1 Introducing sensory-rich play

> Everything we know about the world and ourselves has come through our senses
>
> (Bogdashina, *Sensory Perceptual Issues in Autism and Asperger Syndrome*)

Overview

This chapter sets Treasure Baskets within a wider theoretical and sensory context, making links with the worlds of neuroscience and outdoor play. It introduces the six dimensions of 'beyond' which form the focus of the book, suggesting far greater significance to Treasure Basket play than initially meets the eye.

Treasure Baskets and beyond

If ever there was a resource that combines simplicity and sophistication, both enthralling children and bemusing adults, it is the Treasure Basket. Essentially a basket of natural and household objects, the Treasure Basket of Elinor Goldschmied's creation has the senses at its very core. In essence 'babies use their five senses along with their co-ordination of eye and hand in playing with objects, which in their various ways offer them a rich stimulus' (Goldschmied 1989, cited in Forbes 2004: 62). Its inception was influenced by Goldschmied's own childhood experiences, growing up as she did in the countryside, with the environment's natural treasures, her playthings of choice. Satisfied by nature's 'instruments for exploration and imagination' (Hughes 2006: 7), Goldschmied sought to distil this very essence into a resource which would be accessible to the urban child too, and so the Treasure Basket was 'born'. Some seventy years later, its links to sensory play have

been largely forgotten, with Treasure Baskets more closely associated with heuristic play than their sensory roots. This brings me to the book's title – *Treasure Baskets and Beyond* – to explain from the outset what this means and to introduce the six dimensions of 'beyond' which form the focus of this book.

1 The importance of sensory play

Despite its sensory origins the Treasure Basket has largely become synonymous in the early years sector with heuristic play (discovery play with lots of objects, to which we will return shortly). Limiting the application of Treasure Baskets in this way loses some of their wider significance for children's development. Understanding the importance of the senses in the early years is critical to meeting children's needs, as we shall discover in Chapter 2. So too is a full appreciation of the value and appeal of sensory-rich play, and recognition that children's play is changing. Unstructured play (particularly outdoors) is in danger of being squeezed out in favour of organized clubs and screen-based alternatives (Gill 2011; Play England 2011). Recognizing the importance of the senses as a gateway to all learning is fundamental to tailoring appropriate provision, essential for fulfilling children's potential. It is also crucial to meeting the needs of children with sensory processing difficulties who, as we shall discover in Chapter 8, experience the world in a fundamentally different way.

2 Understanding babies' brains

Until recently, babies were predominantly viewed as helpless entities to be nurtured and protected from the environment. As we shall discover in Chapter 2, advances in neuroscience are beginning to challenge such mainstream perceptions, portraying babies as remarkably sophisticated sensory beings.

3 The benefits and appeal of objects

Few young children can resist the appeal of a Treasure Basket. Superficially the level of engagement and play potential may seem disproportionate to the sum of its parts. A basket of natural and household objects could not be further from the all-singing, all-dancing toys that we have come to expect. Chapter 3 delves beneath the surface of this resource to explore the mysterious appeal of Treasure Baskets. Drawing on the world of object play and its relationship to brain development, the allure and benefits of this type of play are explored and numerous assumptions questioned. Although further

research is needed, the apparent simplicity of a Treasure Basket may conceal its importance as a sophisticated 'rule acquisition' tool.

4 The benefits of Treasure Basket play to older children

The concept of a Treasure Basket, developed by Elinor Goldschmied, was for babies aged 7–12 months after which children, once mobile, progressed to heuristic play, i.e. play with lots of similar objects. With children's developmental milestones occurring at different times and every child unique, imposing an age restriction instinctively seems at odds with good practice. In a clear departure from Goldschmied's thinking, this book sets out the case for offering Treasure Baskets to older children. Based on a wealth of observations of Treasure Basket play in Chapters 4, 5 and 6, readers will be invited to make up their own minds about whether this resource should continue to remain the preserve of babies. In Chapter 7 we will explore how sensory-rich resources like Treasure Baskets can help bring the early years curriculum to life, making learning relevant, real and fun.

