be relevant to active play.

### ***2.2. Identification of suitable material***

A range of methods was used to identify suitable material to be used in the review. Two expert PDG members helped to identify a long list of relevant references, based on an iterative search of material in the National Play Library. This was supplemented by web searches and re-interrogation of the previous search results from the other reviews. References were screened by two reviewers for relevance.

Material was included if it offered an insight into the issues identified in section 1.5. In particular, material was deemed relevant if it illustrated or described the opinions and experiences of children, parents and practitioners about ways to stimulate or help stimulate active play.

The reviewers (assisted by the expert PDG members) identified a very broad range of types of evidence, including:

- case studies
- examples of practice
- process evaluations
- lessons learnt from the field
- individual reflections
- reports
- articles.

All references considered for this review are listed in Annex 1.

### ***2.3. Limitations of this approach***

The approach taken to selecting information, together with the type of information considered, means that the evidence presented in this review cannot be taken to represent the sum total of knowledge of this field. It is possible that for every article that we found that reports a practitioner's view of something that appears to work, there is another article (that was not found) that says the same approach does not work. But this limitation applies equally to qualitative studies, which often aim to provide a deeper understanding of an issue rather than to provide a complete or quantified overview.

### **3. Active Play: some concepts**

*“The young of all creatures cannot keep their bodies still or their tongues quiet: they are always wanting to move and cry out; some are leaping and skipping and overflowing with playfulness and pleasure, and others uttering all sorts of cries”.*

(Plato, 360 BC).

*“Play is what I do when everyone else has stopped telling me what to do”*

(Young child, quoted in Cole-Hamilton et al, 2002)

The child’s right to play is recognised in Article 31 of the United Nations Convention on the Rights of the Child, which was ratified by the UK Government in 1991:

*“States recognise the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.”* (OUNHCHR, 1990).

#### **3.1. Definitions**

Different people have different definitions of play. From an early age, play is important to a child’s development and learning. It can involve cognitive, imaginative, creative, emotional and social aspects. It is the main way most children express their impulse to explore, experiment and understand. Children of all ages play. Some may need support to get the best out of play. (National Children’s Bureau, 2005)

For the purposes of the review, play is defined as:

*“what children and young people do when they follow their own ideas and interests, in their own way, and for their own reasons.”*

(National Children’s Bureau, 2005)

Another important definition is that of *free play*. Free play is defined by Play England as:

“...children choosing what they want to do, how they want to do it and when to stop and try something else. Free play has no external goals set by adults and has no adult imposed curriculum. Although adults usually provide the space and resources for free play and might be involved, the child takes the lead and the adults respond to cues from the child”. (Santer et al, 2007).

Free play is especially relevant to the early years, with most literature on this topic applying to children aged 3-5. Little was found on free play for children aged 5-7 years.

This review focuses on *active play*. For the purpose of this review, this is any play that includes some element of physically active movement. This is a deliberately broad definition with no threshold for energy expenditure, meaning that active play might range from games with small, infrequent movements (such as playing marbles or clapping games) through to activities expending large amounts of energy such as running games or climbing trees. In using such a broad definition in this report we have however tried to focus on the type of active play that might be at a level thought likely to confer health benefits (Cavill, Biddle and Sallis, 2001).

### **3.2. Active play: indoors or outdoors?**

It is clear from the bulk of literature on young children’s play that the outdoors has an extremely important role in facilitating active play (Stephenson, 2002). In

supervised play settings, children are physically active indoors, but for many reasons this is the exception rather than the rule. This may be due to space limitations, safety concerns, or the focus of practitioners on maximising learning through play indoors. This is also true of play at home, where parents are likely to want to limit boisterous physical play indoors, and view the outdoors as the natural domain for physically active play. Most outdoor play does not take place on sites formally designated as play spaces. When not playing at home, many children resort to local streets or any nearby open spaces and buildings from which they are not excluded. This is most important for children with little or no play space at home. (NCB, 2005). There is also evidence that older children and teenagers view the outdoors as the most important environment for physically active play (Open space, 2006), and that children who go out without adult supervision are likely to be more physically active than those who do not (Mackett et al, 2007).

The importance of the outdoors was also highlighted in the quantitative correlates review conducted previously for NICE. This review brought together evidence from systematic reviews (Ferreira et al, 2006; Sallis et al, 2000) and found a 'moderate-to-strong positive association between time spent outside and physical activity in young people' (Biddle et al, 2007).

For this reason this review will emphasise the role of the outdoors in facilitating play, and practitioners' experiences in encouraging children to play actively outdoors, although this will not be to the exclusion of issues around indoor active play.

## 4. Views of practitioners.

### Summary points

- There is strong support for the principle of ensuring that children in the foundation stage are given the opportunity for regular outdoor play as part of the school day.
- Outdoor play should provide opportunities for movement and challenge, and opportunities to play safely with natural elements
- Children's play in outdoor space can be optimised through a number of practical measures such as: seeing the indoor and outdoor spaces as one environment; providing materials specifically for physically active play; making links to the curriculum; provide for diverse active activities; planning to take account of issues such as weather, light, wind direction.
- The indoor environment can also be optimised for active play, through providing sufficient space; allowing freedom to move from one area to another; providing good opportunities for energetic physical movement; dividing space into active and quiet zones.
- Adults can help to facilitate active play through: creating the right context for play in which children feel secure and still have the necessary freedom and autonomy to explore through free play; observing play and understanding children's interests, in order to guide the provision of resources and environments for play; interacting appropriately and intervening only when necessary; creating the right environment for play including materials and resources for play, as well as the actual place to play.
- Practitioners may limit the amount of outdoor play offered to children due to a number of assumptions: that the outside is dangerous; that higher adult:child ratios are needed outside; that educators are merely supervisors outdoors, and that no learning happens outside; that the weather is a barrier; and that being outside is somehow less healthy. All of these assumptions can be tackled to increase active play outdoors.

- There appears to be a strong consensus among practitioners that there should be much more out of hours use of school grounds.
- For older children, play facilities are most valued when they are close at hand. If a facility is more than a few hundred metres away, regular use declines dramatically.

This section will describe views from ‘practitioners’ who are concerned with children’s play. This includes a variety of people including teachers, play leaders, nursery staff, youth club workers and others. It describes material that sets out what practitioners think works in stimulating active play, including the practical measures that practitioners think works to support and increase children’s active play, illustrated with examples from the field.

#### ***4.1. Providing the environment for play (early years)***

##### **The outdoor environment**

There appears to be strong support in general for provision of outdoor play opportunities for young children in the foundation stage. Waller (2007) reports that early years teachers have long regarded outdoor play as an integral part of the curriculum. Casey (2007) reports that providing opportunity for physical activity is one of the important roles of outdoor play, alongside providing ‘regular time and space to play in an interesting physical environment in order to draw on their own resources, develop their identity and social relations, connect to the community, [and] have contact with nature...’ (Casey, 2007, p394). The Children’s Play Council (Cole-Hamilton et al, 2002) suggests that outdoor play should provide opportunities for movement (running, jumping, climbing) as well as challenge in relation to the physical environment, and opportunities to play safely with natural elements (earth, water, fire).

Stephenson (2002) describes some interesting features of the outdoors that support its role in facilitating active play. One of these is that the outdoors is

always changing while the indoors stays relatively static. Children can get positive opportunities for play that vary with the seasons, temperature, wind, or the arrangement of physical features. For example in a study of a New Zealand play setting, it was found that children could be encouraged to be more active simply by placing football goals or dens outside. She also notes that the outdoors tends to support physical activity as there are usually fewer rules, more space, and running and shouting are not frowned upon (Stephenson, 2002).

This received wisdom in support of outdoor play is reflected in official guidance: the curriculum guidance for the foundation stage (DfES/QCA, 2000) states that effective teaching depends on 'planning the indoor and outdoor environment carefully to provide a positive context for learning and teaching'. Updated detailed guidance is also now available with a specific focus on incorporating outdoor learning in the early years foundation stage (DCSF, 2007).

Despite this clear guidance, it is reported that some practitioners still make limited use of outdoor activities. 'Practitioners who simply take the indoor sand tray or drawing table outside are not exploiting the potential of the outdoor world' (Edgington, 2004). Suggestions for maximizing the use of outdoor space include:

- Try to see the indoor and outdoor spaces as one environment that offers complementary but different opportunities for learning. Alternate indoor and outdoor sessions as appropriate.
- Provide materials specifically for physically active play (including role play). This might include games such as lifting and manoeuvring heavy crates or tyres, riding or pushing wheeled toys, climbing ladders to paint a wall with water or gardening with child-sized spades or other tools.
- Work with natural materials such as shells, twigs, large pebbles, logs, cardboard boxes, milk crates, tyres, guttering and tubes. Make these

available as building materials for children to make dens or other spaces.

- Be imaginative about links to the curriculum. For example 'making relationships' can be linked to ball games involving shouting other children's names before throwing the ball to them. 'Developing confidence' can be achieved through obstacle courses with achievable challenges.
- Provide for diverse activities. For example areas of tall grass to creep, hide and crawl; tree trunks and stumps to jump and climb on; tractor tyres to climb or sit on; paths for bikes and wheelbarrows; spaces to dig the soil (Engel, 2003).
- Plan early, taking account of issues such as light, wind direction and planting times. (Engel, 2003).

In addition, the charity Learning through Landscapes sets out three key principles for outdoor play projects (Ryder Richardson, 2005):

- Holistic: settings should consider the whole outdoor space, the whole curriculum, and take account of the needs of the whole community.
- Participative: at each stage of the development, settings should aim to include and involve children, staff, parents, and the local community.
- Sustainable: consideration should be given to how the space, equipment and resources will be managed and maintained in the future.

### **Case studies: *making the most of outdoors space***

New College Day Nursery in Huddersfield has been declared an example of outdoors best practice by Ofsted (Bashford, 2005). The centre has a strong focus on outdoor play sessions in which children regularly get wet and muddy, playing in all weathers. The centre staff had to overcome many parental concerns about the risks of outdoor play, and now find that many parents are requesting places at the nursery as a result of enthusiastic support from other parents. The outdoor play area was created with low cost features such as a teepee, totem pole, whispering tube and camouflage net. It was reported that the biggest barrier to progressing the idea was not the limitations of the physical environment, but parental and practitioner perceptions that 'real learning happens indoors, and the outdoors is just about running around and letting off steam. But the outdoors is equally important, it's valuable and supports development'. (Bashford, 2005).

Staff at Budhill Nursery in Glasgow created an imaginative outdoor play space, based around only a small tiny triangle of grass at the end of the existing playground. (Bashford, 2005). Funding from the local council was used to extend the area in to adjacent woodland, including new fencing. Local businesses got involved and prepared the ground, made furniture and donated flowers and plants. The play space now includes a herb garden, a vegetable patch and a willow tunnel. There is provision for babies with a sensory garden including strong-smelling plants and an array of different surfaces such as painted barks. The play area links closely to the curriculum, and many of the classes traditionally taught indoors are now outside.

#### **Keys to success** (Bashford, 2005)

- Capture and utilise the nature of the outdoors
- Make good use of all space and features
- Help parents see the value of outdoor play

- Be clear about what you want the children to be able to do
- Have a supply of warm clothing, rain wear and sun hats
- Organize a transition zone so it is easy for children to go from indoors to outdoors

### **The indoor environment**

While the outdoor environment may offer the greatest potential for stimulating active play in the early years, there is also potential in improving the indoor environment for play. Engel (2003) reports that the organisation of a room and its resources can have a major impact on children's well-being, behaviour and relationships. She writes that 'quality play that is spontaneous, cooperative, sustained and varied will inevitably flow from an environment where the space, layout and organisation of resources has been carefully thought out.' (Engel, 2003, p.16). Although this article (and indeed much of the literature on children's play) does not focus specifically on physically active play, it seems reasonable to assume that creating an environment that stimulates play in general will create some opportunities for physically active play. Engel (2003) presents detailed guidance on creating indoor environments for play. Relevant guidance points with implications for active play include:

- Providing enough space for children to move freely
- Allowing freedom to move from one area to another, indoors and outside
- Good opportunities for energetic physical movement
- Dividing space into zones including an active zone (alongside a quiet zone, messy zone and entry zone).
- Rearrange indoor furniture to provide a flexible space for dancing; or use low level items such as beams to encourage balance.

## **The 'social environment'**

In addition to providing appropriate indoor and outdoor spaces for children to play, there is much that adults can do to facilitate play. Ouvry (2003) suggests that children should be given the right context for play they can 'slip in and out of easily'. Santer et al (2007) set out four main roles of adults providing suitable environments and in facilitating children's experiences of free play.

- Sensitivity and attachment. Adults need to create psychologically and physically suitable context in which children feel secure and still have the necessary freedom and autonomy to explore through free play.
- Observation. This helps the adult to understand children's interests, and hence guide the provision of resources and environments for play.
- Interaction. The extent of adult interaction will vary: in some situations it is appropriate not to intervene in a young child's free play in order to allow them to make mistakes and learn. In others it may be necessary to intervene for example to challenge difficult or anti-social behaviour.
- The environment. Adults are responsible for providing the environment for play, including materials and resources for play, as well as the actual place to play.

## **VITAL**

The NCB review of children's play sets (NCB 2005) describes the common elements of many successful play opportunities using the acronym VITAL:

Value based; In the right place; Top quality; Appropriate; Long term.

### **Value-based**

- Children and young people's interests and rights are respected
- All children and young people, whatever their ability or background are welcomed, especially those from disadvantaged groups
- Children and young people's competences and abilities are respected

### **In the right place**

- Close to children and young people's homes and schools, on well-used travel routes, in safe locations
- Located in places that children and young people and the wider community are happy with

### **Top quality**

- Safe, welcoming and providing choice and variety
- Well-designed in relation to the surrounding space and community
- Taking a balanced approach to managing risk
- Well-managed

### **Appropriate**

- Shaped by local needs and circumstances
- Complementing other local opportunities
- Taking account of all sectors of the local community
- Well-planned

### **Long-term**

- Sustainable beyond the lifetime of the NOF programme
- Set up to be valued and respected parts of the social fabric of the neighbourhood

## **4.2. *What stops children from playing outside during the school day?***

Ouvry (2003) provides an illuminating account of the factors that may prevent children from being allowed to play outside. She details a number of assumptions that appear to be frequently held by practitioners, parents and others, along with suggested ways to deal with these assumptions:

### **Assumption 1: 'outside is dangerous'.**

If we want children to run around and be physically active outside then it is a concern that this might increase the risk of falls. But...

- In playing outside, children test what their bodies are capable of; being on the edge of what they can manage is where learning happens.
- The real risk is probably smaller than the perceived risk.
- Risky behaviour can happen indoors too. One headteacher pointed out that a pencil in the eye is far more dangerous than a grazed knee, but no-one bans pencils
- Rationing access to the outdoors may actually increase the risk as children rush to get out, and increase the level of boisterous behaviour

### **Assumption 2: 'higher adult:child ratios are needed outside'.**

Practitioners often feel that more staff are needed to supervise outdoor play, and there appears to be no consensus on the appropriate ratio. But...

- The ratio is not really the issue, it is in reality the knowledge and confidence of the staff and whether they believe that children do need outdoor access.

- If assumption one is tackled head-on, then it follows that more staff are not needed to supervise somewhere that is not inherently dangerous.

**Assumption 3: ‘educators are merely supervisors outdoors’.**

Practitioners who do not believe in the value of outdoor education may feel that when they are outdoors they only need to stop risky behaviour and confrontations. But...

- The outdoors can provide learning experiences as good as (if not better than) indoors
- Practitioners who feel they are only supervisors when outdoors may fail to interact fully with the children to make the most of the learning experience

**Assumption 4: ‘no learning happens outside’.**

This is perhaps the most fundamental assumption: that effective learning only happens when children are still, quiet and calm, with pencil and paper to hand and with a teacher nearby to offer instruction’. (Ouvry, 2003, p.23). But...

- This assumption seriously underestimates the value of outdoor learning
- This also prioritises academic progress over the development of core skills and healthy habits through physical activity
- If no learning happens outside then it is likely to be the result of poor planning on the part of the practitioner

**Assumption 5: ‘we would go outside if the weather were better’.**

This may appear to grow out of concern that children do not want to be outside in cold or wet weather. But...

