



AN EVALUATION OF INTEGRATING LEARNING  
ENVIRONMENT IN HOSPITAL SCHOOLS IN  
MALAYSIAN PUBLIC HOSPITALS

BY

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A thesis submitted in fulfilment of the requirement for the  
degree of Master of Science in Built Environment

Kulliyyah of Architecture and Environmental Design  
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SEPTEMBER 2014

## ABSTRACT

The effort of integrating learning in hospital schools in selected Malaysian public hospital has been implemented by Ministry of Education (MoE), Ministry of Health (MoH) and Nurul Yaqeen Foundation since 26<sup>th</sup> July 2011. Since then, 1,454 children have utilized the hospital schools muted by the Ministries. This becomes a serious concern of parents and patients on needing to overtake on academic matters during recovering process. The aim of research is to evaluate the physical elements of hospital schools as learning environment in selected public hospitals in Malaysia. The key objectives of this research are (1) to study the key factors of integrating learning environment in hospital; (2) to measure the level of satisfaction of end users which are parents, patients, teachers and staffs towards hospital schools, and (3) to make recommendations of the physical learning environment for hospital schools in Malaysian public hospitals. Qualitative and quantitative methods are adopted in this research are mainly observation and question survey. Three case studies selected are Institute Paediatric Hospital Kuala Lumpur, Ampang Hospital and Serdang Hospital. 51 candidates were randomly selected as respondents during field survey. 10 physical elements which are garden, playground, aroma, space, music, colour, lighting, artwork, accessibility and safety were evaluated as a basis to measure the satisfaction level of end users. Finding shows in three hospital schools, the highest score mean from overall elements is Hospital Serdang with the score of 4.02 out of 5.00 followed by IPHKL, 3.52 and Ampang Hospital with 3.16. Analysis shows in three hospital schools, 86.5% respondents agreed that artwork element as most satisfied elements that have been implement. Meanwhile 61.4% respondents complain the absent of music as it was not implemented in classroom. Most of respondents recommended that the access to outdoor learning and upgrading the current spaces are needed in future. It can be concluded that integrating learning environment in hospital schools has received a good feedback from the public to be an establish research in future.

## خلاصة البحث

ماليزيا تبدأ رائدة خدمات التعليم في المستشفى العام منذ 26 يوليو 2011. العثور في يوليو تموز الى ديسمبر 2011 يكشف التحقوا 454،1 الأطفال في المدارس مستشفى في ماليزيا مما أدى إلى قلق بالغ من أصحاب المصلحة مثل الآباء والأمهات والمرضى والمعلمين من الحاجة للتعليم مكان خلال عملية أطفال يتعافى في المستشفى. الهدف من البحث هو تقييم عناصر البيئة التعليمية في المستشفى العام في ماليزيا. الهدف الرئيسي من هذا البحث هي (1) لدراسة العوامل الرئيسية لدمج بيئة التعلم في المستشفى؛ (2) لقياس مستوى رضا المستخدمين النهائيين نحو التعلم في المستشفى؛ و (3) إلى المبادئ التوجيهية الموضوعية من بيئة التعلم التي يمكن الاندماج في التصميم بعد تأسيس المدرسة إلى المبادئ التوجيهية المستشفى. الطرق المعتمدة في هذا البحث هي المراقبة والاستطلاع السؤال. دراسات الحالة الثلاث المعنية هي معهد طب الأطفال مستشفى كوالالمبور، مستشفى امبانج ومستشفى سيردانغ. تشارك المسوح 51 المستجيبين التي هي المستخدمين النهائيين من المدارس المستشفى. يظهر الاستنتاج الأولي أن مستشفى سيردانغ سجلت أعلى معدل في عشر العناصر المادية التي تم تحليلها مع درجة من 4.02 من 5.00 تليها IPHKL ، 3.52 ومستشفى امبانج مع 3.16. ويبين التحليل أن 86.5٪ قد اختار عناصر العمل الفني حيث أن معظم عنصر راض بينما 61.4٪ كانوا غير راضين عن الموسيقى كما لم تنفذ في الفصول الدراسية. في وقت لاحق، وتنفيذ التعلم في الهواء الطلق وتطوير المساحات الحالية الموصى بها لتحسين المستقبل. ومع ذلك، في عالم اليوم، يبدو أن الناس الجمهور في فهم أفضل على أهمية إدماج البيئة التعليمية في المستشفى. هذا يعتبر مؤشرا جيدا ومعيارا لإنشاء مالمستشفى بل في المدارس مستشفى في أفضل

## **APPROVAL PAGE**

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Built Environment.

