


Chapter 9

ICT–Driven Architectural Education for Human Development

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ABSTRACT

This research explores the role of Information and Communication Technology (ICT) in enhancing architectural education and fostering human development. It highlights the increasing importance of ICT in transforming traditional architectural pedagogy. The research aims to identify how ICT tools and platforms improve the educational experience of architecture students by addressing accessibility, engagement, and skill development. A mixed-methods approach, combining quantitative survey and qualitative interviews with students, educators, and industry professionals, was used. Data collected through structured questionnaires and interviews revealed that ICT

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significantly enhances learning by providing interactive and flexible environments. Tools like digital design software, virtual simulations, and online platforms foster creativity, critical thinking, and practical skills, while promoting inclusivity. The study concludes that ICT-driven architectural education improves academic performance and prepares students for professional success by equipping them with essential digital skills. Future research will explore the long-term impacts of ICT on careers and investigate emerging technologies to further enhance education.

1. INTRODUCTION

Social and cultural sustainability ensures the wellbeing of our community by addressing basic human needs such as rights, equality, health, culture, and religion, both now and in the future. It prioritizes people and communities, recognizing their needs, values, and shared experiences in sustainable development planning. Social sustainability interacts closely with economic and environmental sustainability, influencing and being influenced by them. Factors like individual and collective health, living standards, and human rights also shape social sustainability. Ultimately, it aims to enhance people's lives by fostering enduring social wellbeing and promoting high-quality living conditions over the long term (Aotearoa, 2020).

Human development examines the multifaceted factors shaping individual identity, including influences from sociology, psychology, biology, religion, genealogy, and more. The primary objective is to study these elements to enhance the educational experiences of students. Ensuring a rich and secure education is recognized as a fundamental human right. However, various environments can impede this access, necessitating the role of human development specialists. These experts provide crucial support to students, helping them achieve their educational goals and develop skills to overcome barriers hindering their academic progress (Pacific Oaks College, 2020).

Understanding human behavior within cultural contexts highlights how social environments shape individual choices and perceptions of self and others (Figure 1). This interplay underscores the complexity of social choice processes and the potential for interventions that align with both behavioral and institutional dynamics, enhancing policy effectiveness amid evolving societal changes. Efficient and equitable intervention design should adapt to these dynamics, acknowledging their interconnectedness for effective policy outcomes (United Nations Development Programme, 2024).

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