- This may be more likely to reflect the fact that practitioners do not want to be outside in bad weather
- Weather can be used as a stimulus to all kinds of learning.

This issue is explored further in section 8.

**Assumption 6: 'it is more healthy to be inside than out'.**

Parents sometimes ask staff to keep children indoors because they might catch a cold; have concerns about pollution in inner city playgrounds; or worry about their child's asthma being exacerbated by exercise. But...

- There is no evidence to show that children are more likely to catch a cold in the fresh air
- Air quality indoors is unlikely to be better than outdoors
- Asthma can be managed carefully without avoiding exercise, and indeed exercise is now being recommended by clinicians as part of the management strategy (Satta, 2000; Fanelli 2007)

Ouvry suggests many of these assumptions can be tackled through

- Positive attitudes from the staff, and a greater appreciation of the value of outdoor play
- Discussions with parents
- Stated policies on access to the outdoors

### **4.3. *Out of hours use of school grounds***

There appears to be a strong consensus among practitioners that there should be much more out of hours use of school grounds, especially where they are the main or only local open space in a neighbourhood. (NCB, 2005). Yet very few school grounds are used out of hours, partly because the main priority for a school is achieving high educational standards, and also because it can be expensive to make school buildings secure. Some agencies are tackling this issue however, such as the charity 'Learning Through Landscapes'.

### **4.4. *Use of the outdoor environment (older children)***

The strongest message from children and young people from a review conducted by the National Children's Bureau (NCB, 2005) was that play facilities are most valued when they are close at hand. This is backed up by research showing that if a facility is more than a few hundred metres away, regular use declines dramatically. The distance children are prepared to travel to play depends on their age and the facilities available so the optimum solution is a hierarchy of spaces.

Focus group research has highlighted the importance of what is called 'wild adventure space' (Open Space, 2006) for teenagers and older children. This was defined as 'outdoor space where young people have some level of freedom in terms of activity and experience'. This issue will be explored in more detail in section 6.5.

## 5. Risk

### Summary points

- Risk is an essential and healthy element of children's play. Risk-taking behaviour often involves mastering new tasks or conquering fears, and is an integral part of young children's drive to expand their physical prowess and independence. The key issue is to balance the risks with the potential benefits, and to understand what types of risks are acceptable.
- There is concern that the perceived 'blame culture' and increase in litigation have led to play facilities which offer no challenges and which will not contribute much to a child's development. They can become so boring that children seek excitement elsewhere often at much greater danger to themselves and other people.
- Parents are most concerned about stranger danger; anti-social violence; and traffic.
- Perceived risks appear to be unrelated to the real level of risk. For example, fear of strangers is a strong perceived risk among many parents, even though the real risk appears to be low.

Risk is a key issue in children's play. Surveys show that many parents are very concerned about the safety of their children and are reluctant to let them out of the house. They cite fears of strangers and traffic as their main concerns (NCB, 2005). Risk of injury is also a key issue in play space design, with concerns raised that fear of litigation is resulting in sterile risk-free play spaces. This section explores what parents think about active play and risk, including comparisons between parents' perceptions of risk and 'actual' risk.

### **5.1. *An introduction to risk in play***

Most practitioners seem to agree that risk is an essential and healthy element of children's play. In play children seek out risks, because through these they develop self esteem and confidence. Children often choose to take physical risks that they themselves describe as 'scary'. These often involve mastering new tasks or conquering fears. It appears to be important to allow children to experiment and take risks, within limits. Undertaking risky activities is an integral part of young children's drive to expand their physical prowess and independence. Risk taking has been described as an 'intelligent behaviour' (Santer et al, 2007). The key issue is to balance the risks with the potential benefits, and to understand what types of risks are acceptable. An 'acceptable risk' has been defined as: one which it would be reasonable to assume will not result in harm, or where any resulting harm is itself acceptable. An 'unacceptable risk' is one which it would be reasonable to assume may lead to harm, and where any resulting harm is itself unacceptable (Wainwright, 2001). It is crucial to be able to balance the requirement for safety with the need to provide physical challenges.

### **5.2. *Risk management in play spaces***

The other side of the safety coin is the growing blame culture and litigation. This leaves providers of play facilities more and more concerned to minimise the chances of even minor accidents for fear of being taken to court. Play facilities which offer no challenges will not contribute much to a child's development. Worse still, they can become so boring that children seek excitement elsewhere often at much greater danger to themselves and other people. This is an obvious possible result when play facilities are closed because of fear of litigation or because insurance premiums have been increased. The play review consultation revealed strong concern about the damaging impact of an overly cautious approach to safety. (National Children's Bureau, 2005)

### **Risk management in play**

The Play Safety Forum (2002) has summarised well the issues around risk management for children's play. While the issue shares common concerns with health and safety in the workplace, the critical difference is that in play provision there is a place for appropriate risk in ways that do not arise in the workplace. Children and young people need a childhood in which they can enjoy an acceptable level of risk and challenge. (Lindon, 2007). The key steps of appropriate risk management are:

- Identify a hazard that may cause harm
- Assess the kind of harm that could result for children and young people
- Assess the likelihood that harm could result
- Assess the benefits of enabling children to have access to this resource
- If there are benefits, how can the hazard be managed so that the risk is reduced to an acceptable level?

Concern over the 'litigation culture' tends to have arisen from practitioners and others giving undue weight to potential risks, without balancing them against the potential benefits (Lindon, 2007).

**Case study: *risk-taking in a forest school***

Forest schools aim to ‘encourage and inspire individuals of any age through positive outdoor experiences’ and provide opportunities for children to enjoy supervised play in woodlands throughout the UK in ‘all weathers except high winds’ (Forest Schools, 2008). The concept was originally developed in Denmark and has spread throughout the UK since 1993.

A study of risk-taking behaviour in a forest school (Waters and Begley, 2007) showed that the forest school environment was better able to support the development of positive risk-taking behaviours than the outdoor play space in a school. Children displayed more varied risk-taking behaviours (such as climbing trees; jumping across ditches; swinging from branches) in the forest school than in the outdoor play space at school.

Factors that were thought to be important included:

- A high staff to pupil ratio (one member of staff per four pupils)
- A stated aim to encourage risk taking behaviour
- A consistent staff approach to allowing appropriate, supervised risk taking

The authors concluded that

“...because of the curtailment of outdoor play outside school and children’s limited access to diverse natural environments, time spent at Forest School or similar outdoor projects may be the only opportunity some children have to develop positive learning dispositions towards physical risk, persistence and challenge, and to acquire the possible benefits this could produce...”

(Waters and Begley p.374).

Another study of forest schools (Massey, 2004) explored the views of parents who watched their children exploring in the woods. The parents expressed wonder at the level of independence and confidence the children were showing, and felt that they would encourage more freedom, perhaps out of sight in a secure environment. Massey (2004) summarised the elements needed to manage the positive elements of risk-taking

- Supportive adults who don't intervene too early
- Encouraging children to make choices
- Practitioners making risks apparent to children
- Opportunities to keep themselves and others safe within acceptable boundaries
- Encouraging children to assess their own risks
- Encouraging parents to participate in activities
- Providing small achievable tasks
- Understanding and matching the appropriate skills to the child's ability

### **5.3. Parent's views of risk on the streets**

ICM research conducted detailed focus group research among adults, to investigate their attitudes to children playing out in the streets. Respondents were a mix of parents and non-parents, and were conducted across the UK. (ICM, 2007)

The research found that play was generally viewed to be universally positive, associated with key benefits including health and fun, and was seen to be a key part of a child's development. Parents recognised the benefits ranging from establishing boundaries and learning about the physical environment to becoming independent and learning about risk.

However, there were felt to be numerous barriers to allowing children to play out freely, which have led to changes in parental behaviour and attitudes which are not conducive to children being allowed to play in the street.

The three greatest fears expressed by respondents in this research were:

- **'Stranger danger'**

This was a particularly emotive issue, felt by many to be a real and growing threat, and provided a significant barrier to parents allowing children to play outside. While some people felt that this was a problem that had always been there, others felt the problem had grown recently. Whether that threat is real or perceived is unclear, but the impact on children's play is the same. This was also seen as one of the reasons why parents drove their children to school, thus increasing the traffic problem

- **Anti-social violence**

Youth violence and anti-social behaviour is seen as both a nuisance and a threat to other children and adults. There is a feeling that the problem has become worse over time. While many adults appear to be unsympathetic to the issue, some people feel some sympathy for adolescents, who may have nothing to do and no place to go. In some locations, local facilities are poor, and if adults don't give them a chance, they respond accordingly. It is also of note that youth presence can make some places such as parks and shopping areas feel like 'no go' areas.

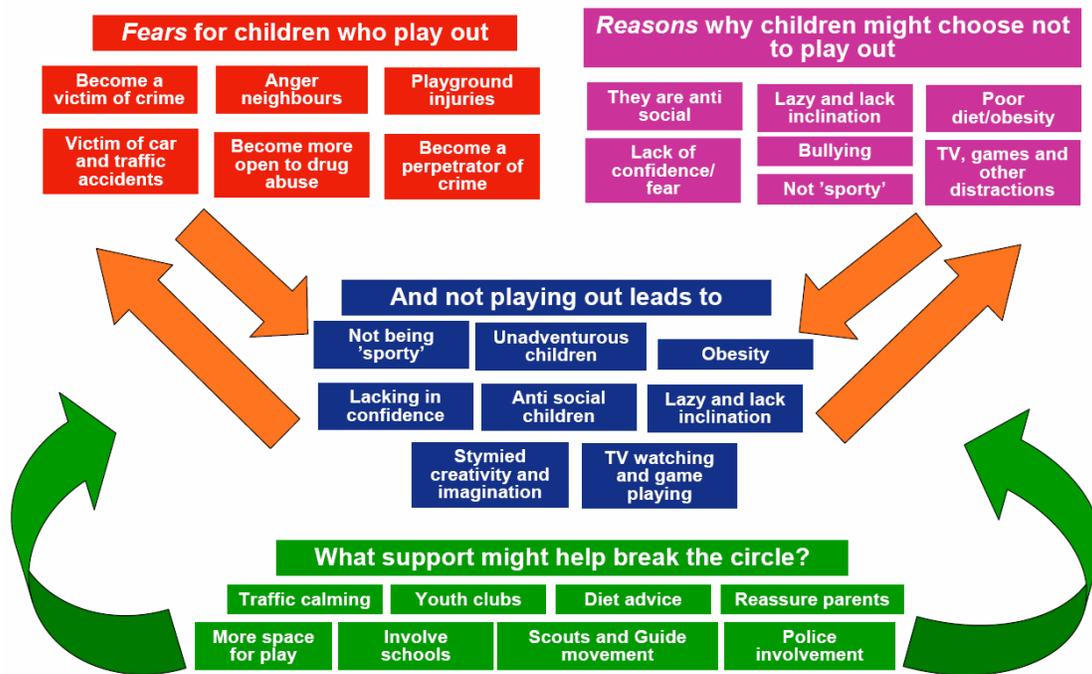
- **Traffic**

It was widely felt that traffic had contributed to streets becoming a less safe environment. The volume of traffic had increased, (partly due to more children being driven to school due to safety concerns) and speeds appear to have increased.

Other barriers included:

- A lack of play areas including green space
- Dirty or dangerous play areas
- Intolerant adults, notably non-parents being intolerant to children playing on the streets, believing they should be in custom-made play areas.

Figure 1. The vicious circle of play and risk



Source: ICM (2007)

These concerns have been reflected in other studies. Santer et al (2007) have pointed out that free outdoor play has been affected by parents' fears that hinge around traffic, strangers and drugs. Parents tend to suggest solutions based around increased surveillance and organised activities, but this creates a tension as parents tend to be aware that children are less 'free' than they used to be. (Santer et al, 2007). Parents tend to believe that today's children have fewer

opportunities for play than they did themselves, and feel that children today spend too much time watching TV or playing on computers, and would prefer it if they spent more of the time being physically active (National Children's Bureau, 2005). Other solutions offered by parents relate to controlling traffic, improving facilities, and increasing the safety of urban environments (ICM, 2007). In the ICM research, parents in particular mentioned reducing traffic in an area or stopping it altogether. Non-parents and parents were keen for facilities to be improved, including retaining green space; cleaning up existing green space and improving safety by removing trees, having more wardens and improved lighting. Other suggestions included making sure that new housing developments have provision for good play space; providing dedicated facilities for bikes, rollerblading, skating; providing youth clubs for different age groups on different nights, and rolling out Home Zones to create safer environments for play.

#### **5.4. *Real vs perceived risk***

Fear of strangers is a strong perceived risk among many parents, even though the real risk may be low. It is extremely rare for children to be harmed by a stranger in any public space. On average eight children have been killed in each of the last five years (NCB, 2005). Hardly any children are ever seriously harmed by a stranger in a park or playground.

The other main fear is of road traffic injury, where the risk may be perceived to be high: 141 children were killed on the roads in 2005, 25 less than in 2004, a fall of 15 per cent. The total number of children killed or seriously injured fell by 11 per cent to 3,472 (Department for Transport 2006). The risk has been declining for some time: in 2005 the number of people killed or seriously injured in accidents reported to the police was 33 per cent below the 1994-98 average; the number of children killed or seriously injured was 49 per cent below the 1994-98 average; and the slight casualty rate was 23 per cent below the 1994-98 average. (Department for Transport 2006). However, it is almost impossible to separate real and perceived risk. The real issue is probably parental fears or concerns, which appear to be very real.

Children and young people are also concerned about their safety. Surveys show that children's main safety fears are about bullying and traffic. Both children and parents are keen on adult supervision. (National Children's Bureau, 2005).

**Case study: risk taking in adolescence**

A study considered the views of 11-14 year olds who lived in a relatively deprived area in the north of England. These adolescents had few organised leisure activities in their neighbourhood and some admitted spending time in locations they knew to be risky, like abandoned buildings and quarries. The young males were more likely to seek out activities they knew to be unsafe. Danger was part of the attraction, which they deliberately increased by daring each other to run across roads or sit on the railway tracks. This age group also reported regular unintentional injuries, arising from sporting activities, traffic accidents including falling off the bike and not wearing a helmet. However, these adolescents were still concerned about their own safety and took some steps to protect themselves through avoiding particular people and places and moving about in a group. (Child Accident Prevention Trust, 2002)

## 6. Children's views and wants

### Summary points

- Children say that they like physically active outdoor and indoor pursuits; meeting with their friends; quiet activities; being able to choose from a range of activities.
- Barriers to active play outdoors include fears for their own safety, in particular being bullied; dirty, unkempt play areas and parks; the lack of things to do; and traffic.
- Young children say they like having playmates and other children to meet; having spaces and opportunities for play; being able to do what they want to do; and having fun.
- 83% of children aged 4-14 like playing sport and hanging out with friends. However, 73% want to play more sport and 69% want to have more friends to play with.
- Children say the nature of the local environment had a strong effect on their play. In rural areas children spoke more about playing near woods and streams, and in the cities the focus was more on parks and green spaces.
- Younger children have concerns over strangers abducting them whilst they were playing in their street and also of older children who could commit crime. Older children are more concerned about fighting with other young people and bullying. Both older and younger children were worried about getting mugged in the streets and areas near their homes.
- Children have varied experiences of playing outside with various boundaries or restrictions set by parents.
- Older children said that adults can be a barrier to young people's play: either 'grumpy neighbours' or the police. Younger children said that teenagers were a barrier to their play in the streets and local area.
- Teenagers have very positive views about the opportunities afforded by wild adventure space for active play.

It is critical to consider the views of children when making recommendations that might affect their opportunities for play. This section considers what young children say encourages and discourages their participation in active play. It will draw on studies that have used qualitative and quantitative methods to assess children's views on active play.

