An Exploratory Study of Sensory Gardens

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Abstract

This preliminary study explores the common issues of sensory gardens around the UK, by observing how they are utilized. Of the fourteen sensory gardens visited, eight were designed by landscape architects. One of these is a health-care centre for adults, another is a primary school and one other is accessible to the public. The rest are special schools, which cater for children with special needs. This study also involves conducting interviews with the designers, teachers, therapists and key expert of the subject. The teachers, therapists and key expert view was that designers should have close collaboration with the users before designing the actual sensory garden as designers often presume that they know what the needs of the users are and how users engaged with the multi-sensory environment. While designers noted that there is a lack of detailed guidelines available when designing sensory gardens for people with special needs.

Introduction

> *'The only difference in a sensory garden is that all these components (hard landscaping, soft landscaping, colours, textures and wildlife) must be carefully chosen and designed to appeal to the senses in such a way that they provide maximum sensory stimulation'.*
>
> Lambe, L. (1995:114)

Sensory gardens[1] have evolved gradually from the traditional concept of a 'garden for the blind'. The term 'sensory garden' has been very much over-used in recent years but, in a therapeutic context, it usually refers to a small garden that has been specially designed to fulfil the needs of a group of people who want to be involved in active gardening and who also enjoy the passive pleasures of being outdoors amongst plants (Gaskell, 1994). It is often assumed that sensory gardens are for people with mobility or other impairments, where these gardens are usually attached to a special school or home for elderly people

[1] A sensory garden is a *'self-contained area that concentrates a wide range of sensory experiences. Such an area, if designed well, provides a valuable resource for a wide range of uses, from education to recreation'* (http://www.sensorytrust.org.uk/information/factsheets/sensory_ip.html).

(Lambe, 1995). This attitude was reflected in the early design and construction of sensory gardens, which were focused on too few sensory experiences.

The Evolution of Sensory Gardens

In an interview that the researcher conducted with Jane Stoneham, the director of the Sensory Trust[2] and the author of the book, *'Landscape Design for Elderly and Disabled People'*, Stoneham stated that the initial idea of sensory gardens derived from the horticultural therapy movement, which developed in the United Kingdom in the 1970s. Horticultural therapy was focused on special environments, such as hospitals and rehabilitation units and, as a result, developed more rapidly than sensory gardens, which used to be 'gardens for the blind'. One positive aspect of sensory gardens was the genuine response to meet the needs of visually-impaired people. Stoneham added, however, there was not really much thought given to the design of these gardens. The first sensory gardens were often located in public parks because the local authority would have decided that it was a way of showing that they were implementing inclusion on strategies. However, the reality was that they were small areas, often signposted as 'Garden for the Blind', and they consisted of a combination of scented plants, Braille labels and raised planters.

Over time, society's attitude to disability changed, as did the function and users of the sensory garden. Any design for disabled people should aim to help overcome the stigma that is attached to being labelled 'disabled'. Since the mid-1970s, a rapidly growing body of opinion has suggested that this can be achieved more easily by integrating, rather than segregating facilities. In 1978, the then United Kingdom Minister for the Disabled, Alfred Morris, said:

'The simplest way of causing a riot in any locality in Britain would be to clamp on the able-bodied the same restrictions that now apply to the disabled. They feel that their personal handicaps are bad enough without the gratuitous social handicap of being treated differently from everyone else' (Rowson, 1985:21).

Stoneham (2006) added that in the 1980s, visually impaired people challenged the initial ideas about 'gardens for the blind' because the issue of being segregated from able-bodied people was itself beginning to be challenged. It is now widely understood that disabled people do not want to be segregated from able-bodied people in their enjoyment of green space. Thoday and Stoneham (1996:20) support this idea, 'the *sensory landscapes* should

[2] The Sensory Trust was established in 1989 and grew out of a multi-disciplinary consultation resulting in a wide network of disability and environmental organisations working together to promote and implement an inclusive approach to design and manage outdoor spaces; richer connections between people and place; and equality of access for all people (http://www.sensorytrust.org.uk).

be a way of introducing much greater interest and variety into green spaces for everyone to enjoy and should not result in *gardens for the disabled.* The basic idea is to integrate green spaces that will allow an enhanced sensory experience, which will make for a more sustainable and inclusive approach rather than making 'special' provision for disabled people (O'Connell and Spurgeon, 1996). One recent publication by the *Building Bulletin 102* (2008) outlined the needs when designing for children with special education needs. One of the requirements when designing a special school is to provide an accessible outdoor space, which emphasises multi-sensory experiences for therapy, educational and recreational use.