5 Balancing child-led and adult-led play

A key characteristic of play with a Treasure Basket, as described by Elinor Goldschmied, was that it should be child led. Indeed for the youngest of children this resource offers perhaps the one and only opportunity for them actually to choose what to play with and how. This child-led dimension is a vital characteristic of free play with a Treasure Basket, but it is also an aspect of play that many adults grapple with. Time and time again observations of Treasure Basket play have been characterized by well-meaning adults intervening through comments, suggestions, questions, and imposing their own play ideas. Indeed, if unchecked an emphasis upon active parenting and the adult as a key driver of play threatens the very thing that makes free play with a Treasure Basket so special. In Chapter 9 we explore further the thorny issue of if, when and how to become involved in children's play without destroying its essence. The Sensory Play Continuum (Gascoyne 2009) is explored in Chapters 5 and 6, and offers a tool for safeguarding the special qualities of Treasure Basket play by helping adults achieve this balance.

6 Exploring our sensory preferences

It's all too easy to forget our own sensory preferences and needs, dismissing these as childish or irrelevant. In fact, as numerous practitioner training sessions frequently testify, when as adults we give ourselves time and permission to nurture our own sensory needs we are quickly propelled into

childhood memories, as crystal clear as the day the memories were created. Sensory-rich experiences forge memories. It is vital for us to remember this and be aware of our own sensory preferences, assumptions and practice so we can ensure that these are not at odds with the needs of children in our care, particularly those with special educational needs (SEN), as we will discover in Chapter 8. Practitioner reflection is a key aspect of good practice and sensory reflection is no different. In Chapter 9 this will be explored further as part of a toolkit for appraising sensory provision.

Throughout the book we will return to these six 'dimensions of beyond' as drivers not just for enhancing play with a Treasure Basket, but improving play provision generally. I will now briefly introduce the links between Treasure Baskets and sensory play before focusing on the theoretical context.

Introducing Treasure Baskets and sensory play

For something so fundamental to children's growth and development, definitions of sensory play (like play itself) are remarkably elusive! Sensory play is essentially play that engages one or more of the senses. As such, most play clearly has the potential to be sensory. However, sensory play differs from other types of play in that the sensory focus adds a significant and integral extra dimension to the play. Usher (2010: 2) defines sensory play as 'play that provides opportunities for children and young people to use all their senses or opportunities to focus play to encourage the use of one particular sense'. Sensory play is commonly accessed in the outdoor environment, and some forms, like sand and water play, can be intrinsically messy, which for most children only adds to their appeal! Many sensory-rich play opportunities surround us in our everyday lives, from a muddy puddle to a tree root, and most of these are freely or cheaply available.

As Treasure Basket objects are not toys, like the outdoor environment they offer limitless potential for open-ended play. Gibson introduced the idea of 'affordance' of objects or environments in terms of what they can offer. This means 'that what is perceived when looking at objects is not their dimensions or properties but their affordances: what they can provide or offer' (McInnes *et al.* 2011: 123). To an adult, Treasure Basket objects may be seen literally as a collection of household and natural objects but to a child (or playful adult) they can offer a high degree of affordance, much like a tree does in the outdoors environment. Each Treasure Basket object has the potential to be used in a multitude of ways so that with an imaginative mind a metal chain is transformed into a snake, spaghetti, two characters or even an oven! But this resource doesn't just offer individual affordances; the juxtaposition of objects within the basket (many of which you would not expect to find together) also affords countless play and explorative permutations.

Theoretical context

Treasure Baskets, heuristic play and loose parts play

Working in orphanages in 1940s rural Italy, Elinor Goldschmied observed babies' fascination for playing with the simplest of household objects, like those found in a kitchen. From her observations of play, the idea of a Treasure Basket – a basket of natural and household objects, picked for their sensory appeal – was conceived for babies aged 7–12 months. Research and observations of older children playing have since highlighted the value of Treasure Baskets for children aged 6 months to 6 years and even older, as well as children with special educational needs. We will return to this at the end of this chapter when we introduce the Sensory Play Continuum (Gascoyne 2009). The importance of Learning Tools (see Chapter 3) has also emerged as a way of understanding young children's play (Waldon cited in Stroh *et al.* 2008).