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## DECLARATION

I hereby declare that this dissertation is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Noor Fatehah Binti Mat So'od

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This thesis is dedicated to my parents;

*Mat So'od Ab Rahman & Hafzan Mohd Noor*

Who introduced me to the joy of reading from birth and who taught me to  
write from the heart.

## ACKNOWLEDGEMENT

In the name of Allah, The Most Gracious, The Most Merciful. All praises be to Allah (SWT) who gave me chance, time, strength, courage and patience to complete this course successfully. My sincere appreciation goes to my supervisor, Asst. Prof. Dr. Fadzidah Abdullah for guidance, encouragement as well as for the academic and moral support. Her invaluable help of constructive comments and suggestions have contributed to the completion of this research. I am extremely indebted to my internal examiner, Asst. Prof. Dr. Srazali Aripin who willingly devoted so much time in giving me his gracious guidance.

Most of the results described in this research would not have been obtained without the close co-operation from Dr. Hj. Noraini binti Zainal Abidin, the Assistant Director, Special Education Division Ministry of Education Malaysia, head teachers, teachers and all staffs of Hospital Schools in the Institute of Paediatrics Kuala Lumpur (IPHKL), the Ampang Hospital and the Serdang Hospital for providing me vital information for my case studies. Also, sincere thank you to those who have participated in the questionnaire surveys conducted. Your cooperation was most beneficial.

Especially thanks to all my friends in Master of Science in Built Environment, Master in Urban Planning, colleagues in the Ministry of Education Malaysia for all the assistance throughout the process of completing this research. They have given me their unequivocal support as they always have, for which my mere expression of thanks likewise is insufficient.

Last but not least, my deepest gratitude goes to my beloved parents, Mat So'od bin Ab Rahman and Hafzan Binti Mohd Noor for their endless love, prayers and encouragement. I would like to dedicate my sincere appreciation to my siblings for their endless support throughout my academic years. And, to those who have contributed in this research, your kindness means a lot to me. A big Salaam!



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# CHAPTER ONE

## INTRODUCTION

### 1.1 INTRODUCTION

The notion of providing special education services to the children with medical needs is relatively new in Malaysia. The hospital school projects commenced in Malaysia on 26<sup>th</sup> July 2011. The ‘Schools in Hospitals’ program was launched by the Education Minister; The Honourable Tan Sri Dato’ Hj. Muhyiddin Hj. Mohd Yassin and is a joint initiative with the Ministry of Education (MoE), the Ministry of Health Malaysia and the Nurul Yaqeen Foundation, Malaysia. It aims to facilitate continuing education for hospitalized children, especially those who are being warded for long periods and who are returning patients (Indramalar, 2011; American Academy of Paediatrics, 2000). There are three pioneer school hospitals in Malaysia, They are the Institute of Paediatric Kuala Lumpur Hospital, the Ampang Hospital and the Serdang Hospital.

According to the report published by MoE official web page, the notion of a hospital school was aimed at preventing students from being constantly left behind in their studies while undergoing long periods of treatment at the hospitals. Thus, the establishment of hospital schools are important to achieve the main point of education in Malaysia which is “*Education for All*”. The Honourable Tan Sri Dato’ Hj. Muhyiddin Hj. Mohd Yassin claimed that, for a start of hospital project schools, lessons would be conducted in specially set-up classes at the hospitals. The qualified teachers appointed by the Ministry of Education Malaysia are responsible in teaching in classrooms and wards.

In the early establishment, only 16 teachers were placed in a selected hospital based on the number of children admitted to the hospital (MoE, 2011).

