

Editorial

Research Dexterity in Tertiary Education

Tertiary education consists of knowledge construction as well as knowledge dissemination. New knowledge is important not only to improve the quality of learning, but also to make the products of education socially responsible. Thus, facilitating the growth of the rational thinking process, based on scientific investigation, is a must for all tertiary educational institutions. Documenting constructed knowledge, along with the methods and paths used to investigate and analyze data, is as crucial as conducting research. Dexterity in research and academic writing makes learners less descriptive, less precedent-dependent, or tutor-dependent, but more innovative and creative. Once research is recognized as the systematic nature of investigation, and writing as the scientific documentation of results, learners begin to shoulder their responsibilities and demonstrate empathy.

The Department of Built Environment and Spatial Sciences (FBESS) at the Southern Campus of General Sir John Kotelawala Defence University (KDU) provides education for architects, quantity surveyors, and land surveyors. Since these learners are being prepared to work within an unprecedentedly changing social and physical context, enhancing their research dexterity is essential. FBESS exposes its learners to both qualitative and quantitative research methodologies, encouraging them to explore and practice empirical research strategies such as ethnographic analysis, grounded theory, and phenomenological analysis, integrated with experiments and simulations, to enrich the learning process. They learn to prepare research plans, execute them at various levels, and practice writing in the IMRaD format (Introduction, Methods, Results, and Discussion). The papers published in this issue reflect the standard of research and writing proficiency expected by FBESS.

The first paper, 'Considering Luminance In-situ in Building Interiors Using an Innovative Mobile Phone App', authored by P. R. Hébert, A. Jayadas and M. N. R. Wijetunge, presents the results of an exploration conducted in the USA and Australia, bringing a novel perspective to this issue. It investigates the impact of lighting in interiors. The authors, focusing on older adults who are sensitive to glare yet require well-lit interiors, describe the causes of glare and investigate strategies to mitigate the same. Architectural lighting is a complex area. The authors note that glare is caused by excessive luminance or contrast. Luminance, defined as the intensity of emitted light, is measured in cd/m^2 . They highlight the lack of sufficient studies on measuring interior luminance and aim to address this gap. This exploratory study compares luminance across two countries using a convenience sample of six diverse building interiors in the USA and Australia. Objectives: the use of smartphones and an innovative free app to photo-document interior scenes, capturing images of luminance in false color; recording luminance quantities to attest to the use of diverse tools for data collection. The paper also attests to the variety of research required to make architecture a utilitarian art for the people.

The second paper, 'Efficiency in Occupational Skills and Safety Training for a Multicultural Workforce in the Building Industry', authored by W. U. U. Perera, T. Chandrasekara, M. N. R. Wijetunge, and D.W.K. Gayantha, presents the results of a comparative study from the American context. These two multicultural workforces, often trained in different parts of the world, are required to meet the safety requirements of their current environment. However, the training programs developed to meet those requirements may not have taken their previous exposure or values into consideration. As societies diversify at an unprecedented rate in this globalized world, this study highlights a topical issue through the straightforward example of cleaning solar panels. The authors draw on Kolb's 'learning cycle theory' to emphasize the promotion of self-efficacy as the primary aim of the research. Acknowledging potential language barriers and the traditional working norms these workers are accustomed to, the authors propose using virtual reality and video technology for training. They also stress the need for further studies to develop and refine these modalities. This study can be hailed as an exploration into a forgotten, yet vital, area. It has the potential to contribute to making societies safer and minimizing possible construction accidents.

The third paper, 'Impact of Successful Timely Completion of Construction Projects on the Economic Development of Sri Lanka', authored by W. A. M. N. Weerasingha, S. D. Jayasooriya, W. N. Kawmadi and A. H. Lakmal, is an excellent example to suggest the diversity of knowledge construction

at BFESS. It investigates the construction industry as an income-driven sector, especially in developing countries. The Central Bank of Sri Lanka notes the nation's construction sector as one of the most influential drivers of its economy, employing many and adding value to the environment. Among the most crucial issues in the construction sector are time overruns. The paper discusses the consequences of delaying public sector projects beyond their expected dates. The paper aims at investigating the reasons for these delays and the means to overcome this problem. The paper describes research methods, such as interviews with stakeholders, to identify contracting only qualified and competent parties, increasing the ethical professionalism of parties, proper supply chain management, etc., as key mitigating techniques. It is important to understand the roles state agencies should play in identifying these professionals. This paper may prepare the groundwork to formulate a more dependable system to support the on-time completion of construction projects.

The fourth paper 'Elite-led Cultural Projects Manifesting Periodic Changes: Geoffrey Bawa Case Studies in Postcolonial Sri Lanka', authored by M. N. R. Wijetunge is an investigation into the synonymy between architectural forms and societies. The authors establish the connection between the so-called cultural projects and political, economic and socio-cultural manifestation of a given society. In an ever-evolving sociocultural context, some stand out as the indicators of such evolutionary periods. Sri Lankans, having endured four hundred years of colonialism, seem to have understood their most celebrated architect Geoffrey Bawa as the founder of a national architectural style. The scale, composition of masses, and use of certain elements in his works are often regarded as the vocabulary of a national architectural language. Bawa's emergence during a closed economy, relying on local materials and craftsmanship, also attributed a distinct value to his work. The authors clearly identify the fact that Bawa received state sponsorship, as well as the support of the social elites of the nation. Sponsorship of the state or the social elite classes have been witnessed in many other societies elsewhere. Just like Bawa, most innovators of cultural projects had an elite background as well as a powerful circle of supporters. It is no secret that Bawa's cultural projects, in a way, signify the rise of a new post-independent elite class in Sri Lanka, akin to the emergence of various historical styles over the course of history (*i.e.* Gothic, Baroque, etc.) on a global scale. The paper clearly discusses the methods used, thus making a valuable contribution to future learners.

These four papers, with diverse research aims and using various research methods, show the depth of research required to study spaces that are designed and built for humans. They assess the psychological and physiological health of such spaces, as well as the safety of their construction and usage. "Men come to cities to lead a good life," Aristotle once famously said. Therefore, as responsible professionals, we must indeed ensure that our societies are enabled to lead such a life.

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