In the 1980s the term 'heuristic play', meaning discovery play, was coined by Goldschmied (in conjunction with Anita Hughes and Glen Carmichael). This concept was used to describe the type of exploratory play behaviour seen when 1- to 2-year-olds engage with lots of bags of different objects, such as bags of jam jar lids, curtain hoops and so on (Goldschmied and Jackson 1994). Heuristic play is characterized by children engaging in deeply absorbing repetitive behaviours and trial and error investigations and was felt to be particularly suited to 1- to 2-year-olds with their newly discovered mobility and independence. Unlike Treasure Baskets, heuristic play objects are not picked with sensory interest in mind, but for their availability in quantities that make endless play permutations possible. Less widespread in the early years is loose parts play, the term coined by architect Simon Nicholson in the 1970s for open-ended materials like sand, cardboard boxes, crates, pallets, bakers' trays, tyres, gravel, logs, containers and guttering that can be used in limitless ways. The potential for creativity and open-ended play has close parallels to Treasure Baskets and heuristic play, albeit on a much larger scale, as a beach can be a loose parts environment! Their widespread appeal is also apparent with children aged 1–11 years (and older) enjoying play with resources like these. This also has much in common with Broadhead's 'Whatever you want it to be place' (2004: 73).

Sensory play

Turning to the senses, the theoretical context is less clear, with several theorists recognizing the importance of sensory experiences and environments. A key contributor to the development and understanding of sensory play was Jean Piaget (1896–1980). He believed that children's interactions with their

environment create learning, and described the first stage in a child's development as the sensorimotor stage. Occurring in the first two years of life, it is characterized by most learning occurring through the senses and manipulation of objects, the focus of the next two chapters. Piaget introduced the term 'disequilibrium' when a child encounters something unexpected and needs to assimilate and accommodate this new information and learning, something which resonates with recent neuroscience findings. Piaget also believed that babies need to manipulate and explore interesting objects, which has obvious parallels with the types of objects and explorative play associated with a Treasure Basket. In the sensorimotor stage 'children build up a mental picture . . . based on their sensory contact with their environment. They do this when they hold, feel, suck, listen to, look at, shake and throw things' (Beaver *et al.* 1997: 52). Piaget believed that 'words such as "bigger", "smaller", "longer", "further", are not understood until the logical properties themselves are understood' (Geraghty 1990: 96). This would certainly seem a good fit with emerging evidence from the world of neuroscience, as we shall see in Chapter 3. Piaget suggested that children's curiosity drives their learning (Mooney 2000) and that through exploration and symbolic play, such as making an imaginary meal from pebbles, or playing spaceships in a cardboard box, they make sense of objects and the world.

Maria Montessori (1870–1952) also believed that children learn best through their senses, although not in a symbolic way. She argued that children have 'sensitive periods' when their senses are ready to learn new ideas and that if we spot these we can best support children's development. She suggested that children's senses come first in their intellect and that adults have a role to play in offering and arranging an interesting and attractive environment. She recognized the importance of providing appropriate materials and giving children adequate time and space to experiment, key roles that we will return to in Chapter 9.

Although Piaget and Montessori were key in promoting sensorial environments, interest in the senses started as early as the 1600s when John Comenius recommended sensory experiences rather than formal teaching for children. He is credited with introducing a visual focus to learning by adding illustrations to books. A transition can be seen as Friedrich Froebel (1782–1852) placed an emphasis upon sensory play and first-hand experience as a tool for learning, principles that were also reflected in his kindergarten. In the 1800s, Johann Pestalozzi emphasized the importance of the senses and basing learning on things that are familiar to children, a factor which we will return to throughout this book. Similarly, Rudolph Steiner (1861–1925) recognized that children learn from the people and environment that surround them, with Steiner settings characterized by natural open-ended materials that children can explore at their own pace, like the nature tables that many of us may have enjoyed at school.

Reggio Emilia pre-schools recognize the marriage between providing a quality environment and a supporting practitioner. The very design of space serves to maximize opportunities for sensory stimulation as children are able to gain 'an awareness of scale, colour, texture, sound, smell, light, micro-climate' by virtue of the arrangement of space, use of mirrors, variety of transparency, reflectance, colour, texture and acoustic qualities that they encounter (Bishop 2001: 78). This exploration of different materials is further extended by the provision of stimulating resources and the use of professional artists and skilled practitioners whose role is to foster children's innate curiosity about the natural world, as partners rather than in a top-down approach. As early as the 1920s, Susan Isaacs saw the value of 'free, unfettered play' highlighting the role of the adult in supporting children to make sense of the world themselves. She recognized that 'no experimental scientist has a greater thirst for new facts than an ordinary, healthy, active child' (Pound 2006: 33), the roots of which lie in brain development, as we shall learn in Chapters 2 and 3. We will also see its manifestation in the trial and error investigations, so typical of heuristic and Treasure Basket play.