In designing hospital schools in Malaysia it is important for the Malaysian government to provide proper necessities required for the educational services needed for the hospitalized children. Tobin (2008) ; French & Tate (1998); and American Academy of Paediatrics (2000) claimed that the needs and spatial requirements in providing an educational place may be varied in every country, depending on the requirement by local authorities, but for the hospitalized children, educational goals should be addressed before they were discharged from the hospital.

Hence, this study contributes in highlighting the importance of providing a learning environment for the education of children under treatment in Malaysian hospitals so that they are not academic left behind in academic matters. This research is being referred to along with the international cases in hope that it can improve the design guidance in hospital schools of Malaysia. There should be a special provision for children requiring medical needs enabling them to get a proper education while they stay in the hospitals. Moreover, it is important to measure the satisfaction level from the hospital school's users. For this reason, this study also emphasizes on the contribution of physical elements in hospital schools, so that the current quality of a learning environment within a hospital's setting can be improved.

## **1.2 BACKGROUND OF STUDY**

Over the years, the healing environment has become an important factor in designing hospital buildings. According to Ananth (2008), due to the improvement of modern science, today's healthcare is no longer designed as a place just for treatment but for healing and curing patients as well. Creating a healing environment is important as it improves the quality of life, decreasing morbidity and providing a better environment for the patients in the hospital (Ananth, 2009). Mohd Yusoff & Roslinda Ghazali

(2011) suggested that the optimal healing environment that is applied to health care lies in the emphasis of two factors; interior and exterior environment. The creation of healing in paediatrics wards is more challenging as it involves the physical and spiritual development of children (Gasalberti, 2006).

American Academy of Paediatrics (2000) discussed that there are several reasons for children of discontinuing their studies in schools. The need to stay in hospitals to receive treatment make the children unable to attend school on a regular basis, for example recovering from surgery, trauma, extended recovery, and chronic diseases. French & Tate (1998) states that, the children who stay long in the hospital often view the hospital's environment as an unfamiliar setting from their home or school. Similar findings were also muted by Ismail Said & Mohd Sarofil, A.B. (2006) that hospitalized children strongly view hospital settings as a threat. They may often act differently and succumb to more negative experiences such as boredom, and excessive fear towards a strange and terrifying environment.

Gasalberti (2006) asserted that due to the improvement of facilities in healthcare, many alternative therapies for children were provided in paediatric wards. Ananth (2009) agreed that most of the therapies provided were intended to develop the healing culture and the healing relationship within the paediatric hospitals. Tobin (2008) states that providing learning activities in the hospital appear to be one of the ways to promote healing to paediatric patients. Her views are that in order for hospitalized children to maintain a sense of normality in the hospital environment, they need to be provided with learning activities while undergoing recovering process.

Department of Education and Skills [DfES] (2003) states that children are usually demotivated to go back to school after undergoing long periods of treatment

at the hospital. Providing space for learning seems to be the most logical for the children to engage themselves in beneficial activities, whilst helping them to recover from operations and in doing so promptly taking their minds off from thinking of their illness. Hospital school is not only to help those children to regain motivation, but also to provide alternative ways to keep up with their academic matters in a hospital setting.

### **1.3 AIM AND OBJECTIVES**

This research aims to evaluate the physical elements of a learning environment in a hospital for hospitalized children. The objectives of the research are as follows:

1. to identify and evaluate the physical elements that contribute to learning environment.
2. to measure the level of satisfaction of end users who are parents, patients, teachers and staff towards the physical elements of learning in hospital schools.
3. to make recommendations of the physical learning environment for hospital schools in Malaysian public hospitals.

To achieve the aims, the first objective of this research is intended for the researcher to evaluate and identify the physical elements which are relevant in the contribution of providing a proper education required in hospital schools. Secondly, by identifying the physical elements, the researcher is then required to measure the level of satisfaction of the physical elements from the end users of hospital schools. Thirdly, after analysing the physical elements required in hospital schools, the

researcher is therefore able to establish a set of guidelines that can be used for the future improvement in a learning environment of hospital schools in Malaysia.

