"ARCHITECTURE FOR CHILDREN"

Examination of the Role and

Importance of Architecture on Child Development in Pre Schools.

LIBRARY University of Moratuwa, Sri Lanka Moratuwa

A Dissertation submitted to the University of Moratuwa Sri Lanka

As a Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture

72"05 12(043)



University of Moratuwa

B.D.S. De Silva Department of Architecture University of Moratuwa Sri Lanka March 2005

8549.9

ARCHIT M.Sc 1/11 19 MAR 2005 · Worl 1. JUFALUN

2



I declare that this dissertation represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to any other institution fro a degree, diploma or other qualification.

UOM Verified Signature

[B. D.S. De Silva]

UOM Verified Signature

I certify the above information is correct. [Archt. Arosh Gamage, Principal advisor]

Acknowledgement

I wish to express my deepest gratitude to everybody who have been tremendous as set in making my dissertation a success.

I would like to acknowledge the support an the encouragement given by Archt. Mr. Vidura Sri Nammuni , Head of the Department of Architecture. My grateful thanks to Archt. Mrs. Arosh Gamage for her guldance as a supervisor of my project. My thanks to Archt Dr. Harsha Munasinghe for willingly giving me much of his time to solve many problems. I also thank Archt. Christ De Seram for his assistance when ever I called on him for help.

I wish to record my grateful thanks to the Principle of Shinyo En, St.-Brigets, SOS-Piliyandala,

La Petite for granting we permission not only to study the working of their centers but also to take photographs necessary for my study. My thanks are also due to the teachers in all these centers for their collaboration in pooling data and exchange of ideas. I wish to mention very specially the assistance given by Mrs. Apeksha Jayasuriya and Mrs. Sandya Narangoda for going out of their way to help me.

I wish to thank Mr. S. G. Weerasooriya, Mr. Kithsiri, Miss. Nadeeka and Miss. Theja for helping me with my photographic works. I acknowledge with thanks the assistance given by Mrs. Weerasooriya in the documentation of my dissertation. I would also like to thank the support given by child psychologist Dr. Mrs. Thilokasundari Kariyawasam and Mrs. Joice Gunasekara for their enlightened guidance and information provided in relation to my study.

I would be falling in my duty if I did not express my grateful thanks to the little children in the various nurseries I visited for having talked to me about their environmental experiences. This helped me in some way to try to understand the needs of the child in their environment.

My warmest thanks to Miss. Deepani Jayasooroya, Miss.Chaldya, Miss.Ruchira and Miss.Dinithi Nawaratna for helping me in various ways to complete my study.

Finally I wish to record my heartfelt thanks gratitude to my parents Mr. and Mrs. Jinadasa to Upali Illangasinghe my husband and my brother Bimal De Silwa for their support and encouragement throughout the study. Without their support and encouragement the task of completing this dissertation successfully would have being very difficult. Once again I thank you all.

5

Page No

Contents

Declaration Acknowledgement List of Illustrations

INTRODUCTION

Background Problem Statement Intension of the Study Significance of the Study Methodology Literature Review Scope and Limitations

CHAPTER ONE – Child and Space

1:1 Development of child's 'Concept of Space'1:1:1 Neonatal stage- [0-6 months]1:1:2 Infant stage- [6 months - 11/2 years]1:1:3 Toddler stage- [11/2 years - 21/2 years]1:1:4 Strider stage- [21/2 years - 6 years]	01 02 02 03 04
1:2 Design for spatial needs of children 1:2:1 Neonatal stage 1:2:2 Infant stage 1:2:3 Toddler stage 1:2:4 Strider stage	05 06 07 08 10
CHAPTER TWO – Teaching the child in Space	
 2:1 Historical Background 2:2 Concept of Pre - School Education and AMI – Method of Education 	15 17
CHAPTER THREE- Architectural Spaces for Child Development	
3:1 Spatial needs of childhood 3:1:1 Sense of belonging, sense of Security and trust	21
3:1:2 Exploration and imagination	24
3:1:3 Privacy and interaction	26
3:1:4 Opportunities for growth	27
3:1:5 Encourage development and competence	29

۰.

3:1:5 Encourage development and competence

CHAPTER FOUR - Fulfillment of Spatial Needs in Pre-Schools

4:1 Method of selection	33
4:2 Basis of analysis	33
4:2:1 Sense of belonging, sense of	33
Security and trust	
4:2:2 Exploration and imagination	34
4:2:3 Privacy and interaction	34
4:2:4 Opportunities for growth	35
4:2:5 Encourage development and competence	35

4:3 Analytical studies

4:3:1 La Petetie Pre - School – Rathmalana	36
4:3:2 Shinyo En Pre – School - Pamankada	41
4:3:3 St. Bridjet's Pre – school – Colombo -07	48
4:3:4 SOS Pre – School- Piliyandala	53

Conclusion

Bibliography

•



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

List of Illustrations Fig. No

.