The outdoor environment and play

> Many of the ostensibly simple and commonplace phenomena which occur in nature and science are a source of wonderment and discovery to young children. The elements: rain, snow, mist, changes of season; how plants and animals grow; the nature of heat and cold; all provide opportunities for discovery, observation and wonder.
>
> (Geraghty 1990: 250)

Since much sensory play is freely available in the outdoor environment, synonymous itself with open-endedness, and noise and mess are less of a factor, it is worth introducing some of the pioneers of outdoor play. With a focus on health, Margaret McMillan's practice strongly encouraged play and rest outdoors, while Susan Isaacs recognized the benefits to exploration and enquiry from play outdoors. However, it was in 1995 that Forest Schools were established in the UK, with children being given the opportunity to explore woodland environments. Following the model established in Denmark, the Forest Schools movement has taken hold in the UK, capturing the hearts and minds of children and adults alike. The importance of the outdoor environment has also been reflected in evolving early years policy.

More recently the value of children accessing green spaces (the more natural the better) has been proved by a wealth of research demonstrating its health, emotional and behavioural benefits. Similarly, numerous studies have concluded that 'children's preferred environments include a predominance of natural elements' (Korpela 2002, cited in Evans and Wells 2003: 313) –

something that most parents and practitioners instinctively know. Positive benefits have been discovered just from looking at green views, let alone experiencing them first-hand (for example Kuo and Taylor 2004; Barton and Pretty 2010), and the idea of negative repercussions from lack of access to nature and the outdoor environment has been coined 'nature deficit disorder' (Louv 2005).

Improved attention helps children think more clearly, enabling them to respond better to the stresses of life. Attention Restoration Theory is suggested as a possible tool for understanding the restorative qualities of natural elements. This proposes that 'exposure to nature bolsters one's cognitive resources by allowing neural inhibitory mechanisms to rest and recover from use' (Evans and Wells 2003: 325). This recovery is believed to occur because of four characteristics closely associated with natural environments:

1 Fascination refers to nature's ability to effortlessly draw our attention and in doing so allow our brain to rest.
2 The sense of being away from daily worries provides a 'mental vacation'.
3 The extent of the environment gives ample opportunities to be immersed.
4 Finally, an environment which is compatible with a person's preferences, allows their attention to rest.

(Evans and Wells 2003: 325)

The 'physical characteristics of the home environment, such as the availability of toys and materials, a variety of stimulation, and adequate space for privacy and exploration, have been identified as potentially protective factors against the stresses of everyday life (Bradley *et al*. 1990, cited in Evans and Wells 2003: 315) and it seems plausible therefore for a Treasure Basket to provide restorative and buffering benefits that conventional plastic toys cannot.

A further factor to consider is the potential for a Treasure Basket to 'prime' children for fuller exploration and investigation of the natural environment. This idea emerged from a 'Forest Schools' session with 4- to 5-year-old children in the UK. While at the site, a sparsely wooded area on the edge of a school field, the adults and children were gathered in a log circle talking when the teacher asked the children to spend a few minutes thinking about their different senses. One at a time a talking stick was passed around the group and the children's comments struck me as being quick flowing, insightful and surprisingly sophisticated for their age. When I later commented on this to the teacher she explained that earlier that day they'd got the Treasure Basket out in the classroom to sit and talk about their senses, feeling the different objects as they did so. The experience of earlier that day and the opportunity to absorb and reflect may have contributed to the depth, speed and quality of the children's answers. The notion of a Treasure Basket being seen as a tool to

help prepare children to get the most from the environment (definitely not as a replacement) is certainly worthy of further investigation.

Brain development

In the early 1990s, Brierley demonstrated the importance of pattern and variety in engaging the infant's brain (Brierley 1994). This still rings true but research has dramatically changed understanding since then. In particular it is now believed that although the early years remain a vital stage in brain development, the brain does not stop growing at 6 years of age; its 'plasticity' (ability to change) continues throughout our lives, peaking in infancy and adolescence. 'Sensitive periods' have replaced the emphasis upon 'critical windows' of development, in recognition of the brain's amazing ability to evolve (Howard-Jones 2007: 8). Broadly speaking, different parts of the brain are associated

Figure 1.1 Nature for the child is sheer sensory experience

with different functions and are responsible for processing different sensory information from the eyes, ears and other sensory organs. However, as we shall discover in Chapter 2, this does not happen in isolation and is far more fluid than previously believed. To make sense of the world the brain needs to sort and integrate all the different pieces of information in a complex process which most of us take for granted. The remainder of this chapter focuses on sensory-rich play generally, posing the questions 'What do experiences like play with a muddy puddle, tree roots or a Treasure Basket share?' and 'How can such sensory-rich experiences positively shape children's lives and learning?'