### **6.1. Views on play in general**

A review of children's views of play (Cole-Hamilton et al, 2002) provided a useful summary of key aspects of children's views on play:

#### **Where children go when not at school**

- The majority of children are at home or with friends or relatives
- Significant numbers of children spend some of their time in formal childcare
- A small proportion of children use open access play settings and organised clubs or groups

#### **Where children play**

- The streets
- Local parks and recreation fields
- Open spaces
- Play areas

#### **What children like**

- Physically active outdoor and indoor pursuits
- Meeting with their friends
- Quiet activities
- Being able to choose from a range of activities

#### **What stops children playing out**

- Fears for their own safety, in particular being bullied
- Dirty, unkempt play areas and parks

- The lack of things for them to do
- Traffic

#### **What children dislike**

- Bullying and roughness
- Lack of choice of things to do
- Lack of suitable provision for disabled children
- Poor quality buildings, facilities and equipment

Source: Cole-Hamilton et al, 2002

### **6.2. Views of children in early years provision**

It is common in early years practice for adults to record and interpret children's play behaviours. However, these views may not necessarily represent children's perceptions and experiences.

An evaluation by Cook and Hess (2005) explored the views and opinions of children aged 4-5 years on various aspects of their life in reception class. They found that children identified the following as important:

- Having playmates and other children to meet
- Having spaces and opportunities for play
- Being able to do something that they really want to do, rather than because others have told them it is important **to do**

A study by Langstead (1994) found that kindergarten children highlighted the following as important for play:

- Having other children to play with
- Being able to decide who to play with
- Having access to toys, activities and adults to help
- Having fun

Research by the Children's society (Virgo, 2003) on what children aged 4-14 want from after school clubs showed that they valued 'an open outdoor space, and a garden with trees, woods, plants and flowers' and that this should be free from many of the normal constraints of school or family life: 'no teachers, no schools, no school stuff, no homework and no rules...'

### **6.3. Quantitative data on views on play**

An annual survey of 600 children aged 4-16 is conducted by the agency 4children (4children, 2006). This looks at childhood, what it means to children and how they see the world around them. It includes some findings on active play:

#### **What children like doing**

- Playing sport (83%)
- Hanging out with friends (83%)
- Watching TV (70%)
- Playing computer games (67%)
- Playing games with the family (67%)
- Playing outside near home (58%)
- Reading (56%)

#### **What children think about play**

- 65% feel safe playing outside without an adult
- 62% would like to play outside more than they do
- 73% want to play more sport
- 69% want to have more friends to play with
- 27% say 'when I am not in school I stay at home indoors'

### **6.4. Qualitative data on views of street play**

ICM conducted focus groups among children as part of the Playday campaign (Henshaw & Lacey, 2007) A total of 64 boys and girls aged between 8 and 18,

participated in the study. The study focused on street play: what children thought about playing outside, and what might stop them from doing so.

The majority of children played outside, and they were positive about the role of outside play in maintaining friendships and having time away from structured activities and adult supervision. Parks and other green spaces were particularly important and many of the children and young people talked about needing time and space to be alone sometimes.

### **What children like to do outside**

Children and young people in the groups reported doing a variety of different activities whilst outside on the streets near their homes. Chasing games, bike riding, and skateboarding and informal sports were popular. The use of play equipment was also very popular among the younger children. Older children said that they did not use the term 'hanging out' anymore as this was outdated, they used a variety of alternatives such as 'meeting up', 'going out', 'coming out', 'chilling', 'hanging about', and 'passing through'.

### **The local environment**

The nature of the local environment had a strong effect on children and young people's play. In rural areas children spoke more about playing near woods and streams, and in the cities the focus was more on parks and green spaces and the role these had in their play.

Children in both rural and urban areas had good local knowledge and knew where was good for them to play and where was not. Traffic was a particular issue affecting younger children's ability to play outdoors. Main roads limited children's scope for play in their streets, and safe road crossings were seen as really important in enabling them to be independently mobile in their neighbourhoods. Younger children also saw litter such as broken glass as a problem and in some cases a barrier to their play.

## **Fear**

Children and young people's own fears were also a barrier to their play outside on the streets and areas near their homes, and these largely focused around crime. The younger children had concerns over strangers abducting them whilst they were playing in their street and also of older children who could commit crime. The older children were afraid of fighting with other young people who they may be in disagreement with and bullying was also a concern. Both older and younger children were worried about getting mugged in the streets and areas near their homes.

## **Boundaries**

The majority of the children and young people in the ICM research (Henshaw & Lacey, 2007) were allowed to play outside without parental supervision, but this was mostly within certain boundaries and restrictions. Children who did not play unsupervised said this was because of their parents or carers concerns, which included traffic and bullying by older children. Younger children said that playing in the streets near their home was particularly good because their parents could keep an eye on them and they could go home if anything happened. Some of the older children felt that their parents could be over-protective and that this restricted them in going out in their neighbourhood as much as they would like.

## **Other adults**

Both children and young people saw other adults as a barrier to their play and use of the streets and areas near their homes. The younger children said that grumpy neighbours got annoyed at them for playing outside, and often told them to go somewhere else. All the groups of young people said that the police were sometimes a barrier to their use of the streets and that they were frequently dispersed and moved on when they had done nothing wrong. One group of young people felt it was fun to be out in groups with their friends and that they should be able to do this, however they said that they were more likely to be stopped by the police at these times.

The younger children in the study said that teenagers were a barrier to their play in the streets and local area. A number of the children said that teenagers invaded space that they felt was set aside for their play, such as parks with fixed play equipment. Some of the children cited examples of being teased by teenagers, but for most of them it was a fear rather than a reality. However, a few of the younger children with teenage siblings said that the presence of their brother or sister whilst they were playing was reassuring and protected them from being teased.

### **Solutions.**

Children were asked for solutions to the issues raised in the research. The changes they suggested were mainly around making streets safer from traffic. Providing better transport was a key issue for the older children. Better opportunities for recreation such as skate parks and bike ramps were also very popular.

### **6.5. *The role of 'wild adventure space' in teenagers' lives***

The views of teenagers (aged 12-18) were included in focus group research investigating the importance of wild adventure space (Open Space, 2006). This was defined as 'outdoor space where young people have some level of freedom in terms of activity and experience'. In practice, the majority of such space is predominantly natural or semi-natural in character or contains significant natural elements within it.

The focus groups with teenagers showed that adventure space offered the chance to do a wide range of activities, including:

- tree climbing
- getting dirty/mucky
- quad biking
- learning new skills

- something to keep you out of trouble
- special activities
- making dens
- having barbeques and picnics;
- sitting and reading or playing games by yourself.
- bungee jumping
- rock climbing

The young people interviewed saw wild adventure space in a number of different contexts:

- something to keep you out of trouble
- a breathing space, away from family or peer pressures
- a place that offers risk and challenge
- a place that inspires you to do things
- a place where you can do what you want, where you can relax and feel free
- a comfortable place, without adults, where won't be told to go away
- a place to have a good time with your friends

What they disliked about wild adventure space included:

- bad weather and lack of comfort: rain; cold; flies and other insects;
- litter; vandalism; cars and pollution
- The threat of ASBOs
- The cost and/or lack of availability of transport
- Lack of confidence in wayfinding
- fear of strangers
- dislike of other groups causing problems

For young people in disadvantaged circumstances, wild adventure space appears to offer a real “breather” or escape from frequently noisy and stressful family life; the research found that this was the main reason for many to engage in organised activities or youth centres. Without somewhere to go, or youth workers to legitimise activities, there is little alternative for many young people but to hang out in the street. The dangers of traffic, the unwelcoming attitudes of society and the threat of ASBOs are recognised but, for many teenagers, there is no alternative readily available to them and no comfortable place to be away from home.

Activities organised by youth workers and structured use of wild adventure space were also welcomed “to keep you out of trouble”, as many participants in the research stated. The barriers to undertaking wild adventure activities independently are, for many young people, transport and costs, parents’ concerns, and lack of planning and organisational skills. The value of ‘packaged’ activities was underlined by many groups who appeared to enjoy the sense that, despite the organised nature of the activity, they were free to do what they wanted; they enjoyed the sense of challenge and achievement as well as “having a good time with your mates” (Open Space, 2006).

## 7. Core skills

### Summary points

- It is well acknowledged that physical education contributes to the development of core skills. However, there appears to be much less consensus on the role of play in developing core skills.
- Core skills can be developed through natural active play, especially when the play is determined by the children themselves.
- The role of the play practitioner may be less about planning complex programmes to focus on core skill development, but instead facilitating active play.

A critical aspect of children's physical development is the learning of core skills, such as the ability to throw and catch a ball, to ride a bike, or to swim. This section will consider what practical advice exists for the development of core skills through active play.

### **7.1. *Play in the early years***

Much of the literature on the relevance of play in the early years (0-7) focuses on development and learning, rather than physical core skills. In the early years, children practise, develop and master skills across all aspects of development and learning (Santer et al, 2007).

It is well acknowledged in the physical education literature that PE contributes to the development of core skills. Doherty & Bailey (2003) say that 'education in movement is the most fundamental dimension of the PE curriculum... PE is much more than a collection of strategies for keeping pupils fit and healthy...they are activities and experiences that are valuable and worthwhile in their own right.' (p.5). This is reflected in official guidance on PE in the National Curriculum.

*“Physical education develops pupils' physical competence and confidence, and their ability to use these to perform in a range of activities. It promotes physical skillfulness, physical development and a knowledge of the body in action.. pupils discover their aptitudes, abilities and preferences, and make choices about how to get involved in lifelong physical activity.”*  
(DCSF, 2008).

However, there appears to be much less consensus on the role of play in developing core skills. We found very few references that focused specifically on core skill development through play. Some practitioners point out that children use and hone their physical skills when they have plenty of genuine play opportunities, especially outdoors, which are determined by the children themselves. This means that the role of the play practitioner is therefore less about planning complex programmes to focus on core skill development, but instead facilitating active play. (Lindon, 2007).

### **Examples of learning core skills through play**

#### **Dance**

Dance can provide positive opportunities for developing core physical skills. Children can explore the dynamics of movement; functional as well as expressive. Walking, skipping, galloping and stepping actions form a base for later development relating to specific step patterns. Children tend to respond instinctively to rhythm displaying stamps, steps, twists and jumps and move freely and confidently. Adult intervention can help to structure these natural responses into recognized dance forms. (Doherty & Bailey, 2003).

#### **Games**

Games in the early years comprise activities such as running, stopping and changing direction, moving in relation to others in space, and hand-eye or hand-foot dexterity as well as coordination with equipment. Children need to

practise with bats balls of differing shapes and sizes to become competent in the skills of kicking, throwing, catching and travelling with equipment.

Opportunities should exist for individual development of motor skills. Young children use games as part of their natural play in an all-absorbing way, developing skills and knowledge that will form the basis for later physical activity. Using games as a vehicle for lifelong learning and participation will enable a child to develop a competency base that will allow him to enjoy and active and healthy adult life (Doherty & Bailey, 2003).

### **Outdoor play**

As discussed elsewhere in this review, the outdoors has a special role in facilitating play among children. The outdoors offers many features that can be exploited to maximise the potential for stimulating play. Outdoor play has the potential to satisfy the human need for excitement and challenge in a positive way. Equipment such as climbing frames, stepping stones, playground markings, wheeled toys, trikes and bikes can assist physical development in many ways, including assessing risks and developing core physical skills.

### **Case study: the development of core skills in forest schools**

An evaluation of Forest Schools (O'Brien and Murray, 2006) included a focus on the development of core skills and opportunities for physical activity.

Activities in forest schools can include specific tasks such as toasting marshmallows over a fire; building small shelters; climbing designated climbing trees; sliding on muddy slopes; digging in the ground and balancing on logs. The evaluation found that Forest Schools provide the children with many and varied opportunities to improve both gross and fine motor skills.

Gross-motor-skill development included a better range of movement, improved quality of movement or increasing muscle strength. Fine motor skill development included being able to conduct smaller and more intricate movements such as tying knots and using a stick to draw or write.

Testimonies from parents and teachers involved in a forest school pilot talked of increased stamina (through walking to and from the forest school and playing extensively); and improved physical skills (such as climbing trees or running over uneven ground).

It was noted that the development of physical skills went hand in hand with increasing confidence to take risks and face challenges.

## 8. Seasonality

### Summary points

- There is often reluctance by parents and professional carers to also go outside and supervise children playing outdoors in poor weather.
- It appears that practitioners are put off by the weather more than children.
- There are many examples of ways that this has been tackled, through encouraging children to spend time outside independently or under supervision in all weathers; encouraging parents and carers to allow their children to be outside; and encouraging nursery and teaching staff to spend time outside with children as part of their formal and informal activities.
- There is a great deal of experience of a positive approach to bad weather, much of which has been incorporated into the UK Forest Schools movement, building on its origins in Sweden.

There is a growing body of evidence that physical activity and play in children is influenced by environmental factors. These factors include the built and natural environment. It seems logical to assume that the weather would directly influence the attitudes, confidence and behaviours of adults and children.

This section will discuss how the adverse effects of seasonality on active play might be overcome, with examples from practice of approaches that have been taken to encouraging active play in all weathers.

For the purpose of this section we include discussion on the impact of particular types of weather (i.e cold, warm, rain, wind, sun, clouds); and seasons (i.e. natural periods of time within a year which have different weather patterns.)

### **8.1. *What is the problem?***

Children's physical activity is correlated with the amount of time they spend outdoors and can be helped or hindered by adverse weather.

The impact of the seasons and direct impact of the weather have both been found to be associated with different patterns and levels of physical activity in both adults and children (Tucker & Gilliland, 2007). In children activity levels appear to peak in summer and fall in the winter. The most popular explanation for this variation is an observed decline in the time children spend playing out of doors, with the highest outdoor time in summer and lowest in winter (Riddoch et al, 2008). In addition the summer months include the longest period of school holiday time thus allowing a longer time available for children to play outside. Indeed the quantitative correlates review identified that time spent outside was a consistent positive correlate of activity (Biddle et al, 2007). It is important to note that poor weather is also reported to be a barrier to physical activity in adults who are also most active but this relationship has not been seen with children or adolescents.

In pre-schoolers time spent outside has been reported as highly correlated with physical activity levels. However there is evidence for reluctance by parents and professional carers to also go outside and supervise children playing outdoors, particularly in colder seasons (Andersen et al, 2006). A number of studies suggested encouraging the provision and use of alternative indoor opportunities for physical activity and play, particularly in countries with long, cold and dark winter periods. However this attitude of supplementing possible outdoor activity with indoor options does not allow children to experience the realities and enjoyment of playing and learning in all weathers and seasons (a view strongly endorsed by Play England – see Ouvry, 2003).

## **8.2. How does practice tackle this problem?**

The problem is not enough time is spent outside because of the weather and seasons, by children, by parents, by carers.

It may be too simplistic to argue that encouraging children to be outside more is sufficient in itself to encourage physical activity and play. Being outside plus the opportunities for independent or supervised play are the precursors for active play. Evidence from practice to tackle the impact of seasonality on children play action recommended focusing on three areas<sup>2</sup>:

- Encouraging children to spend time outside independently or under supervision
- Encouraging parents and carers to allow their children to be outside
- Encouraging nursery and teaching staff to spend time outside with children as part of their formal and informal activities.

Ouvry suggest that in many cases it is actually the practitioners who do not want to be outside rather than the children. Practitioners should be encouraged to embrace the weather as an opportunity to learn and experience different play and learning challenges.

“The weather .. is one of our most valuable resources. Sun, rain, snow, mist, wind all provide experiences which can increase children knowledge and understanding of the world in which we live. Taking a positive approach, a collection of Wellingtons can help avoid potential problems when rain or snow leaves, puddles and muddy patches. Umbrellas for ‘rainy walks’ can alleviate the ‘pain’ of very wet days when equipment can’t be set up outside. Warm coats, gloves and boots will ensure that staff as wells as children feel comfortable on cold days. Once adults have

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<sup>2</sup> The literature used for sourcing review materials was obtained from the Play England research library. All the literature reviewed focused on the role of professional carers and how they could utilise the effects of weather and seasons on learning and play.

taken the decision to treat the indoor and outdoor areas as one, then the odd occasion that the children can't go out will be far outnumbered by the times children enjoy continuous free movement between areas."

Ouvry, 2003, page 24

**Case study: *rain starts play*** (Drake, 2005)

Try using rain as an opportunity for learning and play. Make a store of Rain Resources: wet weather clothing, (splash suits, wellies) deep and shallow trays

- buckets
- watering cans
- funnels
- plastic pipes
- toy vehicles
- digital camera

Create a series of weather resource boxes that can reflect a range of different weather conditions. Ask parents for old discarded Wellington boots for a permanent store of wet weather equipment.

