Foreword

Information and Communication Technology (ICT) is integral to the development of higher education institutions (HEIs) since it has revolutionised how they conduct their academic practices and procedures. Such reforms has led to communication and learning playing a huge role in facilitating academic operations, which calls for a consensus on a brand of ICT that caters to the personal development needs of HEI multi-stakeholders. This book refers to ICTs as underutilised technologies that have the ability to change the status quo, as well as rethinking about ICT strategies in the higher education context in a way that leads to a better understanding of stakeholders' needs and gives more consideration towards resulting implications. The book draws on the social and technical implications of technologies (sociotechnical systems), which can be observed in underutilised technologies, including organisational and personal issues that lead to making adoptive decisions concerning emerging ICTs. The limited coverage on the application of underutilised technologies for HEIs indicates the need to inform about the potentials of underutilised technologies to enhance and foster institutional practices such as communication and learning. Knowledge is a high priority to HEIs and thus will make the extra effort to improve their ICT infrastructure to address some the key issues the industry faces both internally and externally. Ultimately, the book is inspired to develop theory to support HEIs awareness of underutilised technologies and support institutional practices, thereby helping to shed some light on the potential suitability of such technologies.

Editors present a series of chapters developed by determined and knowledgeable authors concerning the different underutilised technologies and their role in developing pedagogy, as well as learning/teaching/communication practices. It unearths some very new and previously untreated issues, such as employing cloud computing, internet of things (IoT), artificial intelligence and big data among others to provide intelligent shared computing provision to enhance simplicity, scalability and efficiency. This includes meeting stakeholder expectations and preferences from the sharing of quality information resources to facilitating collaboration between multi-stakeholders operating in higher education.

Fostering communication and learning with underutilised technologies in higher education provides a unique outlook on the current and future position of technological developments in pedagogy and its role in shaping learning for future generations. These concepts heralds the emergence of new learning technology frameworks that combines conventional learning methods and modern technological innovations. The book also brings to the attention of both academics and practitioners the notion of developing learning, teaching and communication in the higher education domain through technological paradigms such as cloud computing, Internet of Things, Gamification, Artificial Intelligence and Smart Learning Spaces among others. The book is also inspired by a number of engaging and insightful frameworks and models such as aspectual analysis, systematic literature analyses, sociotechnical theory and case study analysis among others. The book even deliberates on recent world issues such as the COVID-19 pandemic

and its impact on underutilised ICTs, such as video-conferencing through the Zoom application which has recently boomed in wake of the pandemic. The driving notion of this book is the application of these technological paradigms in higher learning settings and how they foster communication and learning in different ways. For that reason, there is a critical need for a principled way of managing knowledge through underutilised technologies in order to provide a more positive pedagogical outcome. This book is both conceptually elegant and operationally useful and is a much-needed contribution.

Editors weaves the phenomena in this book like a determined artist who is fixated on providing a beautiful and intricate work of art that people can appreciate. This can be symbolic of the editor's determination and goal of sharing knowledge in their domain, while anticipating future issues like a skilled researcher who needs to better allocate knowledge as a public good. The book brings together the conceptual richness of a new way of diagnosing existing pedagogical gaps through the application of underutilised technologies, while providing a practical perspective of linking this to the development of learning, teaching and communication in higher education settings and for the requisite institutional change for long-term competitive advantage. The book identifies archetypes of emerging technology trends that help diagnose and uncover pedagogical problems, while directly linking that with technological interventions.

Finally, the book does something that will, in my opinion, becoming increasingly important in the coming years: It sets the stage for better management of pedagogy through current and future underutilised technologies. As the technological landscape continues to develop rapidly, technical techniques for pedagogy will increasingly influence institutional performance for higher education. Editors book is showing us the way of the future of fostering communication and learning with underutilised technologies in higher education. I am honoured and proud to write the foreword to this immensely useful and innovative book.

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