Preface

INTRODUCTION

Higher education is facing a renaissance in terms of its approaches to teaching and learning and the use of physical and virtual spaces. This book will address the question of how higher education institutions and administrators need to re-conceptualize, re-design, and rethink the use of space for students entering university in the 21st Century. Higher education institutions are no longer defined by the physical boundaries of their traditional campus but the entire student experience, whether that be negotiating the physical corridors of the campus or connecting to virtual environments. The design of spaces to support the generation of knowledge by students themselves is an important and neglected field. With lectures and tutorials still predominant in higher education, the organization of space and time configures students as receivers of knowledge until the point of graduation, at which time they are expected to produce knowledge of their own. Rather than lecture halls with rowed seats being the predominant physical learning space for learning and teaching in higher education, learning spaces need to include: physical/virtual, formal/informal, blended, mobile, personal, and professional learning spaces that need to consider flexibility, adaptability, and time. They need to mirror contemporary learning and teaching strategies that emphasize independent and peer-based learning in both physical and virtual learning spaces, and need to account for how students perceive and utilize space in higher education settings. In meeting these priorities, it is essential for universities to support synchronous and asynchronous, multi-disciplinary, multi-campus, and inter-institutional collaboration amongst students, between students and teaching staff, and amongst teaching staff.

THE TARGET AUDIENCE

The target audience of this book will be composed of professionals and researchers working in the field of physical and virtual learning spaces in higher education (e.g. university academics teaching in higher education, librarians, educational designers, academic developers, learning and teaching centre staff, online professionals focused on the design and development of educational technology projects, architects who design buildings and spaces in university environments, and IT administrators). Moreover, the book will provide insights and support university senior management who make decisions about learning space and building projects, heads of departments, faculty deans, and facility managers at universities concerned with the management and design of physical and virtual learning spaces in higher education.
HOW THIS BOOK IS ORGANISED

This book is divided into four sections: Section I. Space Perspectives; Section II. Physical and Virtual Learning Spaces; Section III. Blended Learning Spaces; and Section IV. Authentic Learning Spaces.

Section 1: Space Perspectives

Section 1 examines theoretical and practical perspectives in relation to learning spaces. The first four chapters examine distributed learning spaces, the continual emphasis of ‘place’ in learning spaces, viral learning spaces, and outdoor learning spaces. The chapters attempt to push the boundaries of what we mean by learning spaces from both a theoretical and practical perspective.

In Chapter 1, Mike Keppell and Matthew Riddle examine distributed and personal learning spaces across the spectrum of physical, blended, and virtual learning spaces in the higher education context. They suggest that higher education is no longer defined by the physical boundaries of a ‘physical campus,’ but the entire student experience, whether that involves negotiating the physical corridors of the campus, attending face-to-face classes, participating in fully online courses, or a blend of both face-to-face and online courses. In addition, the student experience may also involve connecting to virtual environments from home, a local café, on the train, or participating in professional practice hundreds of kilometers from the physical campus. This chapter attempts to account for the diverse range of spaces that are enriching the learning and teaching experience for both academics and students and suggests that we need to recognize the changing nature of learning space and broaden our mental models of learning spaces in higher education. In Chapter 2, Warren Sellers and Kay Souter focus on differences between educational places for learning and spaces for learning. They suggest that discussions about teaching and learning spaces continue to concern themselves with what happens at an educational “place.” This chapter looks less at the physical place and more into potential spaces – the notional margins, interstices, and liminalities that are outside, between, and on the fringes of defined places. Rather than seeing a student’s classroom, workroom, lecture hall, and lab as a singular person’s situation or place, they propose seeing and thinking conceptually about spatial-dimensional multiplicities for identities. In Chapter 3, Merilyn Childs and Regine Wagner examine viral learning spaces which are spaces neither designed nor controlled by the institution. They suggest that a disjuncture has emerged between the look of learning spaces discourse, definitions of learning spaces, and the aspirations of ‘learning spaces’ as a design concept that transforms higher education. They argue that a current emphasis on designing learning spaces will fail to transform higher education in the twenty-first century if its proponents do not adequately conceptualize the end of the institution and the rise of viral learning spaces. In Chapter 4, John Rafferty examines the design of outdoor and environmentally integrated learning spaces. He emphasizes the need to explore how the holistic and integrated nature of the campus and the environmental functionality of the site provide unique opportunities for learning within learning spaces. The chapter highlights the value of outdoor environments as legitimate and critical spaces for learning within higher education. Examples are provided of how the natural and built environments of the campus are used as learning spaces to promote social interactions, conversations, and experiences that enhance student learning.
Section 2: Physical and Virtual Learning Spaces

