James L. Lang (2016) *Small Teaching: Everyday Lessons from the Science of Learning*, San Francisco, CA: Jossey Bass (978-1-111-894449-3 [Hbk], 256pp)

Although, this book is aimed primarily at the new practitioner, I believe experienced academics can gain from reading this carefully crafted text. Lang's narrative is engaging, by including scenarios that introduce and explain his thinking on a particular theme.

The opening part of the book sets the scene and introduces the reader to the events, triggers, and published works that led to the conception of small teaching. Lang maintains that small changes in pedagogic thinking do not require a complete re-thinking of teaching practices to produce better courses. The book is organised into three sections: Knowledge, Understanding and Inspiration. Each section provides theory, principles, methods, and tips for implementing change, allowing in-depth study of each topic.

Within the 'Knowledge' section, Lang draws our attention to the importance of understanding how humans learn, by demonstrating how knowledge is acquired based on his personal experience and the research of others. In the following three chapters, he considers approaches to deepening knowledge. Chapter One considers how a student's learning style can hinder them from gaining knowledge as Lang critically evaluates methods that show how recalling tasks strengthen memory, and offers practical approaches to improve student retrieval that link practice and assessments. He finishes by stating that the number of times material is studied and retrieved is more important than the methods used to practice. Chapter Two examines the role of prediction in developing neural networks to aid judgement and help the learner to identify important concepts. Making predictions about a subject increases understanding and aids retrieval of material: Lang offers a guide to creating and integrating prediction activities. Interleaving and the development of long-term memory are surveyed in Chapter Three. Here, it is pointed out that there are challenges for the learner in applying knowledge to solve unfamiliar problems. Lang explains that course and assessment design, in addition to the teaching environment, can be used for embedding interleaving in the curriculum. To conclude, he suggests that regularly studying key concepts, skills and knowledge will ensure long-term retention.

In the next three chapters ('Understanding'), Lang deals with the importance of making connections, practicing and self-explaining to increase a student's understanding and comprehension. In Chapter Four, Lang illustrates how making connections between segments of information can help individuals recognise the "bigger picture", leading to the expansion of neural networks. Lang suggests that deep learning and

comprehension by students is achieved through a stepwise study programme and by making broad connections at the end of a module. Building on this, Lang then describes the role of working memory in developing competence in new tasks. Lang advocates a mindful approach to learning involving the "continuous creation of new categories, openness to new information and an implicit awareness of more than one perspective." He reminds us that academics play an important role in designing assessments that support this learning, for example, breaking down the assessment task in to its component parts and identifying the cognitive skills required. He finishes by stating that the inclusion of increasingly more complex tasks and timely feedback increases mindful learning. In Chapter Six, Lang considers the role of self-explaining as a means of developing understanding. Citing to self-explanation theory and research to illustrate the value of this approach, Lang suggests a number of strategies to encourage self-learning, largely involving breaking down each task in to manageable chunks. He ends by stating that academic/peer input is essential in developing self-explaining.

The final section ('Inspiration') deals with the link between intelligence and learning. Lang identifies three areas, motivation, growth and expanding, which contribute to inspiring a learner. Chapter Seven highlights a story illustrating how intrinsic and extrinsic factors affect motivation. Lang asks how we encourage and maintain motivation and refers to Cavanagh's (2016) research to show that activating emotions make memories stronger, which is important in learning. He continues by explaining that some emotions lead to deep learning. Key elements in increasing motivation are presented which, when delivered together, will inspire the learner. Lang suggests this area of pedagogy is underexplored and may be of interest to many. The take home message from Chapter Eight is, 'effort is important'. This section focuses on the student and how to encourage and embed a mind-set that is willing to try new things. Lang focuses on assessment design to encourage and reward intellectual growth. He concludes that grades will increase incrementally when straightforward formative assignments leading to more complex tasks, are introduced. Once again, Lang states that feedback is necessary but it must be encouraging and have direction if deep learning is to be promoted. A series of approaches to encourage growth are included.

Finally, Lang looks at the changing face of HE (in the USA) and student expectations. In particular, he explores the changes taking place beyond the classroom environment by making use of published works and references a range of useful resources. He reminds us that the previous chapters focused on small changes all aimed at building student engagement, learning and experience, but ends by considering the three elements which are essential when designing courses for the future.

I enjoyed reading this book and would have no hesitation in recommending it as a useful resource for anyone serious about encouraging deep learning in their students.