**Case study: *outdoor play in early years***

There has to be a belief in the benefits of early play. The curriculum must encourage the involvement of both playing and learning indoors and outdoors.

Some simple guidelines include:

- Encourage staff to participate and play with children when they are outside – it will help all keep warm.
- Support staff to plan ahead with the short term weather forecast so you can predict and react to any weather play opportunities.
- Design outdoor space so that it considers the impact of sun, wind, rain, heat and cold. Protection can be achieved through correct clothing and

sun creams but shade and shelter are also needed.

- Strong and persistent wind can be deflected by buildings, fencing, trees and shrubs.

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- Strong and persistent wind can be deflected by buildings, fencing, trees and shrubs.

In Germany new nurseries are always built with their gardens facing south. In Australia it is the norm to have veranda in pre-school buildings so there is no firm distinction between the playroom, patio/veranda and the playground. (Bilton 2002, p12-35).

***Case study: Farley Nursey School – Committed to outdoor learning whatever the weather***

Farley Nursery School in Wiltshire is unusual in that it is embracing outdoor play for pre-school children as the route to early learning. Children are allowed to go inside whenever they want, but seldom choose to. During a full day from 8.00am to 6pm, they might only go inside for lunch and two "snack" breaks.

Outdoor learning is delivered using their outside space to deliver the curriculum.

They aim to ensure that much teaching and learning takes place outside, for all children, in all weathers. This learning experience is not a duplicate of what is going on inside, but an extension of their learning. Children experience the wonders of the natural world in practical play-based activities and they also are free to explore their surroundings as they wish. There are areas for planting and growing, meditation, imaginative play and exploration.

Through using outdoor space they encourage children to become involved in activities which will help them to gain awareness and respect for their environment. The school feels that children grow in confidence through the use of enquiry, observation and discovery. This starting point must be the world as it is perceived by the child.

As so much time is spent outdoors the school ask parents and carers that the children are sent to the nursery school in the appropriate clothing. This consists of the following:

- Deck shirt
- Cotton T shirt
- Soft top (for younger children)
- Blue cotton pull-ons (shorts in Summer)
- Waterproof coat
- Wellington boots
- Indoor shoes
- Sun hat

School staff believe in the motto that 'there is no such thing as bad weather, only bad clothing'.

Further details at:

[http://www.bbc.co.uk/radio4/womanshour/04/2006\\_51\\_mon.shtml](http://www.bbc.co.uk/radio4/womanshour/04/2006_51_mon.shtml)

**Case study: *Forest Schools, Danish Style***

Forest Schools originated in Sweden in the 1950's and spread to other countries, particularly Denmark where they have become an important part of the Danish early years programme.

In a typical Danish Forest School, young children from 3 years are taken into the forest for 4 hours each day of the week. They take no toys with them, but instead use only what the forest provides (and their imaginations) to develop their games. There is a primitive hut in the forest, which is used in extreme weather and where they eat their packed lunches and listen to stories. Activities are child-led and fun, such as finding small animals or stomping in puddles. Because of high adult to child ratios, children can safely try out activities which are often considered too dangerous, such as climbing trees or lighting fires, and by dressing the children in good protective clothing, they are able to play freely, sitting and rummaging in mud and undergrowth. By setting children small manageable tasks at which they are unlikely to fail, and giving genuine praise, children's independence and confidence grows.

A Swedish scientific study found that children attending forest school kindergartens are far happier than children in ordinary town kindergartens. The 13 month study followed children from similar backgrounds in two different kindergartens, one in the centre of a city and the other out in the country. The study concluded that children in the forest school are more balanced and socially capable, have fewer sick days; are more able to concentrate and have better co-ordination than the city nursery children. The study showed the forest school children to be markedly better at concentrating than the city children. The primary reason appeared to be the greater opportunities for play in nature, so that children play for longer at a time, tending not to disturb each other as much

as children in the city nursery. The study observed that where children were interrupted, they became irritable, their stress level rose, and their ability to concentrate fell. When they could not concentrate there was a clear tendency to selfish and inconsiderate behaviour and aggression. The forest school children were much more considerate towards each other.

The study also showed that the forest school children had 25% fewer sick days than the city children. One reason for this is that the air is nearly always better outside than indoors. Outside a child is not so exposed to virus and bacteria and not so likely to be infected by other children. Another reason may be that, since stress has been shown to have a negative effect on the immune system, high stress levels may be weakening the city children.

The forest school children, on the other hand are in a pleasant, natural, fun and less stressful environment.

Source: <http://www.waterproofworld.co.uk/forestschools.htm>

### **Case study: *German Tots Learn to Answer Call of Nature***

Each weekday, come rain or shine, a group of children, ages 3 to 6, walk into a forest outside Frankfurt to sing songs, build fires and roll in the mud. To relax, they kick back in a giant "sofa" made of tree stumps and twigs. The birthplace of kindergarten is returning to its roots. While schools and parents elsewhere push young children to read, write and surf the Internet earlier in order to prepare for an increasingly cutthroat global economy, some little Germans are taking a less traveled path -- deep into the woods.

Germany has about 700 Waldkindergärten, or "forest kindergartens," in which children spend their days outdoors year-round.

Trees are a temptation -- and sometimes worse. "Recently, I had to rescue a girl who had climbed too high", says Margit Kluge, a teacher at Idstein's forest kindergarten. "Last year, a big tree fell right before our noses."

The schools are a throwback to Friedrich Fröbel, the German educator who opened the world's first kindergarten, or "children's garden," more than 150 years ago. Mr. Fröbel counseled that young children should play in nature, cordoned off from too many numbers and letters.

Source:

[http://online.wsj.com/article/SB120813155330311577.html?mod=hps\\_us\\_pageone](http://online.wsj.com/article/SB120813155330311577.html?mod=hps_us_pageone)

## 9. Discussion

This report has uncovered some interesting issues about children's active play.

Overall the views of practitioners in pre-school settings are positive about the rationale and opportunities for play in general. Practitioners appear less keen to pursue an active play agenda outside due to concerns about safety and the weather. Among older children active play is seen as important, enjoyable and valued and is easier to achieve with close, high quality facilities. Risk is a concern for both parents and children in preventing play but the value and benefits of active play appear to be shared. Development of core skills appears to be seen as a natural product of active play rather than the focus of a formal activity. There are connections between poor weather reducing the time spent outside and hence a reduction of active play however many strong examples exist on how to advance outside learning and active play. The most important challenge is to change the attitudes of play and pre-school professionals and their reluctance to embrace all weathers as a context for play and learning.

This review did not set out to present a definitive evidence base on active play, but aimed to provide valuable insights into the views of play and education practitioners, to help to inform the development of guidance. This review might be viewed in the same way as one would view the outcomes of a consensus process among experts or 'expert testimony' at a meeting, as it has summarised the views of people who work with children every day and understand the issues of active play. While such people are likely to express views that are generally positive towards children's play, they have also highlighted a number of barriers to play and potential solutions to these barriers, appropriate to the UK context. These can help to inform the development of guidance to promote active play among young children.

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## Annex 1. Full list of considered references

CHILDREN'S PLAY INFORMATION SERVICE  
NATIONAL CHILDREN'S BUREAU  
8 Wakley Street  
London EC1V 7QE  
Telephone 020 7843 6303  
Email CPIS@ncb.org.uk

Reading List: PARENTS AND OUTDOOR PLAY KW (ie Key word search)

ARMSTRONG, S.C. and others (2006)  
Included elsewhere

BEELS, P. (2003)  
Look to the skies. *Nursery World*, vol.103, no.3883 (11 Sep) pp14-15. (Advises that the outdoors and the licence to play freely there, is the greatest resource that parents and practitioners can offer to young children. Includes a guide for parents on learning outdoors). Location: Library

CHILDREN'S PLAY COUNCIL, and CHILDREN'S SOCIETY (2001)  
Findings from the Play Space survey 2001. London: The Children's Society. 2pp. (Presents the findings from a survey of 800 children aged between four and sixteen years of age conducted for National Playday 2001. Children were asked where they play outside, about their favourite place to play, and barriers to outdoor play). Location: Children's Play Information Service: Article Files

HOUSTON, G. (2006)  
Included elsewhere

ICM RESEARCH (2007)  
Attitudes towards street play. London: ICM Research. 40pp. (Presents findings of research commissioned by Play England for Playday 2007: Our Streets Too! Four focus groups that included parents, grandparents and non-parents were asked about attitudes towards play, fears and barriers to play, and play today compared to play when they were children. Findings showed that parents felt there were many barriers to play. Suggested solutions included more facilities for play, better community spirit, more green space and less traffic). Location: Children's Play Information Service  
Shelfmark - [30-GCB]  
Document Link: <http://www.ncb.org.uk/playday/docs/Attitudes-towards-street-play.pdf>

LEARNING THROUGH LANDSCAPES (2005)  
Outdoors for everyone: enjoying outdoor play in the early years. Winchester: Learning Through Landscapes. (Video; VHS) (Narrated by Marjorie Ouvry, this video shows practitioners and parents from different types of early years settings tell how they went about developing their outdoor play provision and highlight what made their efforts successful). Location: Children's Play Information Service

MACKETT, R. and others (2007)  
Setting children free: children's independent movement in the local environment. London: UCL Centre for Advanced Spatial Analysis. p12p. (Working papers series, no.118) (Reports the findings from the project CAPABLE (Children's Activities, Perceptions And Behaviour). Drawing on fieldwork carried out with children aged 8-11 years in Hertfordshire, it considers the effects of

factors such as the number of adults at home, having an older sibling, and living near to a park on the propensity to be allowed out alone. Findings revealed that children who were allowed to play out unsupervised were more physically active than those who were not). Location: Children's Play Information Service: Article Files

Shelfmark - [00-E]

Document Link: [http://www.casa.ucl.ac.uk/working\\_papers/paper118.pdf](http://www.casa.ucl.ac.uk/working_papers/paper118.pdf)

#### Reading List: PHYSICAL ACTIVITY AB

ANDERSSON, N., WOLD, B. and TORSHEIM, T. (2006)

Are parental health habits transmitted to their children? An eight year longitudinal study of physical activity in adolescents and their parents. *Journal of Adolescence*, vol.29, no.4 (Aug). pp513-524. (Results from this Norwegian study revealed only weak and non-existent associations between changes in parents physical activity and changes in adolescent activity from 13-21 years of age. The findings did not support the hypothesis that adolescents' leisure time physical activity covaried with their parents over time. This may mean that parental physical activity is not transmitted to their children to the degree that is often believed). Location: Library

BAILEY, R., WELLARD, I., and DISMORE, H. (2005)

Girls and physical activities: a summary review. *Education and Health*, vol.23, no.1. pp3-5. (Explores research and evidence about the benefits of physical activity to young people, not only in terms of health, but in terms of greater self esteem, bodily empowerment and enjoyment, and focuses on research into girl's participation in physical activities. Concludes that many girls are not currently able to take advantage of the benefits of regular physical activities due to inequitable access and opportunities. Calls for governments, schools, sports groups and communities to rise to the challenge and develop forms of physical activity that are sensitive to girls' needs and interests. Makes recommendations for strategies that promote and facilitate regular physical activity and sporting experiences). Location: Library

BARNARDO'S (2002)

Right fit. Putting young people in the driving seat. An evaluation of the GlaxoSmithKline and Barnardo's health partnership with young people. Ilford: Barnardo's. 76pp. (This report presents the findings of an independent evaluation of projects funded within the Right Fit initiative on health promotion and young people. The initiative funded 177 local projects across the UK for children aged 5-18 years old. The projects focused on healthy eating, physical activity and smoking, and all of them involved young people actively in the planning, running and evaluation of projects). Location: Library

BROWN, F. (2006)

Play theories and the value of play. London: National Children's Bureau. 4pp. (Highlight Series; no.223) (Examines the main play theories to see what they say about the value of play. Identifies nine generic areas to describe what is happening when children play: arousal seeking, freedom to act independently, flexibility, social interaction and socialisation, physical activity, cognitive development, creativity and problem solving, pursuit of emotional equilibrium, and self discovery). Location: Library; Children's Play Information Service: Article Files

Shelfmark - [00-X]

BRUNTON, G., and others (2005)

Promoting physical activity amongst children outside of physical education classes: a systematic review integrating intervention studies and qualitative studies. *Health Education Journal*, vol.64, no.4. pp323-338 (The review found that whilst children and parents have clear views on what helps and hinders children's participation in physical activity, their views rarely inform the development of interventions. There are few well-evaluated health promotion interventions which

address physical activity beyond the classroom and all are US-based. There is little research to guide promoting physical activity among socially excluded children. Some intervention strategies have proved successful and these include provision of equipment for monitoring television and video game use, engaging parents in supporting their children's physical activity and providing opportunities for family participation, improvements in school PE, and home-based activities. Aiming to provide a safer local environment in which children can actively travel and play could also encourage physical activity; and future interventions need to involve researchers, practitioners, children and their parents). Location: Library

CALE, L., and HARRIS, J. (2006)

Interventions to promote young people's physical activity: Issues, implications and recommendations for practice. *Health Education Journal*, vol.65, no.4 (Dec). pp320-337. (Considers the evidence base for the effectiveness of school and community based physical activity interventions. The literature suggests that these interventions can be effective and achieve positive outcomes. Discusses the interventions and makes recommendations for physical activity promotion practice. Concludes that until a stronger evidence base becomes available, health professionals, physical education teachers and other practitioners should be encouraged to plan, implement and evaluate physical activity programmes for young people and draw on such recommendations to inform their practice). Location: Library

CAVILL, N. (ed) (2007)

Building health: creating and enhancing places for healthy, active lives. London: National Heart Forum. 68pp. (Commissioned by the National Heart Forum, Living Streets and CABE, this report examines some of the key issues concerning the relationship between the environment and physical activity. Covers strategic planning and urban planning, streets and the public realm, walking and cycling, urban green space, outdoor playing space and building design). Location: Children's Play Information Service  
Shelfmark - [30-G]  
Document Link: [http://www.heartforum.org.uk/downloads/BuildingHealth\\_Main.pdf](http://www.heartforum.org.uk/downloads/BuildingHealth_Main.pdf)

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Included elsewhere

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Included elsewhere

HALLAL, P. (2006)

Included elsewhere

HARRIS, J., and CALE, L. (2007)

Children's fitness testing: a feasibility study. *Health Education Journal*, vol, 66, no.2 (Jun). pp153-172. (Commissioned by the National Assembly for Wales, study aimed to determine whether it was necessary, cost effective and practical to investigate Welsh children's fitness levels in order to promote active healthy lifestyles. A comprehensive literature search, a questionnaire survey and interviews were undertaken. Findings revealed a number of concerns including problems associated with the measurement of children's fitness such as methodological limitations, the possible negative impact on some children and the relatively weak association between children's physical fitness and health. In addition utilising children's fitness data to inform policy and practice was considered problematic by professionals in the field and there was limited evidence regarding the effectiveness of previously conducted large scale surveys. However, it was concluded that a 'lifestyle oriented' project which included the monitoring of physical activity might increase activity levels and lead to health gains). Location: Library

HEPPLES, J., and STRATTON, G. (2007)

The Physical Activity Signposting Scheme (PASS): The A-CLASS project. *Education and Health*, vol.25, no.3. pp63-67. (Describes a physical activity and lifestyle intervention programme in Liverpool, the Physical Activity Signposting Scheme [PASS], which aims to increase physical activity, reduce sedentary behaviour and reduce obesity among children aged 8-10 years. Feedback from children, parents and teachers, suggests that the PASS scheme is having a positive effect on children's activity levels). Location: Library

HILLS, A.P., KING, N.A., and BYRNE, N.M. (eds) (2007)

Children, obesity and exercise: prevention, treatment and management of childhood and adolescent obesity. London: Routledge. 172pp. (A practical guide to understanding and managing childhood obesity. Covers: overweight, obesity and body composition; physical activity, growth and development; psycho-social aspects of childhood obesity; physical activity behaviours; eating behaviours; measuring children's behaviour; and interventions for prevention and management of childhood obesity). Location: Library  
Shelfmark - [Main Shelves. HUUH H6]