Section 2 examines the diversity of physical and virtual learning spaces. The five chapters examine institutional spaces for learning, using design-based research to evaluate spaces, networked learning environments, lifelong learning through e-portfolios, and learning community spaces.

In Chapter 5, Robert Fox and Paul Lam explore the changing needs for university learning spaces and the resultant designs to maximize opportunities for student learning, taking into account the special needs and learning culture of the local context and the changing curriculum needs of all higher education institutions in Hong Kong. The chapter outlines a study of these needs and an institution’s plans to better use space to support both flexible and interactive learning environments to enhance active student learning. In Chapter 6, Shirley Reushle discusses the purposes, design, and implementation of a physical experimental learning and teaching space which forms part of the University of Southern Queensland’s Australian Digital Futures Institute (ADFI). It identifies challenges associated with the initial design and offers some recommendations for addressing these challenges. The chapter examines the principles of the PaSSPorT design model which has been developed to guide the redesign of space. The chapter also introduces a process for evaluating the design and implementation of learning, teaching, and research spaces using design-based research to frame the model. In Chapter 7, Chris Jones introduces the idea of networked learning environments and argues that these environments provide the totality of surrounding conditions for learning in digital networks. He provides illustrative vignettes of the ways that students appropriate networked environments for learning. The chapter then examines the notion of networked learning environments in relation to the idea of infrastructure and infrastructures for learning and sets out some issues arising from this perspective. The chapter suggests that students and teachers selectively constitute their own contexts and that design can only have an indirect effect on learning. In Chapter 8, Eva Heinrich and Yuliya Bozhko explore the dominant virtual learning spaces employed in institutions of higher education and contrast them with the virtual social spaces provided by Web 2.0 tools. Guided by the increasing focus on lifelong learning skills in the world of work and in higher education, the authors identify the gap that exists between institutional and social virtual spaces. Heinrich and Bozhko argue for filling this gap by providing access to institutional e-Portfolio systems to students in higher education, and giving students an institutionally supported, student-focused virtual learning space. In Chapter 9, Nathan Wise and Belinda Tynan explore the conceptualisation and creation of an interactive, online, social network community of practice. The Distance Education Hub (DEHub) is both a virtual and physical community space. DEHub is in the simultaneous process of constructing and facilitating a virtual space to support and encourage both knowledge dissemination and knowledge creation. The DEHub space focuses on learning as a cooperative, constructive, and dynamic process involving engaged communities of scholars, learners, and practitioners.

Section 3: Blended Learning Spaces

Section 3 examines the concept of bridging the gap between physical and virtual learning spaces and the movement of the learner between the spaces. The three chapters examine blogs for traversing physical and virtual spaces, a simulated virtual publishing space and blending space with pedagogy.