Children's responses to sensory play

Imagine a walk in the woods; a visit to the seaside; children mixing and splodging paint with a fat brush (better still, their fingers); or building with smooth wooden blocks. What do these all have in common? Each experience, like countless others, is inextricably linked to the senses. The woodland walk conjures up crunching leaves underfoot while dappled light is cast on tree trunks and the pungent smell of fungi pervades. A trip to the seaside offers the satisfaction of shaping wet sand, creating channels for frothing water and the taste of salty air. Painting gives the pleasure and cold silky feel of paint or the visual explosion of colour as shades mix and loop on an expanse of paper. Block play offers the opportunity to create imaginary castles with cool wooden blocks satisfyingly clinking as the creation takes shape. A beautiful Treasure Basket offers a veritable feast of sensory stimulation. The essence of all of these experiences is both captured and conveyed through the colour, sounds, feel, warmth, smells and taste of an infant's interaction. Children are typically hardwired to know how to 'do' sensory play and need no instructions when faced with sand, mud or water. Rather it is we adults who may have lost sight of the awe and wonder that such open-ended materials offer, the limitless possibilities and opportunities for quiet reflection, and the fact that some mess or even the momentary appearance of disorder (as children naturally choose to combine objects and resources) is definitely worth the effort. If the essential ingredients for nurturing quality play are the provision of space, time, materials and support this is all the more important when it comes to sensory play, given its immersive qualities.

Note: throughout the book a number of activities are suggested to help further our understanding in one or more of the following areas:

Environment 

Adult 

Child 

Activity 1

- Try to imagine a vivid childhood play memory.
- Was one or more of your senses really prominent? If yes, why do you think it is so vivid?
- How does the memory make you feel?
- Was an adult present?

As we will discover in Chapter 3, broad-based knowledge depends upon a multitude of separate multi-sensory actions, images and memories, developed and reshaped from a wealth of separate, yet interlinked experiences. When we hear the word 'forest' all our experiences relating to forests come to mind, from climbing trees and the satisfaction of balancing on a fallen log to feeling the texture of bark with fingertips, scrunching leaves, or feeling dappled light on the face. This is a multi-layered experience made up of sights, sounds, feelings and memories, like the memories of the rush of air on the face and scent of the forest while cycling through a wooded glade, the thrill of playing hide and seek or being chased, the exhilaration of swinging on a rope, or the coolness of a gurgling spring. Everybody will have their own unique set of 'mental files' based on their own interests and experiences as well as several in common. All these different sensory-rich experiences can potentially be accessed from the word 'forest' and will only come to life when encountered for oneself. No amount of stories and pictures will convey the essence or replace the magic of first-hand encounters as without the unique sensory experiences and memories that we attach to words, they lack resonance and meaning.

Activity 2

Imagine trying to describe snow to a visitor from another world for whom words have limited meaning.

- How difficult is it and how many different words do you need to use?
- How far from understanding the sensation do you think the visitor would be?
- Can you think of examples of when we tell a child something that they could discover better on their own?

Compare these sensory-rich experiences to the visual focus and passive nature of watching television or playing computer games – just two of the trends in twenty-first-century play cited in recent research (Gill 2011). Or

visit the average toy shop, with shelf upon shelf of brightly coloured toys, some of which flash, bleep or talk, and the visual (and to a lesser extent auditory) focus of many toys is apparent. Opportunities for children to actually touch or taste are often discouraged, or restricted to plastic – limiting the creation of vivid memories. Being brought up in a plastic revolution we may unquestioningly accept or even embrace its contribution to life. However, as the visual stimulus of brightly coloured plastic toys is removed, their appeal and 'differentness' quickly disappears, reminding us of the sensory limitations of plastic as a toy, pacifier and feeding implement.

Activity 3

To gain infants' perspective on their largely plastic world try filling a bag with plastic toys.