Background to the Study

During the researcher's early study, she undertook an essential review of the literature on sensory gardens. However, the review showed that there had been a lack of rigorous research on the subject, it identified a research gap and research questions could not be identified. It was decided that the best approach would be to conduct preliminary site studies, mainly by visiting places that claimed to have sensory gardens and by carrying out personal observations of the usability of these gardens and by conducting interviews with teachers, therapists and key experts. A few noted incidents were recorded as anecdotal evidence and selection of photographs[3] was chosen to illustrate these noteworthy incidents.

The Issues

There were three main issues that arose from the preliminary site studies:

1. In interviews the researcher conducted with Benjamin (2006), Gough (2006) and Stoneham (2006), their view was that sensory gardens which are designed as such, tend not to be entirely satisfactory from the users' perspective, as some designers, apparently, may not interview the users before designing the actual sensory gardens. According to Stoneham, at present, designers think they are designing sensory gardens well but their biggest mistake is in presuming that they know what the needs of users are, for example:
    i) Water is an important element in that it provides users with the opportunity to respond to it in terms of hearing and touch it but in some sensory gardens, this element is not fully accessible, therefore, the feature is not of true benefit to the users (see Image 1). There were also water features that were not working due to technical failure (see Image 2). For example, during the observation at one of the special schools, a teacher expressed her feelings that it was a pity that the water

[3] Photographs were taken by the researcher in the sensory gardens but none include shots of the users due to the school policy.

feature was not working because '*Daniel*' loved to hear the sound of the water and he did, he would remain near the water feature for a longer period.

Image 1: An inaccessible water feature in a sensory garden, especially to the wheelchair users.

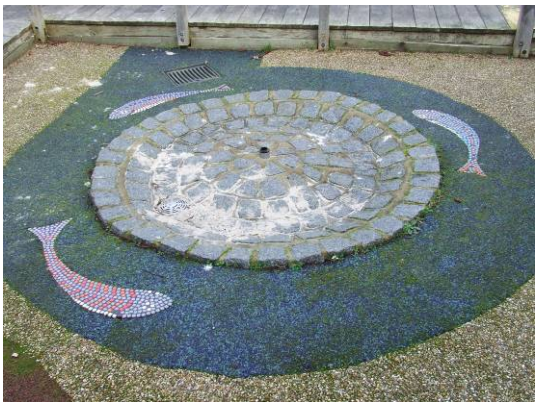

Image 2: A water feature that is accessible to all users but not working due to technical difficulty.

While water was mentioned by Bashir (2007) and McLellan (2007) as an important feature in a sensory garden, owing to its benefits in terms of learning and therapy, some sensory gardens seem to lack this element (see Image 3).

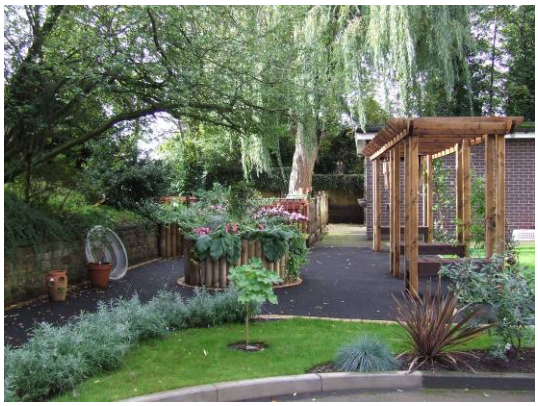

Image 3: A sensory garden that lacks a water feature.

ii) Loose materials on the surface of paths, such as gravel separated by wood edging, are inaccessible to wheelchair users, therefore, such users are unable to appreciate significant features that can only be accessed in this way[4] (see Image 4).

Image 4: An inaccessible path in a sensory garden, especially to wheelchair users.

iii) Ramps, even with an accessible gradient, were not appreciated by the teachers, as they were concerned about the slippery surface. Steps were also not favoured; especially by wheelchair users and their carers (see Image 5).

Image 5: This ramp is hardly used due to its slippery surface, especially when damp while the stairs are inaccessible to wheelchair users. Consequently, users use another route for access.

[4] Not all features will be accessed by loose-surface paths. The loose surface for some users, particularly for students in wheelchairs, is problematic if it is the only form of access. On the other hand, if the school is unlikely to have wheelchair users, the use of loose surfaces can be sensorily stimulating and pleasant for them.