.

•

.

-

Page No

.

01. At birth, the infant has no knowledge of the existence of the would or him self.	01
02. The relationship between the neonate and the mother is significantly important during this stage	02
03. There is a strong sensory awareness about detail, in the space around him.	02
04. Through play most of the abilities will develop.	03
05. Numerous perceptual individualizations taking place at this stage.	04
06. Micro environment plays a dominant role at this stage	06
07. Infant activities focus on the floor and a few feet above the floor	07
08. Play, during this stage acts major role.	08
09. Space bubble expands interior to exterior.	09
10. All is fascinating places for play during this stage.	11
11. Privacy and isolation are basic needs of children.	12
12. Simple play items help to develop the creativity	12
13. Play in the natural setting helps to develop the sense of relationship to natural things.	13
14. Children are learning by doing. And also through peer relations.	14
15. Child gets new experiences outside his own home.	14
16. Through education it enabled the child's inner self to grow.	17
17. Through education it enabled the child's inner self to grow.	19
18. Indoor play area.	20
19. Child feels comfortable in mother related environment.	21
20. Due to UN known surround things child will get frighten	21
21. Interaction through play	22
22. Child is a part of the whole environmental system.	24

23. By seeing touching children will increase their need of exploration	25
24. Through from play child's autonomy will developed	26
25. The way of window placing provides a gathering place for children and inspires them exploration in the world of imaginary.	26
26. Specially designed interior for a child's play room where he get the enough privacy.	27
27. Through adventure play, child will get fantasized and also novelty excitements.	28
28. Play space created by children. Here this kind activity gives them the opportunity to develop their skills.	29
29. Specially designed play structures for children	30
30. Play structure specially designed for children.	31
31. View to the sand court. [Entrance path]	36
32. View to the main building from the outdoor play court.	36
33. Upper floor arrangement also in the same manner of ground floor which will only separate from furniture for some extent while providing a free environment for little ones.	37
34. Class rooms arranged in a manner that will get	38
maximum interaction with each other. Cupboards with	
apparatus are placed around the hall.	
35. Light colour which has used providing a bright quality to the interior.	38
36. Child scale blackboard is placed next to the play court.	38
37. Children would be able to get connected with outside through doors ways	39
38.Ground floor class room	39
39. Child scale sink made him comfortable inside and gives him the opportunity to look around	39
40. A teacher helping the child to do their own works.	39

41. Child scaled equipment make them comfortable inside the class rooms.	40
42. Child scaled equipment inside the class rooms provides an identity as well as fulfills the belonging needs.	40
43. Entrance lobby, the transition and the common space for children.	41
44. The transition space near the doorway extends beyond, all the way to the corridors.	41
45. Direct views from class rooms to the play ground.	42
46. Half raised separation walls between class rooms are using as work tops and at the same time it will smoothly create a physical barrier between class rooms.	43
47. Central spine through class rooms	43
48. Balcony provides a space of small groups of children to create their private spaces.	44
49. Outdoor play area with play equipments with free space provided for children to play.	44
50. Openings of the half raised partition wall provides child's scale openings which provide them the sense of security at the same time.	45
51. Toilet as an element with child scaled fittings	46
52. Indoor multi purpose area with elemental column beam structure.[abstract form of a tree]	46
53. View from outdoor play area to the building.	47
54. Indoor play area which will encourage free movements of children with attractive elemental structure above	47
55. Child scaled curved shaped staircase with openings.	47
56. Grand entrance which will create fear in child's mind.	48
57. Back side entrance porch	48
58. Compacted indoor spaces	48
59. Ground floor corridor paved with slippery ceramic tiles.	49
60. Visual links with court-yard from upper floor class rooms.	49 ·

61. Teaching aids stored in manner to get easy reach of children. And the separation wall is using as a display board.	50
62. View to the outdoor play area.	50
63. Rear view of the building.	51
64. View to the stage from the courtyard.	51
65. Comer of a class room has been created as a fish tank.	51
66. Side entrance to the corridor which link with class rooms.	51
67. Views to the out side from class- rooms of upper floor	52
68. Side garden.	52
69. Child scaled toilet fittings makes them comfortable.	52
70. Entrance lobby.	53
71. Outdoor play area with steel play structures.	53
72. Corridors linking the class room.	53
73. Interior exterior link provided in the class rooms.	54
74. Entrance lobby.	54
75. Class rooms are arranged around a play court.	55
76. Free movements of children encouraged by spatial arrangements.	55
77. Play structures in the play court.	55
78. Attractive colours for children used in class rooms.	56
79. Different coloured furniture.	56
80. Specially designed play items for children.	56
81. Children will get interacted with play.	56
82. Central court-yard.	57
83. Different coloured furniture used.	57
84. Coloured roof structure.	57
85. Child scaled windows provides the visual link	57

.