#### **1.4 RESEARCH PROBLEMS**

The first research problem is the children are giving up towards schooling while receiving medical treatment in hospital. Hospitalized children who stay long in hospital usually feel stressed, unmotivated, and become anxious in a hospital environment (Ismail Said & Mohd Sarofil, 2006; and Ananth, 2006). This is caused by long term hospitalization which affects the children's moods because they are not in their usual surrounding. Hence, the exposure to learning activities is one of the ways to distract their attention away from their illness and boredom. According to the reports written by Rigi (2012); Syarifah Zulikha & Ashraf (2012); and Saifulnizam (2011) education in hospital is aimed to motivate the hospitalized children, who have the right to receive education and to keep up with the academic matters. Their schooling issues must be addressed as part of the treatment, and the future education needs of children must be given serious consideration before their discharge (French & Tate, 1998).

The second research problem is there is information on factors to promote healing in paediatric wards, but limited literature on creating a learning environment in the Malaysian hospital. Many scholars and organizations have done research on healing environment in a paediatric hospital. For example Nehzat Jalal & Mohd Yusoff (2011); Roslinda Ghazali & Mohd Yusoff (2010); Linton (1992); Samueli Institute (n.d); Jarousee (2010); Schweitzer, Giplin & Frampton (2004). These scholars discussed on physical and sustainable environment for children in paediatric

wards. However, there is less information being discussed regarding the healing and learning environment especially in Malaysia.

The third research problem is Malaysian education system requires hospitalized children to have national exams in a hospital. Statistics have showed that in 2010, of the 5,650 children who were warded in Kuala Lumpur Hospital, 812 children, 120 of whom are in primary level, 516 who were in secondary level, took exams in hospitals. In addition, report written by Syarifah Zulikha & Ashraf (2012) stated that hospitalized children do not have an exemption from taking a national exam. Even though they are receiving treatment in hospitals, they are required to sit the national exam like normal students to make sure their academic matters are not delayed. It is to ensure that after their discharge they are able to continue the studies without being left behind in their school learning programmes. However, currently most hospitals in Malaysia lack the learning environment required to prepare hospitalized children for their national exams in the hospital.

## **1.5 RESEARCH QUESTIONS**

Based on the research problem in 1.4; the investigation of research questions established are:

1. What are the physical elements that contributed to healing and learning?
2. How do you measure the level of satisfaction in a healing and learning environment in Malaysian hospital schools?
3. What are the recommendations in terms of planning and design elements that can be provided for future hospital schools in Malaysia?

## 1.6 THESIS STRUCTURE

This thesis comprises of five chapters that emphasize on the findings of physical elements for hospital schools in Malaysia. Figure 1 shows the research framework involved in the research.

