

Preferences For Green Outdoor Environment For Children With Learning Disabilities at Primary Schools in Malaysia

Keutamaan untuk Persekitaran Luaran Hijau bagi Kanak-Kanak Kurang Upaya Pembelajaran di Sekolah Rendah di Malaysia

Noor Azramalina Abdul Aziz¹ & Shureen Faris A. Shukor

*Faculty of Design and Architecture, Universiti Putra Malaysia,
Serdang, Selangor Darul Ehsan*

¹*e-mel: azramalina88@gmail.com*

Abstract

One of the challenges designing for children with learning disabilities is to create an outdoor environment (including learning equipment and furniture) that produces desired behaviour and outcomes, and at the same time support the existing curriculum. The importance of stimulating environment for children with disabilities has been confirmed. The purpose of this paper is to identify the preferences for green outdoor environment at primary school to support special education based on the caretakers, teachers and the special children's needs. Using survey and observation as methodology, a primary school in Serdang was selected as a case study. The expected results gained from this study may provide the understanding on how green outdoor environment may play a role to supporting special education in primary schools in Malaysia. Furthermore, recommendation on the characteristics of green outdoor environments will be later proposed which may assist and support special children learning at primary school in Malaysia.

Keywords *green outdoor environment, learning disability, primary school, Malaysia*

Abstrak

Salah satu cabaran yang dihadapi untuk merekabentuk bagi kanak-kanak dengan masalah pembelajaran ialah mewujudkan persekitaran luar (termasuk peralatan dan perabot pembelajaran) yang menghasilkan tingkah laku dan hasil yang dikehendaki, dan pada masa yang sama menyokong kurikulum sedia ada. Kepentingan merangsang persekitaran untuk kanak-kanak kurang upaya telah disahkan. Kertas ini bertujuan untuk mengenal pasti kecenderungan untuk persekitaran luaran hijau di sekolah rendah bagi menyokong pendidikan khas berdasarkan penjaga, guru dan keperluan kanak-kanak istimewa ini. Dengan menggunakan survei dan pemerhatian sebagai kaedah, sebuah sekolah rendah di Serdang telah dipilih sebagai kajian kes. Keputusan jangkaan yang diperolehi daripada kajian ini boleh memberi kefahaman tentang bagaimana persekitaran luaran hijau boleh memainkan peranan untuk menyokong pendidikan khas di sekolah rendah di Malaysia. Tambahan pula, cadangan mengenai ciri-ciri persekitaran luaran hijau akan dikemukakan bagi membantu dan menyokong kanak-kanak istimewa pembelajaran di sekolah rendah di Malaysia.

Kata kunci *persekitaran luar hijau, kurang upaya belajar, sekolah rendah, Malaysia*

Introduction

In Malaysia, health facilities began to incorporate the idea of therapeutic or healing or restorative gardens in hospital, school and government facilities (Shureen Faris, 2007). The importance of stimulating environment for children with disabilities development has been confirmed since 1930s by psychologists (Noonan and McCormick, 1993). This study aims to examine the green outdoor environment which may support special children learning based on the standard curriculum for special education at primary school. Provision of a garden with stimulating features in the school is considered as environmental intervention that could foster the learning process of children with

special learning disability (Noonan and McCormick, 1993). The rules of Malaysia Education (Special Education) Act 1997, states that teachers can modify the method and techniques of teaching or learning, a time for activities and the arrangement of activities, subjects and teaching aids to achieve the aims and objectives of Special Education (Ministry of Education Malaysia, 2002). A research by Said et al. (2002) mentioned that “by viewing a garden through the classroom windows and/or actively participating in the garden activities would enhance children’s connection to nature and people”.

The potential for landscapes to become an important element in health care delivery may rest on the definition of the therapeutic garden, and its distinction from other garden types - healing, meditation, contemplation, and restorative (Nancy and Vince, 2010). It is a restoration or meditation garden, which may be a public or private garden, and not necessarily associated with a healthcare setting. A restorative garden employs the restorative value of nature to provide a conducive environment to mental repose, stress-reduction, emotional recovery and the enhancement of mental and physical energy. The design of a restorative garden focuses on psychological, physical and social need of the users (Nancy and Vince, 2010). An Outdoor Learning is a broad term that includes outdoor play in the early years, school grounds projects, environmental education, recreational and adventure activities, personal and social development programs, expeditions, team building, leadership training, management development, education for sustainability, adventure therapy and more (The Institute for Outdoor Learning, 2005). An Outdoor play also enables children to enjoy the natural environment and learn to seek out exercise, fresh air, and activity. By outdoor play, it develops disposition for the outdoors, for physical activity, and for care of the environment.

Specifically, the purposes of this paper are to (1) study on the children’s attitudes and behavior when they are in the outdoor environment and indoor class; (2) identify what the children and teacher's preferences regarding the outdoor environment and classroom environment; and (3) understanding the advantages of having outdoor environment and the indoor classroom environment for children with learning disabilities in special education. The increased use of children’s outdoor environment for teaching and learning reflects an increasing number of benefits to children fortunate enough to be involved in this type of learning (Tai et al., 2006). Classroom are well suited to auditory and even visual learners, but those who are dominantly kinesthetic learners need more experiential environment that is easily found in the outdoors. The dominant reasons as to why environment-based education is not embraced, as described by teachers themselves, fall into eight categories (Tai et al., 2006). The categories are lack of understanding, lack of environmental experiences, outdoor fears, time, inflexibility of schedules, training, prissy factor and breaking the routine. The researcher is needed in highlighting the importance of how to utilize the green outdoor environment in teaching children to support the special education at primary school. Thus, a proper planning with consideration to the special children and teacher’s preferences could create conducive green, outdoor environment to support the special education.

