

Architecture for Hearing Impaired: A Study on Conducive Learning Environments for Deaf Children with Reference to Sri Lanka

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Abstract : Conducive Architecture for learning environments is an area of interest for many scholars around the world. Loss of sense of hearing leads to the assumption that deaf students are visual learners. Comprehending favorable non-hearing attributes of architecture can lead to effective, rich and friendly learning environments for hearing impaired. The objective of the current qualitative investigation is to explore the nature and parameters of a sense of place of deaf children to support optimal learning. The investigation was conducted with hearing-impaired children (age: between 8-19, Gender: 15 male and 15 female) of Yashodhara deaf and blind school at Balangoda, Sri Lanka. A sensory ethnography study was adopted to identify the nature of perception and the parameters of most preferred and least preferred spaces of the learning environment. The common perceptions behind most preferred places in the learning environment were found as being calm and quiet, sense of freedom, volumes characterized by openness and spaciousness, sense of safety, wide spaces, privacy and belongingness, less crowded, undisturbed, availability of natural light and ventilation, sense of comfort and the view of green colour in the surroundings. On the other hand, the least preferred spaces were found to be perceived as dark, gloomy, warm, crowded, lack of freedom, smells (bad), unsafe and having glare. Perception of space by deaf considering the hierarchy of sensory modalities involved was identified as; light - color perception (34 %), sight - visual perception (32%), touch - haptic perception (26%), smell - olfactory perception (7%) and sound - auditory perception (1%) respectively. Sense of freedom (32%) and sense of comfort (23%) were the predominant psychological parameters leading to an optimal sense of place perceived by hearing impaired. Privacy (16%), rhythm (14%), belonging (9%) and safety (6%) were found as secondary factors. Open and wide flowing spaces without visual barriers, transparent doors and windows or open port holes to ease their communication, comfortable volumes, naturally ventilated spaces, natural lighting or diffused artificial lighting conditions without glare, sloping walkways, wider stairways, walkways and corridors with ample distance for signing were identified as positive characteristics of the learning environment investigated.

Keywords : deaf, visual learning environment, perception, sensory ethnography

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