In Chapter 10, Kerryn Newbegin and Leonard Webster use blogs to traverse physical and virtual spaces. The chapter proposes that new ways of thinking need to be adopted, and new strategies for collaborating need to be developed to enable students and teachers to traverse physical and virtual
environments. In traversing these spaces, learners must use them to best advantage, both within the higher education context, and then later in the professional arena in which they will be operating. Specifically, this chapter will examine the use of one collaboration tool—blogs—to bridge the gap between the physical and the virtual, the formal and the informal learning spaces. Strategies for using blogs will be presented as a tool for students and educators to enable and promote knowledge creation, and to develop a habit of reflective practice both during and after formal study. In Chapter 11, Steve Dillon, Deidre Seeto and Anne Berry describe knowledge creation metaphors for scaffolding learning in a blended learning environment. Through independent and collaborative work, online participating students experience a simulated virtual publishing space in their classrooms. This chapter is presented as an auto-ethnographic account highlighting the voices of the learning designer and the teacher. Using an iterative research design, evidence is provided for three iterations of each course. A collaborative approach to the development, planning, implementation, and evaluation of two tertiary music elective courses between lecturers, tutors, learning, and technological designers is narrated. A blended learning space was incorporated within each of these elective music courses, and the movement between these learning spaces is described and problematized. The research suggests that learning design, which provides real world examples and resources integrating authentic task design, can provide meaningful and engaging experiences for students. In Chapter 12, Lynne Hunt, Henk Huijser, and Michael Sankey examine blending space with pedagogy. This chapter shows how virtual and physical learning spaces are shaped by pedagogy. It explores the shift in pedagogy from an orientation to teaching to an emphasis on student learning. In so doing, it touches on Net Generation literature indicating that this concept has a poor fit with the diverse nature of student populations engaged in lifelong learning. The argument is that the skill set required for lifelong learning is not age related. The chapter refers to the concept of the “edgeless university,” which acknowledges that learning is no longer cloistered within campus walls. An important point in the chapter is that the deliberate design of quality learning spaces requires whole-of-institution planning, including academic development for university teaching staff, themselves often ill-equipped to take advantage of the potential of new learning environments.

Section 4: Authentic Learning Spaces

Section 4 examines the concept of authentic learning spaces. The five chapters examine assessment in virtual learning spaces, creating an authentic learning environment for nurses, academic development for learning spaces, designing experiential learning spaces, and utilizing student mentors in learning spaces. In Chapter 13, Geoffrey Crisp examines assessment in virtual learning spaces. The chapter examines how assessment spaces must change in response to the rapid development and uptake of new virtual learning spaces. Students are engaging in collaborative, cooperative learning activities in a spatially distributed environment, yet their assessment tasks are often delivered in traditional assessment spaces that bear little resemblance to their learning spaces. The assessment of students in virtual worlds, virtual laboratories, role-plays, and serious games is examined, and the case is presented for the wider use of evidence-centered assessment designs and stealth assessment techniques. In Chapter 14, Gylo (Julie) Hercelinskyj and Beryl McEwan present an overview of an innovative teaching approach in an undergraduate nursing degree at Charles Darwin University (CDU). The authors describe the development and initial integration of a virtual learning space into the first year clinical nursing subject using a case-based approach in order to address some of the issues associated with an externalised Bachelor of Nursing program. In addition, the use of the CDU vHospital® in supporting early role socialisation into nursing
and professional identity of first year nursing students will be explored. In Chapter 15, Caroline Steel and Trish Andrews suggest that academic development can be designed to provide strong opportunities for university teachers to re-imagine their teaching for these new spaces while also building their leadership capacity. This chapter discusses challenges that teachers face in transforming their teaching practices and proposes a model for academic development. Two case studies demonstrate the flexibility and efficacy of the model and provide pointers for further adoption in the higher education context. In Chapter 16, Chris Cheers, Chen Swee Eng, and Glen Postle advocate that to maximise the potential of any learning environment, educators need to understand how students learn in the first instance and then design the learning environment based on these insights. Formal learning is conceived as an individualised experience within an organised learning community, and it is suggested that this learning environment is described as an experiential space. Within this chapter, the authors describe an approach to designing experiential space that uses problem based learning to engage students and facilitate their active construction of knowledge. In Chapter 17, Keith Kirkwood, Gill Best, Robin McCormack, and Dan Tout explore the human element in the learning space through the notion that once a learning space is colonised, it becomes a learning place of agency, purpose, and community involving both staff and students. The chapter discusses the dynamics of peer learning across learning space settings and the challenges involved in instituting the shift from teacher- to learning-centred pedagogies within spaces. Both physical and virtual dimensions are considered, with the SNAP-VU Platform introduced as a strategy for facilitating virtual learning communities of practice in which staff, mentors, and students will be able to engage in mutual learning support. The chapter concludes with calls for the explicit inclusion of peer learning in the operational design of learning spaces.

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