HOPE, R. and others (2007)

Wild woods or urban jungle: playing it safe or freedom to roam. *Education 3-13*, vol.35, no.4, pp321-332. (Examines issues surrounding childhood freedom and levels of physical activity, and argues that beneath the real concerns parents have for their children's safety are societal concerns and perceptions concerning the nature of childhood within contemporary society. Location: Library

KIDS' CLUBS NETWORK (2002)

Active kids' clubs. *School's Out!*, no.33 (Spring). pp24-25. (Reports the results of a survey which investigated the provision of sport and physical activity in kids' clubs. The findings will inform the Active Kids' Clubs project, an initiative between Sport England and Kids' Clubs network). Location: Children's Play Information Service

KIRK, A., and others (2003)

Included elsewhere

LEARNING THROUGH LANDSCAPES (2003)

Included elsewhere

MACKETT, R. (2004)

Included elsewhere

MATTOCKS, C. and others (2008)

Early life determinants of physical activity in 11 to 12 year olds: cohort study. *British Medical Journal*, vol.336, no.7634 (5 Jan) pp26-29. (Parents' physical activity during pregnancy and early in the child's life showed a modest association with physical activity of the child at age 11-12 years, suggesting that active parents tend to raise active children). Location: Library

MCKENDRICK, J., BYRNE, D., and HUNTER BLAIR, M. (2007)

Local authority play provision in Scotland, 2006. Edinburgh: Play Scotland. 45pp. (Reports on a survey commissioned by Play Scotland to gather baseline information on play in all local authorities in Scotland. Questionnaires were distributed to all local authorities to gather information on play policy, provision, funding and staffing. Findings showed that play was perceived to be a priority in 68% of authorities; 68% had a physical activity strategy for children, and 59% provided opportunities for career development of playwork staff. Only 22% of authorities had a play policy, and less than a third had a play strategy. Concludes with a number of policy recommendations). Location: Children's Play Information Service

Shelfmark - [02]

MULVIHILL, C., RIVERS, K., and AGGLETON, P. (2000).  
Included elsewhere

NATIONAL HEART FORUM (2002)

Towards a generation free from coronary heart disease: policy action for children's and young people's health and well-being. London: National Heart Forum. 40pp. (Proposes a national plan for children's and young people's health and well-being with particular focus on coronary heart disease prevention. Recommendations include measures to develop comprehensive national strategies for improving nutrition, increasing physical activity and tackling smoking among children and young people). Location: Library  
Shelfmark - [Main Shelves. HULhea N2]

PICA, R. (2006)

Physical fitness and the early childhood curriculum. *Young Children*, vol.61, no.3 (May). pp12-19. (Offers ideas teachers can use to promote health-related fitness, including cardiovascular endurance, muscular strength, muscular endurance, flexibility, and healthy body composition. Pica advises that developmentally appropriate practice focuses on the whole child and demonstrates that academic work and physical activity are not mutually exclusive). Location: Library

PLAY WALES (2004)

Included elsewhere

PRITCHARD, A. (2003)

Time for action. *Nursery World*, vol.103, no.3860 (3 Apr). pp24-25. (Explains that just as the provision for children's physical activity is being eroded, more research evidence is confirming its importance). Location: Library

REILLY, J.J. and others (2006)

Physical activity to prevent obesity in young children: cluster randomised controlled trial. *British Medical Journal*, vol.333, no.7577 (18 Nov) pp1041-1043. (Physical activity can significantly improve motor skills but did not reduce body mass index in young children in this trial). Location: Library

RIDGERS, N., and others (2006)

The Active City of Liverpool, Active Schools and SportsLinx (A-CLASS) Project Education and Health, vol.24, no.2. pp26-29. (The A-CLASS Project is a multidisciplinary project, which consists of multi-sports activity coaches who will be responsible for running after school and community sports clubs, and four research coaches who will analyse the effects of these programmes on the physical activity levels of Liverpool school children. The project hopes to bridge the gap between practice and science and to establish whether structures or lifestyle programmes have a similar impact on children's physical activity levels). Location: Library

ROWLEY, C., DIXON, L., and PALK, R. (2007)

Promoting physical activity: walking programmes for mothers and children. *Community Practitioner*, vol.80, no.3 (Mar). pp28-34. (Reports on the development of two walking programmes by a health visiting team in West Yorkshire, who were inspired by the Walking the Way to Health initiative. The first was eight guided walks for post-natal mothers and their young babies. The second was three guided activity walks for mothers and children aged over-two years. Evaluation showed that the programmes provided an acceptable and supported opportunity to participate in physical activity. Participants increased their levels of regular activity

and reported psychological benefits. On-going funding has been agreed to continue the programmes). Location: Library

RUSSELL, N. (2006)

Staying alive - project overview. *Education and Health*, vol.24, no.1. pp8. (The author is a Health Improvement Specialist - Healthy Schools with Islington PCT. In this short article she describes the range of healthy eating and physical activity initiatives across the north of Islington, which will be subject to rigorous evaluation processes, with a view to acting as a pilot for other areas). Location: Library

SKIDMORE, P., LOWNSBROUGH, H., and BOND, K. (2004)

Let's get physical! Overcoming the barriers to physical activity within families. London: Demos. 27pp. (Commissioned to increase understanding of the complex barriers that prevent people from living more active lives. Explores the experiences of five families and supplements this qualitative data with evidence from academic literature and new opinion polling based on a sample of 2000 British adults, of which 831 were parents. Findings showed that although parents understand the advantages of being healthy, this does not necessarily impact on the amount of exercise their family takes and does not lead to them making their children take part in physical activity. The research shows that there is a need for a new collaborative approach to public health issues and identifies a role for policy makers, business, NGOs and families to address these challenges and provide solutions that can be built and sustained within families' daily routines). Location: Library Shelfmark - [Main Shelves. HJ S5]

TERGERSON, J.L., and KING, K.A. (2002)

Do perceived cues, benefits, and barriers to physical activity differ between male and female adolescents? *Journal of School Health*, vol.72, no.9 (Nov). pp374-380. (A four-page survey was administered to 535 adolescents at two single-sex (one male, one female) high schools in Cincinnati, Ohio, to examine whether perceptions of physical activity differed by gender. Results indicated that the most helpful cue to physical activity for both girls and boys was "having a friend to exercise with". The most commonly reported benefit of exercising among girls was "to stay in shape", whereas boys cited "to become strong". Among girls, the most common barrier to exercising was "having no time to exercise", whereas boys were most likely to report "wanting to do other things with my time". The authors offer recommendations on specific strategies to increasing male and female adolescent activity levels). Location: Library

THOMAS, N., and others (2006)

Physical activity and diet relative to socio-economic status and gender in British young people. *Health Education Journal*, vol.65, no.3 (Sep). pp223-235. (Using data from two Welsh secondary schools, this study considers the physical activity and dietary habits of young people according to socio-economic status. Findings showed that two thirds of all participants had not taken part in vigorous activity during the last week. There were gender differences, with boys being more active than girls, but socio-economic status did not influence time spent in physical activity. There were no significant differences in fat intake across the sexes or across socio-economic status, but 93 per cent of the participants exceeded the 10 per cent saturated fat cut off point recommended by the World Health Organisation. The study concludes that lifestyle changes can modify levels of physical activity and diet, and that preventative strategies for combating diseases brought about by poor diet and inactivity should begin early in life and encompass all socio-economic groups). Location: Library

THORPE, J. (2004)

Active playgrounds evaluation. Kirklees: Children's Fund Kirklees. 6pp (Reports on the Active Playground Project in Kirklees, which aimed to create safe and inclusive school playgrounds with a variety of activities, focusing on physical activity). Location: Children's Play Information Service: Article Files

Shelfmark - [03-HB]

VAN SLUIJS, M.F., McMINN, A.M. and GRIFFIN, S.J. (2007)

Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials. *British Medical Journal*, vol.335, no.7622 (6 Oct) pp703-707.

(Concludes that some evidence was found for potentially effective strategies to increase children's levels of physical activity. For adolescents, multicomponent interventions and interventions that included both school and family and community involvement have the potential to make important differences to levels of physical activity and should be promoted. A lack of high quality evaluations hampers conclusions concerning effectiveness, especially among children).

Location: Library

VEITCH, J., SALMON, J., and BALL, K. (2007)

Children's perception of the use of public open spaces for active free-play. *Children's Geographies*, vol.5, no.4 (Nov) pp409-422. (Children's activity in their free time may have a significant impact on overall physical activity levels, however, little is known about the influences on children's active free play. This paper reports on a study that examined the role and use of public spaces among children aged 6-12 years. Focus group interviews revealed that their use of public open spaces were influenced by play equipment and facilities at local parks, lack of independent mobility, urban design features, presence of friends and personal motivation).

Location: Children's Play Information Service

WALKER, M. (2005)

All in the mind. *Out of School [Nursery World supplement]*, (May) pp10-11. (Ideas for 'brain activities', activities which require children to use different parts of their brain simultaneously, through physical movement combined with mental activity, for out of school settings). Location: Children's Play Information Service

YOULDEN, P. (2004)

Included elsewhere

Reading List: PLAY AND EXERCISE NOT PHYSICAL FITNESS

Y LINDON, J. (2003)

On the go. *Nursery World*, vol.103, no.3869 (5 Jun). pp12-13. (Advises early years practitioners to build in opportunities to develop a range of gross and fine motor skills when planning activities for under-threes). Location: Library

Y MULVIHILL, C., RIVERS, K., and AGGLETON, P. (2000).

A qualitative study investigating the views of primary-age children and parents on physical activity. *Health Education Journal*, vol.59, no.2 (Jun). pp166-179. (Examines factors influencing the involvement of primary school children in physical activities such as general play with friends, PE and organised activities with parents. Influences identified included perceived enjoyment and social and cultural aspects. Although boys and girls reported generally high levels of activity, girls towards the end of the primary phase showed less enthusiasm with a preference for more sedentary activities). Location: Library; Children's Play Information Service: Article Files  
Shelfmark - [00-R]

Y OUVRY, M. (2000)

Exercising muscles and minds. *Outdoor play and the early years curriculum*. London: National Early Years Network. 96pp. (reprinted by NCB 2003). (Using examples of good practice, this

guide shows how to plan for outdoor play as part of the whole early years curriculum. Challenges the assumption that outdoor play is an optional extra). Location: Children's Play Information Service  
Shelfmark - [00-E]

#### Reading List: PLAY\* AND PHYSICAL FITNESS

DAVIDS, K. (2004)

Physical activity, constraints and children's perceptual-motor development. *Childrenz Issues*, vol.8, no.1. pp26-28. (An important area of research concerns the effect of physical activity and exercise on children's health and well being. This issue has been addressed from a perceptual-motor development perspective, with the argument that the acquisition of fundamental movement skills provides a vital platform facilitating the successful performance of many enjoyable dynamic activities in childhood. However, there are a number of constraints on children's skill acquisition that can impede development and impede success in many physical activities. This article argues that a challenge for both theoreticians and practitioners is to identify the range of different constraints on children's perceptual-motor development, so that children can be supported in developing a range of appropriate skills for participation in physical activity and sports). Location: Library

DYMENT, J., and BELL, A. (2007)

Active by design: promoting physical activity through school ground greening. *Children's Geographies*, vol.5, no.4 (Nov) pp463-477. (This paper follows on from a Canadian study of promoting physical activity through school ground greening in 2006. Results from questionnaires from parents, teachers and administrators in 59 schools across Canada showed that in order to stimulate active play, school grounds should be designed to provide adequate space, diverse play opportunities and interaction with natural elements. In addition, children were found to be more active when rules and supervision allowed for non-competitive and open-ended play). Location: Children's Play Information Service

GOODCHILD, R. (2006)

Included elsewhere

GRAVES, L. and others (2007)

Energy expenditure in adolescents playing new generation computer games. *British Medical Journal*, vol.335, no.7633 (22 Dec) pp1282-1284. (Concludes that playing new generation active computer games uses significantly more energy than playing sedentary computer games but not as much energy as playing the sport itself. The energy used when playing active Wii Sports games was not of high enough intensity to contribute towards the recommended daily amount of exercise in children). Location: Library

HALLAL, P. (2006)

Early determinants of physical activity in adolescence: prospective birth cohort study. *British Medical Journal*, vo.332, no.7548 (29 Apr) pp1002-1005. (Concludes that physical activity in adolescence does not seem to be programmed by physiological factors in infancy. A positive association between birth order and activity may be due to greater intensity of play in childhood and adolescence. Tracking activity from age 4 to 10-12 years, however, suggests that genetic factors or early habit formation may be important). Location: Library

HOPE, R. and others (2007)

Wild woods or urban jungle: playing it safe or freedom to roam. *Education 3-13*, vol.35, no.4, pp321-332. (Examines issues surrounding childhood freedom and levels of physical activity, and argues that beneath the real concerns parents have for their children's safety are societal

concerns and perceptions concerning the nature of childhood within contemporary society.  
Location: Library

JOYCE, R. (2004)

The forest schools of Sweden. *Nursery Education*, (Dec). pp4-6. (Describes the philosophy of the Swedish Skogsmulle Foundation, which is a private body, but part of the national childcare system, which promotes nursery schools for children aged two to four years. The Foundation believes that nature and movement are essential to a child's overall development, and children attending the nursery schools spend most of their time outdoors, all year round, whatever the weather. The author describes a typical day in one of the schools). Location: Library

KIRK, A., and others (2003)

Play for health. A pilot study investigating the distribution and features of publicly provided outdoor play areas in Greater Glasgow. Glasgow: MRC Social and Public Health Sciences Unit, University of Glasgow. 23pp. (This pilot reviewed the literature on the benefits of physical activity and active play for children and issues in play provision, including whether outdoor play areas encourage physical activity and active play, and whether the quality of the play areas make a difference. It also examined the distribution of public outdoor play areas in Greater Glasgow, and investigated the features of two play areas in socially contrasted localities). Location: Children's Play Information Service  
Shelfmark - [00-E]

LEARNING THROUGH LANDSCAPES (2003)

Physical activity and active play in school grounds. Winchester: Learning Through Landscapes. 4pp. (Groundnotes) (Looks at the importance of school grounds in providing physical activity and physical play for pupils). Location: Children's Play Information Service; Journals Shelf

MACKETT, R. (2004)

Making children's lives more active. *Play Action*, (Spring) pp17-20. (Discusses the findings from a research study at the Centre for Transport Study at University College London. The study collected data from 195 children in years 6 and 8 to examine the impact of children's activity patterns and travel on the quantities of physical activity. The main findings include: walking and playing outside provide children with more physical activity than most other activities, and reducing the length of school breaks will reduce children's quantity of physical activity). Location: Children's Play Information Service

MERCER, C. (2005)

Good food and getting active. *Playtoday*, no.47 (Mar/Apr) pp4. (Reports on three projects promoting good health through play: a Children's Centre campaign for a holistic approach to children's health; Playboard's Fit for Play Project, and a three-year project by Islington Play Association, which will assess how much physical play is taking place in adventure playgrounds, and how to increase it). Location: Children's Play Information Service

PLAY WALES (2004)

Healthy children play. *Play for Wales*, no.13 (Summer) pp5. (Summaries research carried out by the Centre for Transport Studies at University College London on the way school aged children use energy in their everyday life. The study found that walking and playing provide children with more physical activity than most activities). Location: Children's Play Information Service

PUGH, R. (2004)

Body and mind. *Health Development Agency*, no.22 (Aug/Sep). pp7-9. (Reports on a playground activity scheme set up by Salford and Trafford Healthy Schools, which aims to increase physical activity levels among primary school children). Location: Library

SANDERSON, P. (2004)

A sporting chance. *Sure Start Magazine*, no.4 (Autumn). pp14-17. (Reports on three effective community schemes aimed at increasing the health and fitness of both parents and children, with a focus on exercise and healthy nutrition). Location: Library

STEPHENSON, A. and others (2002)

Lets go outside! Outdoor settings for play and learning. *Young Children*, vol.57, no.3 (May). pp8-41. (Series of articles which encourage early years practitioners to recognise the potential of thoughtfully planned outdoor settings, observe how and what children learn through outdoor experiences, provide adaptations that ensure all children can be part of outdoor play and create outdoor environments that challenge children to learn and stay fit). Location: Library

