DAYLIGHTING STRATEGIES AND VISUAL COMFORT IN THE DESIGN

OF A COLLEGE OF ARTS AND CRAFTS, ILARO

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DAYLIGHTING STRATEGIES AND VISUAL COMFORT IN THE DESIGN OF A COLLEGE OF ARTS AND CRAFTS, ILARO

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF SCIENCE (M.Sc.) DEGREE IN ARCHITECTURE IN THE DEPARTMENT OF ARCHITECTURE, COLLEGE OF SCIENCE AND TECHNOLOGY, COVENANT UNIVERSITY.

SEPTEMBER, 2021

ACCEPTANCE

This is to attest that this dissertation is accepted in partial fulfillment of the requirements for the award of the degree of Master of Sciences in the Department of Architecture, College of Science and technology, Covenant University, Ota, Nigeria.

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DECLARATION

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Signature & Date

CERTIFICATION

We certify that this dissertation titled "DAYLIGHTING STRATEGIES AND VISUAL COMFORT IN THE DESIGN OF A COLLEGE OF ARTS AND CRAFTS, ILARO" is an original research work carried out by FALETI MICHAEL OLUWATIMILEHIN (13CA015679) in the Department of Architecture, College of Science and Technology, Cov enant University, Ota, Ogun State, Nigeria under the supervision of Dr. F. O. Jegede. We have examined and found this work acceptable as part of the requirements for the award of Master of Science in Architecture.

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DEDICATION

This thesis is dedicated to the Almighty God, the one who gives guidance and all wisdom generously without finding fault. My family and friends and to all in the lower echelon of society who desire an adequate education in art and craft, don't lose hope, a better life is imminent.

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ABSTRACT

The integration of daylight in the design of educational buildings can preserve the use of resources, enhance the health, visual comfort, and efficiency of its users. However there is little study on how daylight affects art and craft learning environment, buildings and structures. In a country such as Nigeria, where art and craft is experiencing a decline, a well designed art and craft learning environment would help provide better art and craft practitioners. This study seeks to identify daylighting design strategies that can improve visual comfort and promote a suitable learning environment in the design of an art and craft college. The study investigated the effects of daylighting strategies and features that were adopted in selected art and craft schools in South-western Nigeria. Quantitative and qualitative research methods were used in conducting the study. The data collection instruments included structured questionnaires and observation schedules. Data were analysed using the descriptive statistical tools of frequency and percentages of the Statistical Package for Social Sciences (SPSS). Results showed that considerations were not given to daylight designs. However, some elements of daylight designs were seen, such as the use of properly positioned windows, louvers, and the overhang from the roofs to act as a shading device. This study recommends that for future designs of art and craft schools, adaptaton of top and side lighting strategies should be used, such as light shelves, louvers, laser-cut panels, etc. in order to provide adequate visual comfort in the learning spaces. This would improve the performance of art and craft students and therefore improve the quality of art and craft practitioners in this region.

Key words: Art and craft schools, daylight strategies, and visual comfort.