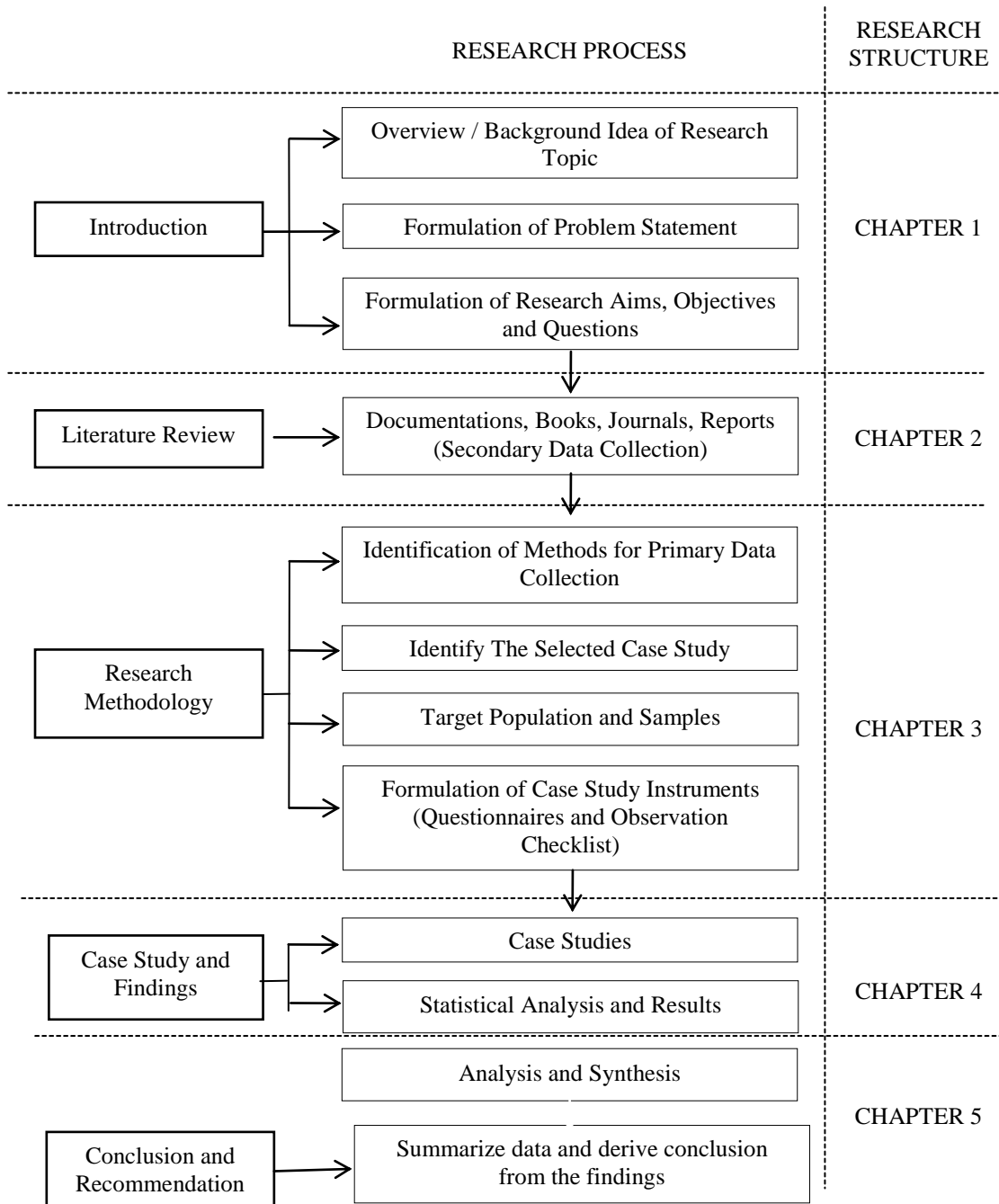


Figure 1.1: Research Framework

Chapter one (1) deals with the framework of research which identifies problems; aims and objectives; research problems; research questions; the methods used to establish research; and, structure of thesis from the beginning to the end.

Chapter two (2) outlines the major literature regarding positive factors that contribute to a healing and learning environment in hospitals. It also deals with five (5) major topics such as the definition of terms, the importance of a healing environment, the significance of healing in a hospital, the spatial requirements for a healing and learning environment, and the comparative study of the existing hospital schools local and international.

The third chapter focuses on the methods used in this research. The research utilised mixed methodologies consisting of both qualitative and quantitative approaches. The case studies selected are the existing hospital schools in Malaysia; which are the Institute Paediatrics in Kuala Lumpur (IPHKL), the Paediatric Ward in Ampang Hospital and the Paediatric Ward in Serdang Hospital.

The fourth chapter deals with gathering data through methodology adopted in this research. This chapter also covers the findings and analyse of the collected data such as feedback from questionnaire surveys and analysis from the observation during the study. For the quantitative approach, questionnaires were distributed to users of hospital schools. This survey was conducted to seek the level of satisfaction users towards the healing and learning elements in hospital schools. The question surveys afterward were analyzed afterwards using Statistical Package for Social Science (SPSS), version 19. Assessments of the results presented in this thesis are either in the form of frequency or percentage to show the highest and lowest score mean for each healing and learning element.