SUTCLIFFE, R. (2006)

Freedom to play. *Local Government News*, (Jan) pp52, 54. (Looks at the role of playgrounds and states the case for unstructured and impromptu play to improve long-term health and fitness and create environments for the whole community to enjoy without stifling free play). Location: Children's Play Information Service

VEITCH, J., SALMON, J., and BALL, K. (2007)

Children's perception of the use of public open spaces for active free-play. *Children's Geographies*, vol.5, no.4 (Nov) pp409-422. (Children's activity in their free time may have a significant impact on overall physical activity levels, however, little is known about the influences on children's active free play. This paper reports on a study that examined the role and use of public spaces among children aged 6-12 years. Focus group interviews revealed that their use of public open spaces were influenced by play equipment and facilities at local parks, lack of independent mobility, urban design features, presence of friends and personal motivation). Location: Children's Play Information Service

VOCE, A. (2006)

A child's right. *Green Places*, no. 25 (May) pp20-22. (The Director of the Children's Play Council reports on some of the evidence which has identified the increasing barriers to outdoor play as a factor in the increasing levels of childhood obesity, and looks at the role of the Big Lottery Fund (BIG) in bringing about a long-term change in attitude towards children's play). Location: Children's Play Information Service

VOCE, A. (2006)

A child's right. *Green Places*, no. 25 (May) pp20-22. (The Director of the Children's Play Council reports on some of the evidence which has identified the increasing barriers to outdoor play as a factor in the increasing levels of childhood obesity, and looks at the role of the Big Lottery Fund (BIG) in bringing about a long-term change in attitude towards children's play). Location: Children's Play Information Service

YOULDEN, P. (2004)

Included elsewhere

Reading List: PRESCHOOL & PHYSICAL FITNESS KW

BRITISH HEART FOUNDATION (2000)

Couch kids: the growing epidemic. Looking at physical activity in children in the UK. London: British Heart Foundation. unpaginated. (Asks - why is physical activity important and how much do children need to do? Shows that obesity in our children is increasing, while the hours spent in physical education in British secondary schools are the lowest in Europe. The quality of children's diets has also lowered in recent years. The Foundation makes a number of policy recommendations for government, schools, local and health authorities, and parents). Location: Library; Children's Play Information Service  
Shelfmark - [Pamphlet Boxes. HJ B7]  
[01-F]

GOODCHILD, R. (2006)

Go with the flow. Nursery World, vol.106, no.4039 (28 Sep) pp12-13. (Advises that encouraging children to get physical can lay the basis for health and success in other fields. A cut-out-and-photocopy parents' guide looks at why exercise is vital to children, and ways to encourage it). Location: Library

HALLAL, P. (2006)

Included elsewhere

HOLMES, E. (2006)

Keep on moving. Sure Start Magazine, no.13 (Winter). pp10-13. (Suggests ways for early years practitioners to help get children into the habit of exercising. Shows how parents can be encouraged to get involved in physical exercise with their children. Provides a list of useful organisations and their websites). Location: Library

HUETTIG, C., and others (2006)

Growing with EASE. Eating, Activity and Self-Esteem. Young Children, vol.61, no.3 (May). pp26-30. (Describes an intervention programme for preschool children and their families. Participants learned to make better food choices for themselves and their children and to involve their families in physical activities). Location: Library

MATTOCKS, C. and others (2008)

Early life determinants of physical activity in 11 to 12 year olds: cohort study. British Medical Journal, vol.336, no.7634 (5 Jan) pp26-29. (Parents' physical activity during pregnancy and early in the child's life showed a modest association with physical activity of the child at age 11-12 years, suggesting that active parents tend to raise active children). Location: Library

NATIONAL ASSOCIATION FOR THE EDUCATION OF YOUNG CHILDREN (2006)

Special issue: nutrition and fitness. Young Children, vol.61, no.3 (May). pp1-96. (Whole issue advising early years practitioners how they can teach children about healthy foods and introduce fun ways to exercise and build motor skills). Location: Library

O'CONNOR, J.P., and TEMPLE, V.A. (2005)

Constraints and facilitators for physical activity in family day care. Australian Journal of Early Childhood, vol.30, no.4 (Dec). pp1-9. (Findings of a study that examined what encouraged and discouraged exercise among children looked after by childminders). Location: Library

PICA, R. (2006)

Physical fitness and the early childhood curriculum. *Young Children*, vol.61, no.3 (May). pp12-19. (Offers ideas teachers can use to promote health-related fitness, including cardiovascular endurance, muscular strength, muscular endurance, flexibility, and healthy body composition. Pica advises that developmentally appropriate practice focuses on the whole child and demonstrates that academic work and physical activity are not mutually exclusive). Location: Library

PRITCHARD, A. (2003)

Time for action. *Nursery World*, vol.103, no.3860 (3 Apr). pp24-25. (Explains that just as the provision for children's physical activity is being eroded, more research evidence is confirming its importance). Location: Library

RAWSTRONE, A. (2007)

Feel the beat. *Nursery World*, vol.107, no.4090 (4 Oct) pp16-17. (Rawstrone visits an infant school in Oldham where dance is used to help young children interact as a group and learn something they're proud to show off at home). Location: Library

REID, J. (2001)

Catch them (very) young. *Community Practitioner*, vol.74, no.3 (Mar). pp92. (Brief description of the Play@Home exercise programme for preschool children established by Fife Primary Care NHS Trust in partnership with the local education service). Location: Library

ROWLEY, C., DIXON, L., and PALK, R. (2007)

Promoting physical activity: walking programmes for mothers and children. *Community Practitioner*, vol.80, no.3 (Mar). pp28-34. (Reports on the development of two walking programmes by a health visiting team in West Yorkshire, who were inspired by the Walking the Way to Health initiative. The first was eight guided walks for post-natal mothers and their young babies. The second was three guided activity walks for mothers and children aged over-two years. Evaluation showed that the programmes provided an acceptable and supported opportunity to participate in physical activity. Participants increased their levels of regular activity and reported psychological benefits. On-going funding has been agreed to continue the programmes). Location: Library

SANDERSON, P. (2004)

A sporting chance. *Sure Start Magazine*, no.4 (Autumn). pp14-17. (Reports on three effective community schemes aimed at increasing the health and fitness of both parents and children, with a focus on exercise and healthy nutrition). Location: Library

SODHI, S. (2005)

Let's get physical. *Nursery Education*, (Feb). pp10-11. (Sally Gunell talks about the new 'Leaps and Bounds' programme for under-fives. Ten top tips to encourage active children are listed). Location: Library

N SORTE, J.M., and DAESCHEL, I. (2006)

Health in action: a program approach to fighting obesity in young children. *Young Children*, vol.61, no.3 (May). pp40-48. (Describes how early years practitioners worked with families to make changes to foster good health habits and fight obesity. Through five simple steps they paired a nutrition goal with a physical activity goal, reinforcing the idea that good health relies on both nutritious eating and physical activity). Location: Library

STEPHENSON, A. and others (2002)

Lets go outside

Included elsewhere

YOULDEN, P. (2004)

Customers of the future. Recreation, (Jan/Feb) pp28-29. (Describes TOP Tots and TOP Start, programmes which provide training and resources to support the delivery and facilitation of physical activity for preschool children. Both programmes encourage children to play by providing activities in the four main areas of physical development in the early years - mobility, awareness of space, physical control and manipulative skills). Location: Children's Play Information Service

Reading List: OUTDOORPLAY NOT PHYSICAL FITNESS

4CHILDREN (2006)

Buzz survey 2006 report. 4Children's annual national survey on children's views and aspirations. London: 4Children. 7pp. (Presents the results of a survey of 600 children on their views and aspirations. Findings showed that 62% would like to play outside more than they already do, and that 64% feel safe when playing outside their home without an adult. Other survey findings covered mobile phones, internet, stress, money, and bullying). Location: Children's Play Information Service: Article Files  
Shelfmark - [85-K]

ALDERTON, T. and CAMPBELL-BARR, V. (eds) (2005)

Putting the child into childcare. Kent: Kent Early Years and Childcare Partnership. 145pp. (Collection of papers from Kent EYDCP's conference 'Putting the Child into Childcare' held September 2004. The overall theme of the conference was the way in which the voices of children should be heard and listened to when planning and delivering childcare services. Topics covered include: messages from research; partnership working; key issues when working with children under three; methodologies for listening to young children; children's perspectives on outdoor play provision; quality assurance schemes). Location: Library  
Shelfmark - [Main Shelves. QVBIA A2]

ALLEN, A. (2007) Early stages

Where would we be without scuffed knees? Play for Wales, no.22 (Autumn). pp6. (Reports on DIY Streets, a project by Sustrans that aims to encourage more outdoor play by helping residents in ten UK streets redesign their streets to make them safer and more attractive). Location: Children's Play Information Service

ALLEN, S. (2002)

Just too boring! Local Government News, (Oct) pp50-52. (Discusses the findings of a survey, commissioned by the Children's Society and the Children's Play Council for National Playday, which revealed that children are bored with their playgrounds, and often prevented from playing in a way that they enjoy, due to safety concerns). Location: Children's Play Information Service

ARMSTRONG, S.C. and others (2006)

Evaluation of play provision and play needs in the London Borough of Redbridge. Final report. CENTRE FOR CHILDREN AND YOUTH, UNIVERSITY COLLEGE NORTHAMPTON London: Redbridge Children's Fund. 256pp. (Presents the findings of a major project that investigated the play provision and play needs of children and young people in the London Borough of Redbridge. The research was based on consultations with over 750 children aged 5 to 13 years, over 250

parents and 28 key workers in the play and recreation sector. Includes a number of recommendations). Location: Children's Play Information Service Shelfmark - [02]

ARNOLD, C. (2000)

The value of spatial awareness; Encouraging spatial awareness; Exploring space and movement. Practical Pre-School, issue 22. 6-page insert. (Three short articles looking at the exploration of spatial concepts by young children - for example throwing a ball, climbing on a frame or riding a vehicle. These activities can provide a foundation for later mathematical understanding and help children make judgements about distance and speed). Location: Library

ARNOLD, D. (2005)

Planning your outdoor play area. Practical Pre-School, no.50 (Mar). (Insert). (Sets out the steps involved in transforming an outdoor play area). Location: Library

BAILEY, D. (2003)

SNAP - providing adventure play for all. Playwords, no.20 (Aug/Sep) pp12-14. (Describes the Special Needs Adventure Playground (SNAP) in Cannock. The playground provides outdoor and indoor play for children with special needs). Location: Children's Play Information Service

BARKER, D. (2006) Case study

Action and adventure. Local Government News, (May) pp56. (Reports on Somerford Grove Park, the first adventure playground to open in London for over 20 years. The playground was designed and built in consultation with local children). Location: Children's Play Information Service

BARKER, D. (2006) Case study

Fun at the forest. Local Government News, (Aug) pp52-54 (Reports on a new play forest which has transformed a derelict site of former council allotments into a play area. The play area is a combination of informal play and modern technology). Location: Children's Play Information Service

BARNARDO'S (2005)

The delivery of Better Play Projects in public spaces. London: Barnardo's. 4pp. (Better Play briefing; no. 2) (Reports on the work of the 18 organisations funded by Better Play to deliver play projects in public spaces. Covers the achievements, the service they provided, and the issues tackled by organisations using public spaces). Location: Children's Play Information Service Shelfmark - [02]

BARNARDO'S (2005)

The delivery of environmental play projects by the Better Play funded organisations. London: Barnardo's. 4pp. (Better Play briefing; no. 4) (Reports on the work of the 14 organisations funded by Better Play to deliver environmental play projects, focusing on engagement with the natural environment and the natural elements). Location: Children's Play Information Service Shelfmark - [02]

BARNARDO'S (2006)

More school, less play? The role of play in the extended school of Denmark and England. London: Barnardo's. 6pp. (Reports on a small study carried out by Barnardo's which considered approaches to after school care in Denmark and England). Location: Children's Play Information Service: Article Files Shelfmark - [25-ABA-2]

BASHFORD, S. (2005)

Babes in the woods (and everywhere else). *Children Now*, (18 May). pp20-21. (Discusses the benefits of outdoor play for babies and small children with examples of innovative approaches in early childhood settings). Location: Library

Document Link: <http://www.cypnow.co.uk/Archive/login/475833/>

BAXTER, N. (2005)

The erosion of outdoor play: effects and implications for children, the environment and the playwork profession. Unpublished dissertation BA (Hons) Playwork. 59pp. Leeds Metropolitan University. (Explores the benefits of outdoor play and contact with nature on children, and looks at how restrictions placed on children's outdoor play opportunities can have negative consequences for children and the environment. Explores positive steps being taken by the playwork profession and concludes with recommendations for future initiatives). Location: Children's Play Information Service

Shelfmark - [00-E]

BEELS, P. (2003)

Look to the skies. *Nursery World*, vol.103, no.3883 (11 Sep) pp14-15. (Advises that the outdoors and the licence to play freely there, is the greatest resource that parents and practitioners can offer to young children. Includes a guide for parents on learning outdoors). Location: Library

BIDDULPH, M. (2002)

No place like home. *Local Government News*, (Sept). pp21-22. (Reports on new Home Zone guidelines published by the Institute of Highway Incorporated Engineers). Location: Children's Play Information Service

BILTON, H. (2005)

Brake time. *Nursery World*, vol.105, no.3952 (20 Jan). pp26-27. (In a discussion of young children's use of bikes in the outdoor area, Bilton recommends a rethink about what is being achieved with one of the most common play resources stocked by early years settings). Location: Library

BILTON, H. (2005)

Learning outdoors: improving the quality of young children's play. London: David Fulton. 106pp. (A handbook which show how to develop an effective outdoor learning environment for young children, how adults should behave in this space and the benefits of outdoor play for children. Includes real-life examples of how to solve common problems encountered in the outdoor area, practical advice on issues such as including parents, self-evaluation of outdoor provision and using ICT. Photocopiable resources are included) Location: Children's Play Information Service  
Shelfmark - 00-E]

BILTON, H. (2002)

Outdoor play in the early years: management and innovation. 2nd ed. London: David Fulton. 132pp. (Aims to stimulate and challenge early years practitioners to develop an effective outdoor teaching and learning environment. Gives advice on how to provide outdoor play in infant settings and offers examples from teachers in the field. Links are made between the Foundation Stage principles for early years education and the guiding principles for outdoor play and provision. Literacy, numeracy, personal, social and emotional development, movement and thinking, bikes, fixed equipment and play scenarios are discussed). Location: Children's Play Information Service  
Shelfmark - [00-E]

BILTON, H. (2004)

Playing outside: activities, ideas and inspiration for the early years. London: David Fulton. 95pp. (Provides guidance and advice on how to make outdoor play work in early years settings. Covers the benefits of outdoor play for children, the adult's role in planning and providing outdoor play, the outdoor play curriculum, and how to create a workable playing environment). Location: Children's Play Information Service  
Shelfmark - [00-E]

BISHOP, K. (2003)

Access in playgrounds: What does it mean? How does it work? Why is it so important? Playrights, vol.XXV, no.3 (Sep) pp18-24. (Discusses the meaning of a truly accessible playground, and looks at some of the issues that need to be considered when designing play areas). Location: Children's Play Information Service

CAIN, P. (2005)

This is what we want. Children Now, (7 Sep). pp18-19. (Reports on children's participation in the design and building of outdoor play spaces). Location: Library  
Document Link: <http://www.cypnow.co.uk/Archive/login/504540/>

CASEY, T. (2007)

Environments for outdoor play. London: Paul Chapman. 116pp. (Gives ideas for developing play environments that will meet the needs of all children. Illustrates how improving the play environment offers a positive way of dealing with issues such as inclusion, playground management and the promotion of physical activity. Includes frameworks for designing play environments and case studies). Location: Children's Play Information Service  
Shelfmark - [03-ABC]

CASEY, T. (2005)

Evaluation report of Playboard Northern Ireland's 'Out 2 Play' training package for Play Scotland. Edinburgh: Play Scotland. 24pp. (Describes the evaluation for Play Scotland of the Out 2 Play training package which was successfully developed and implemented by PlayBoard in Northern Ireland. The evaluation considered the suitability of the package to promote active outdoor play in Scotland). Location: Children's Play Information Service  
Shelfmark - [00-E]