Reviewed by Patricia Burke

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Reference
Cavanagh, S. (2016) *The Spark of Learning: Energising the College Classroom with the Science of Emotion*, Morgantown, WV: West Virginia University Press

Barbara Allan (2016) *Emerging Strategies for Supporting Student Learning: A Practical Guide for Librarians and Educators*, London: Facet Publishing (ISBN 978-178330-107-2, 240pp)

The market for books on higher education is a crowded one; Facet Publishing has carved something of a niche here, by releasing books that are primarily focused on the information professional or librarian. Whilst this book is not perfect, there are elements that will appeal to librarians and teaching staff alike.

Highlighting the particular strengths of the book, the chapter on digital literacies is engaging and will give anyone a really good background in this fast-changing area. Practitioners (librarians and teachers) will find the frameworks on information literacy especially pertinent and, to make the chapter more illuminating, there are accompanying case studies and useful references. The following chapter on approaches to teaching and learning will appeal to those engaged in instruction.

The book comes into its own in after the initial sections. This is because it is much more purposeful and activity-led. I especially liked how these activities were framed, offering me useful insights into how to gather feedback from group activity, for example. Chapter Seven (entitled, 'Making it Happen') provides grounding in the principles of course and activity design. It provides a useful template for planning activities, such as the 4MAT approach (McCarthy and McCarthy, 2005) and the following chapter then gives practical examples of how to apply these principles to different modes of teaching, specifically face-to-face, flipped classroom, blended learning and online learning. Example

lesson plans and case studies are provided which are especially useful. The reader then derives a clearer sense of the actual delivery of a training course in a chapter that covers both online and face-to-face teaching. This is really useful for those both new to teaching as well as more experienced practitioners. The ability for librarians to forge effective ways of working with teaching staff is then highlighted which focus on more individual, rather than holistic/strategic, working arrangements.

Evaluating activities is essential and Allan gives a comprehensive background and sense of how this is to be carried out. Schilling and Applegate's (2012) research on evaluating learning and teaching in academic libraries is brought to the reader's attention. This makes for interesting reading as it identifies the pros and cons of different methods of evaluation. I found this useful when thinking about the ways we currently evaluate our sessions and whether it is valuable for measuring learning or satisfaction: the case studies in this section were more research oriented rather than everyday methods.

The chapter on lifelong professional development for library and information workers is really useful if you are new to library work as it gives a good outline of the range of different learning and development opportunities. There are examples in fostering an organic way of individual professional development as well as a more structured approach.

In conclusion I wouldn't necessarily recommend reading the whole book from cover to cover but it's certainly useful to dip into. For newer professionals the background and grounding principles in the early chapters would be more useful than for someone with years of experience in the sector. For the more experienced professional looking to spice up their sessions the latter elements of the book are definitely worth engaging in.

Reviewed by Cath Dishman

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Schilling, K. and Applegate, R. (2012) 'Best methods for evaluating educational impact: a comparison of the efficacy of commonly used measures of library instruction' in *Journal of the Medical Library Association*, 100 (4): 258-70

Sandra L. Enos (2015) *Service Learning and Social Entrepreneurship: A Pedagogy of Social Change*, New York: Palgrave Macmillan (ISBN 978-1-137-55443-7 [Hbk], 96pp)

Enos's book is well timed: academic work that explores and challenges the role of higher education in its wider social context are always to be welcomed. However, in a time of ongoing challenges to the nature of higher education and a context where social change processes may need to be reignited, a work which considers service learning, social entrepreneurship and a pedagogy of social change may not only be timely but necessary, "Higher Education has too important a role to play in our communities to let this opportunity pass" (p. 84). A significant part of current higher education rhetoric acknowledges and highlights the civic role universities can play within their communities: the aim of LJMU is, "to be recognised as a modern civic university developing solutions to the challenges of the 21st Century."

This volume is structured and to be read as four interrelated academic journal articles. The structure is attractive and the inclusion of abstracts per chapter/article is both helpful and engaging. Though not a lengthy book it merits careful reading and the effort is rewarded with insights and actions which could be transferred from the American context into the civic engagement strategies which could be at the heart of any modern civic university.

The first chapter ('The Landscape of Social Change Education') presents an overview of how community engagement has developed in the higher and further education sector in the USA. Enos provides a comprehensive overview through a critical discussion of: the history of service learning and social entrepreneurship; the common features of both; and their distinctions/differences. We are provided with a good literature review which sets the scene for the following chapters.