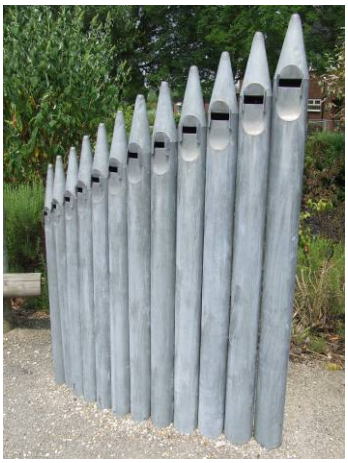

Image 6: These musical pipes were least used because users cannot easily make a sound from them.

iv) Constructive elements in sensory gardens were designed to create sounds so they would attract users to engage with it. Unfortunately, some of them were unusable and dysfunctional (see Image 6).

An example of a functional sound stimulation was recorded in one of the special schools:

> A young boy was walking hand in hand with his teaching assistant in the sensory garden. He was wearing glasses and looked very charming. Both of them were silent - listening to the humming insects, chirping birds and the wind in the leaves. As they were strolling together, one of the sound stimuli went off by it self. The boy let go of his assistant's hands and ran towards the sound. Soon he managed to find the source of the sound, he walked towards the researcher and asked, *'Are you here to see the flowers? It's a nice garden, isn't it*?' He then smiled and continued strolling with his teaching assistant.

2. Regardless of who designs a sensory garden, a landscape architect or via community or school effort, challenges in terms of long-term maintenance should also be addressed in the design plan. If they are not, a poorly maintained sensory garden will not benefit its users and it will lack aesthetic[5] value (Alsleigh, 2006; Bridge, 2007; Busby, 2006; Jefferies, 2007; Kinnear, 2007) (see Image 7).

[5] The philosophy or theory of taste, or the perception of the beautiful in nature and art (Oxford English Dictionary, quoted by Hill, 1993:170).

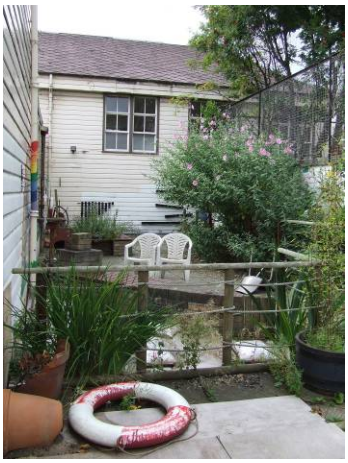

Image 7: An example of what a sensory garden can look like if it is not well maintained.

Well maintained sensory gardens offer users an outdoor environment for educational activities such as tree-rubbing:

> One morning, a group of female adults and students with various kinds of impairment were walking hand in hand, through the sensory garden of the school to find the perfect tree to do some tree-rubbing. As they neared a huge shady tree, a teacher said, *'Let's feel this tree'*. She placed her hands on the tree trunk. A male student moved her hands over the bark and slid his arms around the trunk until they met. His face was touching the bark and he said, '*This is the perfect tree!*' So they all got out their paper and pencils and started a tree-rubbing activity.

3. In an interview that the researcher conducted with Jane Stoneham, she stated that a considerable amount of research needed to be conducted, with regard to discovering what people with special needs really required. She warned that a great number of assumptions have been made about how disabled people navigate and benefit from an outdoor environment but that this had not yet been fully tested. She claimed that this is evident in the fact that an ambiguous direction has been taken in relation to sensory gardens in the field of landscape architecture and that there are no design guidelines for sensory gardens (although there are some publications on anthropometrics for a variety of users, including disabled people). Hence, the design of sensory gardens currently relies on the experience and attitude of designers. This idea is supported by designers, Petrow (2006), Mathias (2006), Robinson (2007) and Boothroyd (2007), who note that there is a lack of detailed guidelines available when designing sensory gardens for people with special needs.

Conclusion

Accessible and functional elements of sensory experiences, which would encourage a greater understanding of and exploration by users of a sensory garden, would help to fulfil users' needs in terms of their enjoyment of an environment. This initial interview with Stoneham (2006) led the researcher to want to gain an understanding of what had been written about sensory gardens to date and to consider whether the findings in her

exploratory study would be reflected in what had been written and the previous work that had been undertaken. Her literature review showed the historical development of sensory gardens but also users of such gardens had not been consulted as fully as she would have expected. Consequently, this research takes a fresh approach, one where the users are at the forefront of sensory garden design.

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