CHAN, S. (2004)

A place to play of my own. Unpublished dissertation BA (Hons) Playwork. 57pp. Leeds Metropolitan University. (The aim of the study was to examine contemporary children's experiences of public urban space, in particular, where and what the children play, how far they ranged, and their views on personal safety on the street, focusing on a case study in Tranmere). Location: Children's Play Information Service  
Shelfmark - [00-E]

CHILDREN'S SOCIETY (2007)

Good childhood: what you told us about family. London: Children's Society. 6pp. (Evidence summary two - family). (Provides a summary of the evidence 'The Good Childhood Inquiry' received on the theme of family and includes views from experts, members of the public, and from children and young people themselves. The inquiry collected views from 14,000 children and over 1,500 adults and organisations on the theme of the family, and this evidence summary highlights some of the concerns and hopes they raised). Location: Library; Children's Play Information Service: Article Files  
Shelfmark - [Pamphlet Boxes. QV C4]  
[85-K]

Document Link:

<http://www.childrenssociety.org.uk/what+we+do/The+good+childhood+inquiry/GoodChildhoodreflectionschildhood.htm>

CHILDREN'S SOCIETY (2007)

Good childhood: what you told us about friends. London: Children's Society. 8pp. (Evidence summary one - friends) (Presents a summary of the opinions, experiences and research expressed in submissions on friendship and peer relationships to The Good Childhood Inquiry. Includes the views on children and young people and professionals, and covers friendship, bullying and play). Location: Library; Children's Play Information Service  
Shelfmark - [Pamphlet Boxes. QV C4]

[85-K]

Document Link:

<http://www.childrenssociety.org.uk/what+we+do/The+good+childhood+inquiry/GoodChildhoodreflectionschildhood.htm>

CLARK, A. (2007)

Views from inside the shed: young children's perspectives of the outdoor environment. *Education* 3-13, vol.35, no.4, pp349-363. (Examines messages from participatory research about young children's perspectives of early childhood environments and outdoor spaces in particular. The studies selected were carried out in England with children under 6 years using the Mosaic approach, and were compared with findings from a similar study from Iceland. The findings reinforce the importance of private spaces, personal space, social spaces and imaginary spaces in outdoor environments for young children). Location: Library

COOPER, G. (2006)

Disconnected children. *Horizons*, no. 33 (Spring) pp22-25. (Suggests that children are leading more restrictive and protected lives and losing out on opportunities, for play, adventure and contact with nature. Looks at some of the barriers to outdoor experiences for children, and considers the role of outdoor education in overcoming these). Location: Children's Play Information Service

DRAKE, J. (2005)

Rain starts play. *Nursery World*, vol.105, no.3951 (13 Jan). pp12-13. (Part of a series on short-term planning for the Foundation Stage curriculum. Using the changing weather as an example, advises practitioners how they can catch on to children's arising interests and work them into plans for immediate provision). Location: Library

DUDEK, M. (2000)

Going up. *Coordinate*, issue 75. pp8-9. (All too often, early years policy-makers and practitioners focus on what children do rather than the space they're in. And yet it is much more difficult to give children stimulating and enjoyable play activities that help them to develop if their environment is poorly designed. The author asks why the government shows so little interest in best practice for children's architecture). Location: Library

EDGINGTON, M. (2004)

All about...the outdoors curriculum. *Nursery World*, vol.104, no.3933 (2 Sep) pp15-22. (Pull-out supplement which looks at the importance of outdoor learning and its place in the Foundation Stage curriculum; gives an overview of outdoor learning; and shows how to plan for outdoor play and involve parents). Location: Library

ENGEL, L. (2003)

All about...organising space. Nursery World, vol.103, no.3895 (4 Dec). pp15-22. (Pull-out supplement which discusses ways that practitioners can set out and use all the areas in their setting most effectively. Gives ideas on creating a positive and stimulating environment to aid children's intellectual, social, creative and physical development). Location: Library

ENGEL, L. (2005)

Dig and delve. Nursery World, vol.105, no.3963 (7 Apr) pp12-13. (Young children love getting muddy in the garden. Engel advises early years practitioners that they should let them get dirty while developing fine and gross motor skills and learning how to handle implements). Location: Library

FOUNTAIN, D. (2003)

Journeying around my city. Extra Time, no.31(Summer) pp14-15. (Describes the 'Journeying Around My City Project', an outdoor adventure activity project in Birmingham which uses local parks. Discusses the experiences of a group of Muslim girls who participated in the project). Location: Children's Play Information Service

GILL, T. (2007)

Can I play out...? Lessons from London Play's Home Zones project. London: London Play. 33pp. (Reports on an evaluation of the work of London Play's Home Zones for London project. The reports draws on the experience of the project and other home zone schemes, and considers the difference completed schemes have made to children's lives, particularly in terms of their outdoor play. It also looks at what home zones show about public attitudes to children, how they have engaged children and the longer-term prospects for more child-friendly streets). Location: Children's Play Information Service  
Shelfmark - [30-GCB-0]

GREGORY, H. (2006)

It's natural. Children Now, (12 Jul). pp20-21. (Lists sources of help and inspiration to get children playing outdoors). Location: Library

HAYTOR, S. (ed.) (2006)

Special report: Excellence in play. Children Now, (26 Apr). pp24-32. (Highlights what makes for excellent play, drawing on some of the best examples in the UK and the reasons for their success, including the importance of the community context, equipment to expand the range of challenging activities and giving children a say in type of provision as well as day-to-day activities. Includes resource list). Location: Library

HODGSON, R. and LEICESTER, G. (2003)

Designing schools for the future: a practical guide. Edinburgh: Children in Scotland. 34pp. (Discusses what kind of schools are wanted for the future, what should go in them and what kind of spaces do they need to provide. Looks at involving pupils in the building design and the importance of providing creative outdoor spaces). Location: Library  
Shelfmark - [Main Shelves. J H6]

HOUSTON, G. (2006)

Supporting equality in outdoor play. Eye News, vol.4, no.2 (Jun) pp3,9,12. (Considers the benefits of outdoor play in early years settings for children's personal, social and emotional development. Discusses ways of supporting equality in outdoor play, and looks at planning, resources and involving parents and carers). Location: Children's Play Information Service: Article Files  
Shelfmark - [00-E]

ICM RESEARCH (2007)

Attitudes towards street play. London: ICM Research. 40pp. (Presents findings of research commissioned by Play England for Playday 2007: Our Streets Too! Four focus groups that included parents, grandparents and non-parents were asked about attitudes towards play, fears and barriers to play, and play today compared to play when they were children. Findings showed that parents felt there were many barriers to play. Suggested solutions included more facilities for play, better community spirit, more green space and less traffic). Location: Children's Play Information Service  
Shelfmark - [30-GCB]  
Document Link: <http://www.ncb.org.uk/playday/docs/Attitudes-towards-street-play.pdf>

JARVIS, M. (2000)

Using wheeled toys [and] Getting the best from ride-on toys. Practical Pre-School, issue 23. 2-page insert. (Most early years settings have some large wheeled toys and trikes in their outdoor play area, but do they make the best use of them? Jarvis suggests ways that this equipment can be used to promote children's physical development, coordination, mathematical development and creativity. He also links these activities to the Early Learning Goals). Location: Library

JONES, G. (2002/2003)

Planning for health. Leisure Manager, (Dec/Jan) pp26-27. (Discusses the growing recognition of the link between active leisure opportunities, including play, and the nation's health. Highlights the potential contribution that planners can make towards healthier living). Location: Children's Play Information Service

JOYCE, R. (2006)

Learning outdoors. Nursery Education, no.96 (Apr). pp23-26 & pp29. (Advice on how to utilise four different types of outdoor areas for children to learn across the curriculum. Includes a rural setting, a tarmac covered area, a small home garden and a purpose built outdoor area) Location: Library

KEEN, M., and SMITH, B. (2000)

Improving an inner city playground and the quality of children's play. Early Education, no.30. pp8-9. (The author is the Head Teacher of Cowgate Nursery School in Edinburgh, an inner city school which caters for a rich cultural, ethnic and social mix of children, most of whom live locally. She discusses how the staff developed the outside playground area, in conjunction with parents, children and the local authority. In order to create a more challenging and aesthetically pleasing environment for the children, staff and local community, the completed project focused on the three main areas of play facilities, environmental issues and the arts). Location: Library

KIRSCH, M. (2005)

Play the way it's supposed to be. Children Now, (3 Aug). pp16-17. (Examines projects that are encouraging outdoor play in face of dwindling opportunities and lack of space). Location: Library

KNOFLACHER, H. (2007)

Mobility of children as criterion and challenge Leisure & Play, no.6 (Nov/Dec). pp24-26. (Discusses how children's mobility is restricted in our car-oriented society). Location: Children's Play Information Service

LAMBETH EDUCATION (2001)

We want to play. PLAY TRAIN. London: Lambeth Education. (Video; colour; VHS; 9 mins 20 secs). (Records how a group of children aged 8 to 13 years consulted over 700 other local children to report on what they wanted for their play times and play spaces. The project was facilitated by Play Train to inform Lambeth Council about the background to a play policy. It resulted in 17 main recommendations). Location: Children's Play Information Service  
Shelfmark - [02-AA].

LEARNING THROUGH LANDSCAPES (2002)

Healthy schools, happy lives. *Grounds for Partnerships*, (Winter). pp8-9. (Outlines some ideas on how school grounds can support the objectives of the Healthy School Standard, linking the eight healthy themes to specific outdoor activities and projects). Location: Children's Play Information Service

LEARNING THROUGH LANDSCAPES (2001).

Play, playgrounds and playtime. *Grounds for Partnerships*, (Spring). pp8-9. (Looks at the significance of school grounds, and provides ideas on how to create a stimulating outdoor play environment, and how to manage playtimes). Location: Children's Play Information Service

LEISURE & PLAY. (2006)

Derelict council allotments are transformed into a showcase play forest. *Leisure & Play*, (Nov/Dec) pp.35-36. (Reports on the development of the Cutsyke Play Forest, which had the involvement of the community throughout every stage of the planning, design and installation). Location: Children's Play Information Service

LEPPER, J. (2005)

The best places to play. *Children Now*, (23 Feb). pp22-23. (Looks at six examples of playgrounds that have adopted an innovative approach to creating exciting and challenging play spaces - Hengrove Park in Bristol, Lawefield Lane Nursery in Wakefield, Burnside in Northern Ireland, Bowlee Park in Rochdale, Michael Williams Palace Adventure Playground in London, *Grounds for Play* in Glasgow. Outlines keys to success and lists design and consultancy services). Location: Library

LESTER, S., and MAUDSLEY, M. (2007) May have useful references

Play, naturally. A review of children's natural play. *PLAY ENGLAND* London: National Children's Bureau. 123pp. (This research was commissioned to support Playday 2006: Play, naturally. The report considers the meanings of play and nature; explores children's biological drives to play and to connect with nature; and looks at the value and benefits of children's play in natural settings. It discusses changes in children's access to natural spaces for play, and examines a range of initiatives that aim to create and enhance opportunities for natural play). Location: Library; Children's Play Information Service  
Shelfmark - [03-BB]

LINDER, H. (ed.) (2002)

Let's move: off we go outside! Oxford: Meyer&Meyer Sport. 95pp. (Let's move series, vol.3). (Part of a series on games and activities based on gymnastics, movement and music for children aged between 3 and 7 years. Provides suggestions for using finger games and songs, movement games involving equipment, and creative crafts ideas outdoors). Location: Children's Play Information Service  
Shelfmark - [01-A].

LINDON, J. (2003)

Nature's way. *Nursery World*, vol.103, no.3891 (6 Nov). pp12-13. (Advises early years practitioners to make the most of outdoor opportunities for under-threes. Babies and toddlers love to engage with the natural world and there's a great free learning resource outside). Location: Library

LINDON, J. (2000)

Taking risks: or learning life skills? Practical Pre-School, issue 21. 2-page insert. (Most children today do not have the freedom to play and explore out of doors, and to experience 'adventures'. Yet taking risks, and learning from them, is a vital part of growing up. Suggests some strategies for helping children to recognise and deal with everyday risks). Location: Library

LINDON, J. (2002)

What is play? London: National Children's Bureau for the Children's Play Information Service. 5pp. (CPIS Factsheet) (Defines the meaning of play and discusses the importance of play for children. Gives suggestions for how adults can support children's play. Includes a list of further reading). Location: Children's Play Information Service: Article Files  
Shelfmark - [00]

MARTIN, D. (2004)

Fun in the sun. Children Now, (12 May). pp20-21. (Examines the benefits of outdoor play schemes and residential educational activities during the school holidays). Location: Library

MATHIVET, S. (2004)

Happy faces as children have their say. Under Five, (Apr). pp16-17. (Provides background to the Spaces to Play project. Run by the Thomas Coram Research Unit in collaboration with Learning Through Landscapes, it is based on gathering the views of three and four year olds about their outside play area. Findings have challenged pre-conceived ideas that adults have about play and this has resulted in changes to planning and practice). Location: Library

MAYNARD, T. (2007)

Outdoor play and learning. Education 3-13, vol.35, no.4, pp305-307. (Introduces the special issue on outdoor play and learning. Summarises recent debates about children's use of the outdoor environment, including concerns about obesity and lack of connectedness with nature. Looks at the curriculum frameworks for early years in England and Wales, which require schools to use a more play-based approach to learning, including the use of the outdoor environment). Location: Library

MOORE, S. (2003)

The use of public parks in England. Sport England. London: Sport England. 31pp. (Report of a national survey commissioned by Sport England, the Countryside Agency and English Heritage to help establish how many adults in England use public parks, what activities they participate in when visiting parks, and levels of satisfaction with amenities on offer. Findings showed that taking a child to a play area was the second most common activity undertaken in parks by adults. On the whole, the quality of play areas was seen as good, and the majority of adults who took children to play areas used their nearest park, and were most likely to walk). Location: Children's Play Information Service  
Shelfmark - [03-CN]

NURSERY EQUIPMENT (2002)

For work, rest and play. Nursery Equipment [Nursery World supplement], (Feb). pp28-31. (A stimulating outdoor play area can have a positive effect on nurseries and schools - creating an environment which encourages quality free play has been shown to improve children's behaviour and noise levels). Location: Library

OUVRY, M. (2000)

Exercising muscles and minds. Outdoor play and the early years curriculum. London: National Early Years Network. 96pp. (reprinted by NCB 2003). (Using examples of good practice, this guide shows how to plan for outdoor play as part of the whole early years curriculum. Challenges

the assumption that outdoor play is an optional extra). Location: Children's Play Information Service  
Shelfmark - [00-E]

PRE-SCHOOL LEARNING ALLIANCE (2005)

Outdoor play. A wonderful opportunity for fun and learning. Under Five, (Jan). pp10-11. (Discusses the benefits of outdoor play for preschool children and looks at a play group in Oxford who have worked to revitalise their outdoor space. Also provides information and advice about developing outdoor provision and funding projects). Location: Library

RICHARDSON, G.R. (2006)

Creating a space to grow. Developing your outdoor learning environment. London: David Fulton. 91pp. (A guide to changing and developing the outdoor environment in early years settings. Looks at the importance and benefits of outdoor play, presents case studies and examples from the Kent Space to Grow project, and gives a detailed explanation of the approaches used by Learning Through Landscapes. Includes photocopyable prompt sheets to guide practitioners and to encourage the participation of children). Location: Children's Play Information Service  
Shelfmark - [00-E]

RICHARDSON, G.R. (2007)

The great outdoors. Education Review, vol.20, no.1 pp.92-99. (Highlights the special nature and benefits of the outdoors during school time for young children. Identifies key features of outdoor environments that are successful in providing play based Foundation Stage learning. Considers some of the whole school issues that can cause problems for the development of outdoor provision and suggests practical solutions). Location: Children's Play Information Service: Article Files  
Shelfmark - [00-E]

SAMUEL, M. (2003)

How can I develop the outdoor area to enhance children's learning? Early Childhood Practice, vol.5, no.2. pp44-65. (Children's learning can be enhanced by an outdoor curriculum as evidenced by this research into the effects of play on a group of children moving into Reception from Nursery. Case studies and observation of particular children show their development in communication, language and literacy, physical dexterity, personal, social and emotional development). Location: Library

SEXTY, C. (2000)

Playing out: improving child safety in parks and open spaces. NSPCC. Reading: ILAM. 27pp. (Report based on a survey of parks and open spaces undertaken by NSPCC supporters in 1999. Findings revealed that the majority of play areas surveyed had some good basic facilities, however, only a minority of the respondents felt that the play area in their local park was safe. Key concerns included anti-social behaviour, inadequate and unsafe play equipment, play areas where supervision was obscured by bushes, traffic nearby, and dogs. A number of examples of good practice are highlighted in the report). Location: Children's Play Information Service  
Shelfmark - [03-ABC].