Methodology

A mix method will be applied in this study. A survey (quantitative) and an observation (qualitative) will be used to collect the data on the green outdoor environment experience of primary school restorative garden from caretakers, teachers and special children to support special education. For the purpose of this study, the primary school children from Sekolah Kebangsaan Serdang will be chosen as sample. The children, aged between 7 to 14 years old are in special education classes. The term ‘children with learning disabilities’ refers to the children that have disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including their conditions (National Dissemination Center for Children with Disabilities, 2011).

Selected samples will be asked to spend an hour in the garden and another hour in the classroom. The activities in the garden and in the classroom will be monitored by the assigned teachers. The behaviour that will be measured is happier, physically active, less crying, more independent, cooperative and obedient. It is based on the 5-point scale, where 1 indicates “strongly disagree”; 2 indicates “disagree”; 3 indicates “somewhat agree”; 4 indicates “agree” and 5 indicates “strongly agree”. This observation method selection is referring to the observation on Down’s

Syndrome Children (Faris, 2007) and Children with Visual Impairment (Blindness) (Peng et al., 2014). Observations will be carried out and recorded.

An interview with the teachers/caretakers will be carried out based on the content analysis to identify children's preferences of the environment using open-ended questions. The interview consists of five sections; where section A is on demographic data, section B is experience, section C is preferences, section D compose of outdoor and indoor environment learning component and section E is opinion. A questionnaire will also be distributed to the teachers/caretakers to answer questions related to the progress of the children and their interaction with the outdoor learning environment. The questionnaire consists of three sections; where section A is on demographic data, using close-ended questions with multiple choice; section B contains questions related to the experience being outdoor and indoor environment, using close-ended questions; and section C is on assessment of the existing and preferences, outdoor and indoor learning environment using close-ended questions and open-ended questions. The statistical analysis will be conducted using Statistical Package for the Social Sciences (SPSS).

Study Area

The study has taken into consideration the primary school with special education within the vicinity of Universiti Putra Malaysia Serdang campus. As a selected school, Sekolah Kebangsaan Serdang is located 1.1 km from Universiti Putra Malaysia. The school has 16 teachers (22%), four caretakers (5%) and 55 students (73%) for special education (Figure 1).

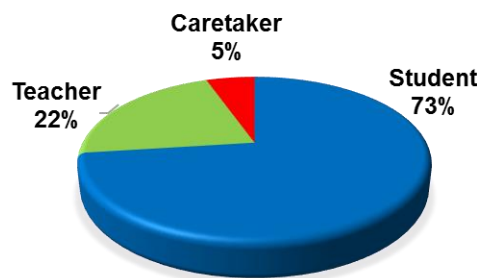


Figure 1 Percentages of teachers, caretaker and students

The type of disabilities children in this school is down syndrome, physical, learning disabilities and multi disabilities. Among all, learning disabilities are the highest type of disabilities in Sekolah Kebangsaan Serdang with 87.3 percentages (Figure 2).

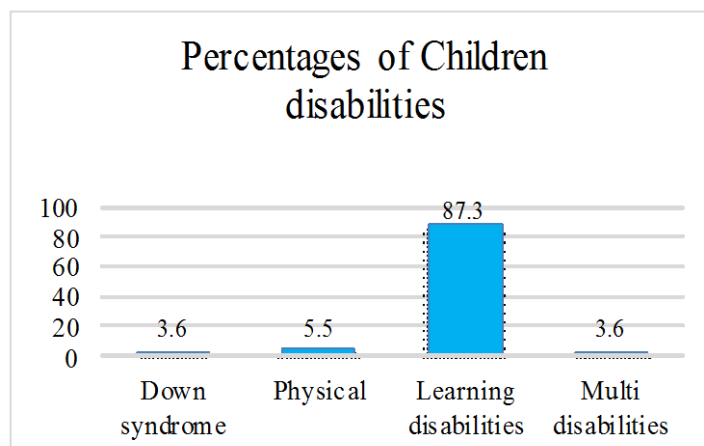


Figure 2 Percentages of children disabilities

Limitations

This study has several limitations. Firstly, the literature review for this study has taken the research done at other countries. There were few studies has been conducted, yet the research on this topic is still new in Malaysia. Further, the respondents for this study will be taken from one place only, which is Sekolah Kebangsaan Serdang, Selangor. Therefore, a limited sample is selected.

Significance Of the Study

This study implies several significances. It will provide for special children and teacher an idea for using the green outdoor environment to support the curriculum for special education at a primary school. Further this study will provide design consideration for special children and teacher to give them the most meaningful when they are using the green outdoor environment.

Expected Implication of Research Findings

It is hoped that this research study may contribute to improve the knowledge and an understanding on the green outdoor environment experience of primary school restorative garden from caretaker, teachers and special children to support special education. This study also may contribute as a guideline and recommendation for the green outdoor environment to support and help teachers and caretakers to assist special children at primary school in Malaysia.

Conclusions

In conclusions, this study may provide recommendations to Ministry Education Malaysia in support of special education for children with learning disabilities. The increase use of the green outdoor environment for teaching and learning may provide many benefits to children with learning disabilities. The green outdoor environment can improve the teaching and children with learning disabilities in terms of encouraging the children to be more active, independent and improve social skills.

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