

# Post Occupancy Evaluation of Building Services Provisions in Higher Institution Libraries in Niger State

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Library is perceived as the heart of every educational institution but has continually being poised with a poor and neglected design approach and maintenance regardless of its relevance in the educational institutions. This paper reports on the post occupancy evaluation (POE) of the buildings services engineering provisions in three selected higher institutions libraries in Niger State within the months of July and December, 2014. The study adopted a bespoke POE approach in carrying out the objective measurement. The data reveal temperature to be within the ranges of 25.0 °C to 32.6 °C, the relative humidity between 52.1 to 83.2 % with most value above 70%, the noise rating recorded was within 27.0 to 86.8 dBA and lighting was within 15.2 to 286.5 lux. The results from the technical indices obtained suggested that most parameters within the indoor space did not conform with the standard provided in CIBSE Guide A (2006). It was recommended that as designers go about their planning and execution of habitable structures, great consideration should be given to the comfort and wellness (physiological and Psychological wellbeing) of the occupants of such spaces with a strong emphasis on the guide provided in Integrated School Design by Chartered Institute of Building Services Engineers [CIBSE] TM57 (2015). Also, a proactive maintenance should be adhered to with a mandate from a periodical POE survey on comfort.

**Keywords:** Building Services Engineering, Institution Library, Occupant Satisfaction, Post Occupancy Evaluation (POE), Psychrometer

## Introduction

Sustainable development of Building projects in Nigeria should be approached through the Concept of "Fit Building" – fit for the people that use it, fit for its purpose, and fit for the planet. School buildings more than many other buildings, do have more challenging environmental requirements that are more demanding and complex (CIBSE TM57 (2015)). Cognitive psychologists have identified the physical environment as having a significant impact on safety and human performance. Reiling *et al.* (2008) established that understanding the interrelationships between humans, the tools they use and the environment in which they live and work is basic to any design of building for humans' use. Hence, various researchers over the years have been able to apply the idea of building services in the library to discover the performance of

libraries designed for academic purposes. Geoffrey (2005) in an effort to picture a library as an inspirational environment were able to discover the library in an academic setting as the only symbolical and physical representation of the academic heart of an institution. Mumovic (2005) stated that School buildings possess environmental requirements that are more complex and demanding and should thus, offer a safe, comfortable and stimulating environment for learning and social interactions.

The physical facility of any academic library should inspire and elevate those who enter it. Researchers (Geofrey, 2005; Vashishta, 2007; Morenikeji, 2007; Nwabueze *et al.*, 2010) have established that educational institutions contribute a major share in the overall human development by providing people

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