SIMONS, J. (2007)

In charge. Nursery World, (11 Oct) pp16-17. (Simons, head teacher of Hungerford Nursery School in Berkshire, recounts how she and her staff cleared the school's outdoor area and let the children choose their own challenges in physical play). Location: Library

SPACES & PLACES (2003)

Grumpy grown-ups stop outdoor play. *Spaces & Places*, no.5 (Oct) pp9. (Reports on a survey by the Children's Society for National Playday, which showed that two-thirds of the children liked to play outside but that eighty percent had been told off by adults for playing outdoors). Location: Children's Play Information Service

STEPHENSON, A. (2002)

Opening up the outdoors: Exploring the relationship between the indoor and outdoor environments of a Centre. *European Early Childhood Education Research Journal*, vol.10, no.1. pp29-38. (Young children's enthusiasm for outdoor play is widely recognised, but the factors that contribute to it are less well understood. In order to open up new perspectives in this area, a broad, multi-dimensional approach was chosen, and ethnographic methods were used to study outdoor play in a single New Zealand childcare centre setting. This paper describes four broad dimensions of difference that were identified in exploring the relationship between the outdoor and indoor playspaces, and the play that occurred there). Location: Library

SWINBURNE, C. (2000)

Take a break. *Nursery World*, vol.100, no.3743 (14 Dec). p21. (Considers an innovative training scheme for lunchtime assistants, established by the charity 'Shared Learning in Action.' The author visits a Merseyside primary school, where the programme has transformed school lunchtimes into a positive experience, both for the children and the staff who supervise them). Location: Library

THORNTON, L., and BRUNTON, P. (2005)

All about...the built environment. *Nursery World*, vol.105, no.3954 (3 Feb). pp15-22. (Pull-out supplement which looks at what the built environment has to offer young children; outdoor activity ideas for children in the Foundation Stage; how children aged nought to three benefit from awareness of the built environment). Location: Library

TOVEY, H. (2007)

Playing outdoors: spaces and places, risk and challenge. Maidenhead: Open University Press. 162pp. (Explains why outdoor play is essential in young children's lives and learning, and examines issues around risk and safety. Identifies key principles underpinning the design of challenging outdoor play environments and looks at how children use and transform space to create their own imaginary worlds. Considers the role of adults in supporting and extending children's free play, and identifies implications for practice). Location: Children's Play Information Service

Shelfmark - [00-E]

VIRGO, S. (2003)

Comfort and joy. *Out of School* [Nursery World supplement], vol.103, no.3853 (13 Feb). pp10-11. (Reports on a project by the Children's Society at St Gabriel's Project in Brighton which investigated what children in West Sussex want from out of school clubs. Findings revealed that safety, comfort, choice of food and outdoor play were seen as the most important by the children surveyed). Location: Children's Play Information Service

WADDINGHAM, E. (2006)

A seal of approval. *Local Government News*, (May) pp52. (Reports on how Bexley Borough Council successfully consulted with the local community, including local children, throughout its major renovation of 23 playgrounds). Location: Children's Play Information Service

WALKER, M. (2005)

After dark. Out of School [Nursery World supplement], (Feb) pp10-11. (Ideas for after dark activities for out of school clubs, including nocturnal nature, glow in the dark and sky gazing). Location: Children's Play Information Service

WALLER, T. (2007)

'The Trampoline Tree and the Swamp Monster with 18 heads': outdoor play in the foundation stage and foundation phase. Education 3-13, vol.35, no.4, pp393-407. (Discusses pedagogy and outdoor play in the early years in relation to findings constructed in an ongoing research project in two settings (in England and Wales). In the project, children aged three to seven years are given regular opportunity to play and learn in natural wild environments). Location: Library

WATERS, J., and BEGLEY, S. (2007)

Supporting the development of risk-taking behaviours in the early years: an exploratory study. Education 3-13, vol.35, no.4, pp365-377. (Research shows that children's opportunities for independent play in natural outdoor spaces, and the opportunities to experience risk, are being eroded. This article reports the findings of an exploratory study that documented the risk-taking behaviours displayed by children aged four years in a Forest School and within their school outdoor play space. Findings indicate that the Forest School environment was better able to support the development of positive risk-taking behaviours). Location: Library

WATERS, P. (2005)

On new territory. Out of School [Nursery World supplement], (Jul) pp8-9. (Considers the importance of allowing children to range, and explores how playworkers can facilitate ranging while accommodating fears about safety). Location: Children's Play Information Service

WEATHERILL, C. (2003)

Primary playground games: ages 4-11. Leamington Spa: Scholastic. 80pp. (Provides ideas for promoting positive play at playtime in primary schools. Includes games for all age groups across the primary age range and games that are suitable for every type of playground, including indoor games). Location: Children's Play Information Service  
Shelfmark - [01-A]

WESTCOTT, P. (2005)

Come outside. Nursery Education, no.88 (Aug). pp14-15. (This special feature presents two case studies which show that whether the setting be rural or urban, effective use can be made of outdoor space. Experience from both settings suggests that having an outside area has been a transforming experience for children, with reports of improvements in mood, behaviour and communication among the children). Location: Library

WHITE, J. (2005)

Fully equipped. Nursery World, vol.105, no.3960 (17 Mar). pp24-25. (White, of Learning Through Landscapes, advises practitioners that they should make imagination and versatility their priorities when stocking outdoor areas with play materials). Location: Library

WINEBERG, L.P. (2000) USA

Integrating walks into academics: authentic learning experiences. International Journal of Early Childhood, vol.32, no.1. pp26-33. (Describes an American project, a university/school partnership, aimed at integrating walks into the curriculum of a kindergarten and a fourth grade classroom, in order to enrich student learning. A second aim was to promote university/school partnerships in collaborating on curriculum development. A wide range of walks are described,

e.g. nature trails, landmark walks, a Dewey Decimal System Treasure Hunt, and a full-moon walk. Links with the curriculum, and benefits to students are described). Location: Library

WOOLEY, H., and JOHNS, R. (2001)

Skateboarding: the city as a playground. *Journal of Urban Design*, vol.6, no.2. pp211-230. (Reports on research which examined why young skateboarders use particular locations within a city centre. Focus group discussions in Sheffield, Manchester and Cardiff revealed that the main reasons for choosing a space for skateboarding included its accessibility, sociability, and compatibility, and the opportunities it offered for tricks). Location: Children's Play Information Service: Article Files.  
Shelfmark - [01-FE].

WORPOLE, K. (2003)

No particular place to go? Children, young people and public space. Birmingham: Groundwork UK. 29pp. (Provides an overview of current government and community initiatives around children's and young people's need and use of public space, including play space. Argues that planning for play and creating safe street networks and spaces for children and young people are pre-conditions of a healthy community life and 'liveability'). Location: Children's Play Information Service  
Shelfmark - [03-FA]

#### Reading List: OUTDOOR PLAY AND PHYSICAL FITNESS

CAVILL, N. (ed) (2007)

Building health: creating and enhancing places for healthy, active lives. London: National Heart Forum. 68pp. (Commissioned by the National Heart Forum, Living Streets and CAGE, this report examines some of the key issues concerning the relationship between the environment and physical activity. Covers strategic planning and urban planning, streets and the public realm, walking and cycling, urban green space, outdoor playing space and building design). Location: Children's Play Information Service  
Shelfmark - [30-G]  
Document Link: [http://www.heartforum.org.uk/downloads/BuildingHealth\\_Main.pdf](http://www.heartforum.org.uk/downloads/BuildingHealth_Main.pdf)

COLE-HAMILTON, I. (2004)

Children's exercise and play. A Children's Play Council briefing. London: Children's Play Council. 4pp. (The Briefing argues that children need to spend less time at home to increase their energy expenditure; that children get more exercise from outdoor play than they do from formal sports activities; that children would like more physically active play but are sometimes prevented from playing outside; and that play and break times are an essential time for children to take exercise. It suggests that simple measures by local authorities, Primary Care Trusts and schools could significantly increase the amount of exercise children get through outdoor play). Location: Children's Play Information Service: Article Files  
Shelfmark - [00-E]

DYMENT, J., and BELL, A. (2007)

Active by design: promoting physical activity through school ground greening. *Children's Geographies*, vol.5, no.4 (Nov) pp463-477. (This paper follows on from a Canadian study of promoting physical activity through school ground greening in 2006. Results from questionnaires from parents, teachers and administrators in 59 schools across Canada showed that in order to stimulate active play, school grounds should be designed to provide adequate space, diverse play opportunities and interaction with natural elements. In addition, children were found to be

more active when rules and supervision allowed for non-competitive and open-ended play).  
Location: Children's Play Information Service

FLOOD, S. (2005)

Fitness for all. *Children Now*, (2 Feb). pp18-19. (Reports on new school activities to help children enjoy exercise, including the walking bus in Hailsham, Dance for Life in Bradford, and the Sporting Playgrounds and Zoneparc projects). Location: Library

GOODCHILD, R. (2006)

Go with the flow. *Nursery World*, vol.106, no.4039 (28 Sep) pp12-13. (Advises that encouraging children to get physical can lay the basis for health and success in other fields. A cut-out-and-photocopy parents' guide looks at why exercise is vital to children, and ways to encourage it).  
Location: Library

HOPE, R. and others (2007) ?? solutions??

Wild woods or urban jungle: playing it safe or freedom to roam. *Education 3-13*, vol.35, no.4, pp321-332. (Examines issues surrounding childhood freedom and levels of physical activity, and argues that beneath the real concerns parents have for their children's safety are societal concerns and perceptions concerning the nature of childhood within contemporary society).  
Location: Library

KIRK, A., and others (2003)

Play for health. A pilot study investigating the distribution and features of publicly provided outdoor play areas in Greater Glasgow. Glasgow: MRC Social and Public Health Sciences Unit, University of Glasgow. 23pp. (This pilot reviewed the literature on the benefits of physical activity and active play for children and issues in play provision, including whether outdoor play areas encourage physical activity and active play, and whether the quality of the play areas make a difference. It also examined the distribution of public outdoor play areas in Greater Glasgow, and investigated the features of two play areas in socially contrasted localities). Location: Children's Play Information Service  
Shelfmark - [00-E]

LINES, L. (2005/6).

Woodland kids. *ReFocus Journal*, no.2 (Winter). pp4-5. (The Woodland Preschool Project in North Tyneside involved children in the nursery class of a primary school making regular visits to a local country park. The project was influenced by the creative practice of Reggio Emilia preschools and the interaction between children and nature, characteristic of Danish forest schools. On leaving the nursery several of the children wanted to set up a club that involved interaction with nature and eventually an after school club was established in a local allotment).  
Location: Library

MACKETT, R. (2004)

Making children's lives more active. *Play Action*, (Spring) pp17-20. (Discusses the findings from a research study at the Centre for Transport Study at University College London. The study collected data from 195 children in years 6 and 8 to examine the impact of children's activity patterns and travel on the quantities of physical activity. The main findings include: walking and playing outside provide children with more physical activity than most other activities, and reducing the length of school breaks will reduce children's quantity of physical activity). Location: Children's Play Information Service

MACKETT, R. and others (2007)

Children's independent movement in the local environment. *Built Environment*, vol.33, no.4, pp454-468. (Presents findings from a study which explored the concept of independent behaviour by children and how independence affects their behaviour, both in terms of how they use their time after school and how they behave outdoors. Children who were allowed out to play without adult supervision were found to have more chance to be active and sociable. Boys who lived near a local park were more likely to be allowed out alone). Location: Children's Play Information Service

Shelfmark - [00-E]

MACKETT, R. and others (2007)

Setting children free: children's independent movement in the local environment. London: UCL Centre for Advanced Spatial Analysis. p12p. (Working papers series, no.118) (Reports the findings from the project CAPABLE (Children's Activities, Perceptions And Behaviour). Drawing on fieldwork carried out with children aged 8-11 years in Hertfordshire, it considers the effects of factors such as the number of adults at home, having an older sibling, and living near to a park on the propensity to be allowed out alone. Findings revealed that children who were allowed to play out unsupervised were more physically active than those who were not). Location: Children's Play Information Service: Article Files

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Document Link: [http://www.casa.ucl.ac.uk/working\\_papers/paper118.pdf](http://www.casa.ucl.ac.uk/working_papers/paper118.pdf)

MILLER, A. (2004)

Size matters. 0-19: Zero2Nineteen, no.3. pp16-18. (Children are becoming increasingly overweight and this is having adverse effects on their health and well being. This article looks at the problem of childhood obesity, its effects on physical and mental health and some of the interventions that are being introduced to tackle the problem). Location: Library

O'CONNOR, J.P., and TEMPLE, V.A. (2005)

Constraints and facilitators for physical activity in family day care. *Australian Journal of Early Childhood*, vol.30, no.4 (Dec). pp1-9. (Findings of a study that examined what encouraged and discouraged exercise among children looked after by childminders). Location: Library

RECREATION (2003)

So, what do kids want? *Recreation*, vol.62, no.8 (Oct). pp18-22. (Reports on a survey conducted by Norwich Union, which investigated children and young people's attitudes towards sporting activity. Findings showed that the majority wanted to have more opportunities for sport in a safe environment. Although most of the over-12s said that they liked going to the local park, many were concerned about risks to their safety). Location: Children's Play Information Service

SHARMAN, L. (2005)

Fit for something. *Local Government News*, (Oct), pp46. (Looks at how Playday developed a top ten tips list for local authorities to ensure that their communities are fit for play). Location: Children's Play Information Service

STALEY, L., and PORTMAN, P. (2000)

Red rover, red rover, it's time to move over! *Young Children*, vol.55, no.1. pp67-72. (Games in which young children chose partners or teams and then compete in a game can be fun and physically stimulating but can also be uncomfortable for children who are rejected or who lose. The author examines a range of outdoor games, and looks at concepts related to physical

activity. Teaching strategies and activities which encourage non-competitive movement and skills are suggested). Location: Library

STEPHENSON, A. and others (2002)

Lets go outside! Outdoor settings for play and learning. *Young Children*, vol.57, no.3 (May). pp8-41. (Series of articles which encourage early years practitioners to recognise the potential of thoughtfully planned outdoor settings, observe how and what children learn through outdoor experiences, provide adaptations that ensure all children can be part of outdoor play and create outdoor environments that challenge children to learn and stay fit). Location: Library

THIGPEN, B. (2007) USA

Outdoor play: combating sedentary lifestyles. *Zero to Three*, vol.28, no.1 (Sep). pp19-23. (In the United States, increasing sedentary lifestyles are contributing to obesity and other health concerns as children spend less time outside engaging in active play. This article looks at the benefits of outdoor play for younger children, and gives suggestions for developing developmentally appropriate outdoor spaces for infants and toddlers). Location: Children's Play Information Service

VOLKER, B. (2005)

A walk in the park. *Spaces & Places*, no.13 (Feb) pp10-11. (Looks at how parks and green spaces can be used to improve the health of the nation, including children's health). Location: Children's Play Information Service

WATERS, P. (2006)

The buskers guide to playing out. Eastleigh: Common Threads Publications. 70pp. (Explores the theoretical and practical considerations for why it is important for children to have access to outdoor spaces for their play. Examines types of outdoor play spaces and their resources, and offers guidance on how adults can help manage outdoor spaces and resources while supporting children's play). Location: Children's Play Information Service  
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WHEWAY, R. (2007)

Couch prisoners? *Spaces & Places*, no.025 pp26-27. (Discusses the links between residential environments and child obesity, and argues that an environment fit for play will improve children's health and reduce obesity). Location: Children's Play Information Service