- Close your eyes and place your hand in the bag of toys. What different 'sensations' (rather than objects) can you feel? Compare smells.
- Describe how it makes you feel, for example interested, excited, disinterested, bored?
- Are you surprised by the difference in quality experience between looking at and feeling the objects?
- Think about what words come to mind when you feel the toys. Contrast with your findings in **Activity 13**.

Modern play primarily takes place indoors, where temperatures are constant, and smells and environmental sounds masked. All this contributes to a sense-limiting experience, where opportunities for learning by doing are severely restricted. Contrast this with the vivid childhood play memories you may be lucky to have of 'running barefoot through grass', making 'mud pies' or 'rose petal perfume' and the appeal of multi-sensory play is evident (Papatheodorou 2010; Gill 2011). The natural environment appeals on many levels, as a constantly changing, full-bodied and open-ended instigator of play but also for the agency it offers children as they use nature's materials to create their own toys and games.

Tapping into this amazing connectivity, richness and immediacy of thought is essential to bringing any early years learning to life. As we shall discover in Chapter 7, the senses can help make learning relevant and real as well as fun! Crowe recognizes that

> without meaning words are useless . . . words are connectors . . . children's senses cry out to be used *first* to provide the experiences

> that they will later need in order to connect. Children must feel their world, listen to it, see it, taste it, smell it, 'know' it . . . That takes time and a great deal of silent investigation in peace and privacy.
>
> (Crowe 1983: 39)

We shall see these ideas in action later, in Chapters 5 and 6, as children explore simple objects with sand and water.

The benefits and features of sensory play

Throughout our lives sensory-rich experiences are vital for brain development. Neuroscientists have identified a strong link between memory recollections and the sense of sight, smell and touch. If you've ever encountered a particular smell, good or bad, that has brought memories flooding back, then you will have experienced this first-hand. Sensory-rich play is an inclusive way of encouraging learning and development, with the hands-on approach appealing to children with different thinking and learning styles. Sensory activities help bring learning to life and are great for children with English as an additional language and those who enjoy a practical approach, especially boys. But they need to be carefully tailored to support children with sensory processing difficulties. In a world in which our senses are bombarded, you don't have to look far to find sensory-rich play experiences. There are ample opportunities for engaging all the senses, through play outdoors, sand and water play, a Treasure Basket or other sensory-rich resources. All these activities also offer a multitude of other benefits that make them perfect for supporting children through any early years curriculum. Much of the beauty and appeal of sensory play resources lies in four characteristics: their simplicity, open-endedness, flexibility and relevance.

1 Simplicity

If you've ever commented on how children 'spend more time playing with the cardboard box than the present itself' then you will have witnessed some of the appeal and excitement of open-ended resources. When it comes to children's play, generally 'the simpler the resource, the better' as this leaves more scope for children to shift from 'What can this object do?' to 'What can I do with it?'

2 Open-endedness

One of the things I most enjoy about watching children playing with a Treasure Basket is that you never quite know what you will see. Creative examples of

Treasure Basket play will be shared in Chapter 7 as we explore how this simple resource can bring the curriculum to life, but it is fair to say that the open-ended nature of sensory-rich play (in that there are no 'right' or 'wrong' ways of playing) offers plentiful opportunities for developing children's skills in problem solving, exploration and creativity. The human brain thrives on variety, stimulation and the unexpected and, for children, play with sensory-rich resources offers just that. Open-ended materials, from a cardboard box to sand, paint, pebbles or a Treasure Basket, enable children (and adults) to represent their experiences, ideas and imagination. When as adults we look at an object like a pastry brush, we often see it for what it is, a brush, rather than a tickling stick, a paintbrush, microphone or mini broom. Children's thinking tends to be less rigid so every natural treasure in the environment or in a Treasure Basket has the potential to be whatever a child wants it to be.

Young children do not have a monopoly on using natural resources or their imagination to conjure up role-play. Older children will delight in creating intricate 'fairy meals' using acorn cups for bowls, creating rose petal perfume or lavender wine, engineering a toxic sludge, witch's potion, hearty 'stews' or cement for construction from mud, sand, twigs, water and so on. With access to a few simple household objects like saucepans, pots, whisks and spoons, recycled containers, twigs, leaves, seedpods and other natural treasures found outdoors, children's creativity and imagination can have a free rein. Of course this will only be the case if they are given the time, space and permission to do so.

