As reasoned by Blackmore et al. (2011), “The Innovative Learning Environments Research Study takes the position that focusing on the social practices of teaching and learning and the use of learning spaces and technologies is the next step in research on Innovative Learning Environments (ILEs).” Charteris et al. (2017) also agreed that since it would be impossible to separate “the technological, spatial and temporal focus of ILEs” from “our wider material global context”, it is tempting to incorporate “poststructural politics to consider how principals mediate and filter their uptake of ILEs in relation to their school philosophies and pedagogical journeys.” These circumstances, and the efforts of a multinational group of researchers over several years resulted in a collective work entitled Teacher Transition into Innovative Learning Environments: A Global Perspective.

Teacher Transition into Innovative Learning Environments: A Global Perspective is a collective work edited by Wesley Imms and Thomas Kvan. This book brings together several Ph.D. projects generated by a series of conferences held across countries and continents: Melbourne (Australia), Michigan (USA), Copenhagen (Denmark), London (England), and Phoenix (USA). The editor points out that this multidimensionality of the projects provides us “to some degree, [with] a global understanding of the latest evidence being found on the good use of innovative learning environments.” The resulting work allows us to advance our thinking on how to maximize the qualities of ILEs.

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In the introduction, the editor addresses the general issue that exists between capital investment and learning outcomes. A brief introduction of the research in this volume and some of the underlying concepts and considerations embedded in the project are provided by presenting the idea that capital investment should be better guided so that better learning outcomes in schools could be delivered. The transitions proposed by the ILETC project in this volume, currently nearing its final stages should be considered to be a seminal moment in the history of school design.

The articles in this volume are grouped under four themes. Each theme addresses a specific topic. Part I: *Change and Risk* consists of six articles and details research addressing the management of change and risk that stems from the introduction of new learning environments. Based on an empirical case study at a Danish school, Bøjer demonstrates how involving all participants in the design process could improve pedagogical practices. Bradbeer, using a New Zealand primary school as model, proposes that only when teachers start to adapt to the new environments will the opportunities provided by ILEs reach their full potential. French points out that many schools fail to supplement the design and construction processes with initiatives that align teaching practices, organizational structures, and leadership with the intended vision. Jones and Fevre discusses how teachers’ perceptions of ILEs can influence their participation in them. Marcarnini concentrates on the strategy of team teaching and illustrated with four schools how this resulted in students improving their learning skills, taking on more personal responsibility, and demonstrating aptitude to study in a variety of ways. Dyer shows to us how to use a pre-existing framework to improve school design more suitable for students and teachers.

Part II: *Inhabiting* contains four articles that reflect on how users inhabit spaces, with particularly focus on their movements and learning activities. Brøns’s chapter discusses how teacher mindsets relate to spatial habits and teaching practices. While their mindsets often influence their ways of arranging furniture unconsciously, physical diversity within a larger space is shown to be beneficial for the collaboration between teachers than furniture itself. Healy and Morrison point out the importance of a new form of collaboration that inhabits the in-between spaces of researchers, participants, and research contexts. Rose-Munro focuses more on how we could include students with hearing difficulties into ILEs, and Shapiro demonstrates how interaction geography may help with the evaluation of physical learning environments.

Part III: *Measurement* groups four more methodological-oriented articles and discusses the kind of initiatives that we can take to produce “good” evaluations. Through the Linking Pedagogy, Technology, and Space (LPTS) observational metric to trace teachers’ practices in two different spatial layouts in three years, Byers not only identifies multiple factors influencing teacher and student activities and behaviors but also indicates the importance of teacher’s spatial competency. Mil et al. examines the interaction between spatial contrast and other factors such as pupil noise, physical activity, and mood. Yu uses a comparative case study in China to examine the relationship between learning spaces and outcomes. At the end of this part, Zhang proposes the creative learning spiral, a new design framework, based on the studies of two learner groups from Harvard.

Part IV: *Teacher Practices* includes four articles and focuses on how teachers occupy and use educational space. In this part, Leighton proposes the new concept “situated environmental imagination” after discussing the relationship between teachers and learning spaces. Mor-Avi advocates the application of the collective culture “We” in designing the learning spaces and further argued that the “We” cultural environment is beneficial for collaboration and creativity in Israel. Through focus group interviews, Nelson and Johnson discusses the socio-spatial challenges encountered by teachers in an innovative learning environment and then provided suggestions for better preparing candidate teachers in New Zealand. To conclude this part, Sasot and Belvis introduces the “Hack the School” project for schools in Spain. Combining a conceptual framework and an applied creative toolkit, the project can
address the concerns posed by learning spaces and facilitate the cooperation between education and architecture.

Imms and Mahat complete the volume with a “Conclusion” chapter, which places the articles into a broader context. The value of this collective work resides not only in bringing together the projects of different research groups around the world but also in identifying consistent patterns in teachers’ spatial transition actions. The authors state “while each teacher or school’s journey from traditional to ‘innovative’ spaces is unique, there exist some common issues that most seem to face at some time, in some way.” Through data analysis, the current volume describes how these common issues can be organized through the use of temporal, theme-based strategies and tools developed by fellow educators to assist in this transition.

Several aspects of this book are particularly worthy of mention. First, the book is well structured with respect to the topics addressed in each part. The themes of the four parts are interrelated yet they follow a chronological order in problem solving. Part I and Part II reflect on the relation between educators, users and spaces. Part III discusses the approaches that we could take to give “good” evaluation thus how one might solve a problem we face. Part IV address the role of the teacher in practice. This structure allows the readers to first familiarize themselves with current problems and then later develop a deeper reflection and understanding of the problem-solving aspect. This structure provides readers with some more room for thinking while reading instead of throwing too much in front of the readers at once. It walks us through a critical examination of what we are facing and how we can solve the problems with available resources.

Second, since each chapter begins with a general introduction of the topics and content of the articles in that part, it gives the reader a better understanding of the theme to be discussed. This section is particularly useful in that it clarifies the motivation of grouping. It gives the readers a clearer idea of what to expect in that part and where the focus should be placed. Since most of the relevant work on the market does not come with this section, the theme under each part might not be crystal clear for readers. This introductory section in this collection largely avoids any potential confusion of this type.

Third, unlike many existing collections, the works in this collection cover a wide geographic range. We do not only see projects done in Western countries but also attempts made by groups of researchers in Asian countries. This is a true collaborative work engaging not only educators but scholars in various fields from all over the world to participate in ILEs. Through this collection, we see how researchers from different parts of the world work towards a common objective in the hope of improving the current educational situations.

Fourth, the quasi-equal number of articles in each chapter also gives balance to the importance of each part, which effectively conveys the idea that in the innovative learning environment, the users are as important as the teachers, and the understanding of problems is given the same priority as the solving of problems. This, from another angle, echoes the proposal laid out at the beginning of the volume by the editors, which proposes that only a better understanding of the problems could lead to more effective capital investment and thus better learning outcomes.

Overall, this volume fulfills its goal. On the one hand, it addresses problems found in innovative learning environments from an international point of view; on the other hand, it demonstrates the need for more effective capital investment in order to better develop innovative learning environments. Thus, this book provides good guidance not only for students or researchers interested in conducting further studies on the topic of innovative learning but also for educational investors who aim to provide better learning outcomes.
References