3 Flexibility

Sensory-rich play resources are found all around us and most children do not need any help in signposting these, nor any instructions on what to do to maximize their play potential! In one play session a group of children (aged 2–8 years) added biodegradable, loose-fill 'peanuts' (similar to polystyrene packing pieces) to water, discovering that when wet they disintegrate to create very realistic effluent scum! Another child spotted the packaging and a small tin and proceeded to see how many pieces he could fit in the tin. He paused several times, explaining that it was full, before devising another strategy to create more space, be it putting the tin lid on to press the pieces down, squeezing them with his fingers, or putting the tin on the floor so he could press down with more force. Once full, he announced that he wanted to count them to see how many he'd squeezed in and therefore set about emptying the tin. This required another strategy as many of the pieces had stuck together, so a spoon was needed to prise them out when his finger could no longer reach them. Another child, aged 8, excitedly called out 'Look!' as she held up a creation for the other children to see. The subject of excitement and pride was some packaging pieces that she had rolled in sand

and couscous to create a look-a-like cheesy nibble! The other children looked on with awe and wonder before a flurry of hands began scooping up packaging pieces to use in their own play. As this example illustrates, with the right context it's easy for simple yet highly sensory resources to spark creativity and play in children of all ages.

4 Relevance

Key to a successful Treasure Basket is selecting objects that are culturally relevant. A Treasure Basket can cross boundaries to enhance the context and content of a child's culture. 'A well-stocked basket with carefully selected objects can give babies the opportunities to explore those things that make up their world' (Forbes 2004: 17). Not only can a collection of objects better reflect the community of interest in which they are created but, unlike many manufactured toys, they are culturally appropriate. Roopnarine *et al.* (1998, cited in Hughes 2003) point to the inherent contradiction of branded toys, like Barbie, being offered in communities where their values and culture are at odds. It is difficult to see the significance of such licensed toys to children's play and lives, and these may actually help erode societal values. The 'term "toy" is often given to things that adults have designed or selected specifically to engage a child, but fascination with the properties of things extends to many other objects as well' (Garvey 1986: 44), as we shall discover.

These four characteristics of sensory-rich play also flag up areas to consider when planning for children's individual needs. What is simple or relevant for one child may not be for another. Ultimately the balance between the environment, children's needs and adults' actions will determine what this looks like in practice, making this a useful appraisal tool. The Sensory Play Continuum, summarized in Table 1.1, brings together these three dimensions, providing an appropriate environment by:

- offering different options at the three stages;
- meeting the child's needs in terms of picking activities and resources, and offering them in different ways to support their needs; and
- getting the adult/child balance right.

I developed the Continuum as a framework for extending the use of Treasure Baskets with older children and children with SEN (Gascoyne 2009). By placing sensory play and the senses at its heart, the Continuum ensures an emphasis upon the often forgotten sensory dimension of play. The three Continuum stages are based upon actual observations of play with a Treasure Basket and help adults achieve the optimum balance between adult-led and child-led play as recommended in the EPPE report (Sylva *et al.* 2004), as we will explore further in Chapters 5 and 6. Although presented as distinct and

sequential stages, this is to oversimplify the process which can flow seamlessly from one stage to another in an iterative cycle as well as being accessed in a different order, as we shall discover in Chapter 9.

As this brief skim through the key shapers in sensory play has revealed, the value of sensory-rich experiences has long featured as an undercurrent of play theory. Sensory-rich play holds a fascination for children and is freely available in the outdoor environment, sharing numerous characteristics and benefits with a Treasure Basket. Although the adult's role may not be obvious in the first two stages of the Continuum, it is nevertheless essential for providing an appropriately stimulating environment, understanding the needs of children, and recognizing adults' own sensory preferences (Gascoyne 2011).

We will return to the interplay between these in Chapter 9. Understanding the sensory domain is key to illuminating children's needs, so we will now explore the senses, the gateway and foundation for all learning.

Table 1.1 The Sensory Play Continuum

Continuum stage	*Type of play*	*Features*
Stage 1	**Free play**	Babies and children play freely with the resources without any adult involvement.
Stage 2	**Combining resources**	The Treasure Basket is offered next to another resource such as sand, water, magnets or mirrors, to further extend its appeal and play potential. Children play freely although if appropriate the adult *responds* to the child's questions.
Stage 3	**Adult-initiated play**	The final stage of the Continuum involves using simple adult-initiated activities with Treasure Basket objects, like guessing whether objects will sink or float in water. Activities may be inspired by children themselves.