The following chapter, 'Organising for Engagement', examines the experiences of ten campuses in the USA that have been recognised as 'Community Engaged Campus University'; Enos claims they are exemplars of service learning or social entrepreneurship education. The primary research is based on a series of interviews with representatives from each participating college. Once more this is divided into sections and particularly interesting are: the summary and analysis of the interviews; challenges in doing community engagement work on campus; and the limitations of the research.

The penultimate chapter, 'Challenges for Service Learning and Social Entrepreneurship', critiques the two concepts and looks at: civic and democratic engagement; concerns about service, power and privilege; the orientation from social justice; service versus problem-solving; and how we teach service learning and social entrepreneurship – overall, this highlights the size and ambition of the chapter. In discussing these, Enos provides a substantive account of the ethical and pedagogical issues faced by the service learning and social entrepreneurship advocate.

The final chapter, brings all the strands discussed in the previous chapters together. Enos proposes a four-point plan that she claims will "advance an agenda that educates students deeply and broadly for active citizenship" (p. 65). She proceeds to argue that this involves finding methods of developing structures that fit and the

organisational culture of the establishment that promotes this engagement.

Enos concludes by discussing opportunities for further research. The research ambitious in scope which, she concedes is unable to answer the multiple questions of policy and practice raised in the book. However, this does not detract from the quality and the importance of the work and is a valuable resource for practitioners, students and policy makers.

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Elizabeth Boling, Richard A. Schwier, Colin M. Gray, Kennon M. Smith and Katy Campbell (Eds.) (2016) *Studio Teaching in Higher Education*, Abingdon: Routledge (978-1-138-90243-5 [Pbk], 300pp)

It is widely acknowledged that best practice in higher education fosters student inquiry, independent learning, collaborative working, active engagement, interaction – both student-to-teacher and student-to-student, and self-direction (Biggs, 2003; Chickering and Gamson, 1987; Prosser and Trigwell, 2001; Ramsden, 2003). *Studio Teaching in Higher Education* demonstrates how these pedagogic qualities can all be synonymous with learning in a studio environment.

The main body of this book comprises 15 chapters, each one a different example of studio teaching which has been written by a teacher involved in running it. My use of the term 'running' as opposed to 'delivering' is deliberate, this being one of the fundamental differences between studio and non-studio teaching methods.

These 15 'design cases' have a bookend at the start by the editors, outlining how they were curated – a key term describing their approach to structuring the book; each chapter has similarities and differences with those before and after it. These 'Curators Notes' also describe some of the core themes of studio teaching common across the examples. The latter three chapters form a second bookend, discussing the studio from an academic and theoretical perspective; Chapter Eighteen provides an overview of the history and features of the design studio, Chapter Nineteen is an informative critique discussing some potential pitfalls and shortcomings of studio pedagogy; and Chapter Twenty is a view on appropriating studio practices into non-

traditional design disciplines, such as Engineering and Computer Science.

The design cases need not be read in sequence, and the reader can dip in and out of these at will. An informative way to approach the book, particularly if unfamiliar with studio teaching, would be to read the first two chapters, followed by the final three – to facilitate a theoretical understanding of the approach – and then to move freely across those in between.

Although the 15 precedents constitute the book's cornerstone, the editors stress that they do not provide conclusive principles or explicit advice that can be directly applied to other situations – such as might be the outcome of traditional case studies. For instance, where authors identify challenges with their approach, they are not always able to offer solutions. Collectively, however, these chapters provide an experiential meander through a range of studio teaching environments, revealing insights into different structures and methods, and – crucially – reflective experiences of teachers who have adopted this approach. Written in the first-person, they are engaging peeks into the day-to-day dynamics and processes of the studio.

Many of these insights will be familiar to experienced studio teachers, even though the subject field might be very different. In some instances, they provide reassuring encounters with challenges that a reader might think are idiosyncratic to their own studio, such as supporting (whilst not leading) students' development, managing assessment in a subjective discipline and nurturing students' understanding of quality. Notably, they also provide informative ideas for evolving studio teaching, even for those accustomed to it.

Studio teaching is often perceived as space-intensive when compared with transmission forms of teaching, and authors describe having to defend their space from institution administrators. Frequently adopting a Socratic approach, studio teaching centres on questioning and dialogue which, over time, nurtures self-directed critical thinking; typically, this occurs in small group or – more often – one-to-one tutorials. For example, when recounting her experience of an instructional design course in Chapter Seven, Boling highlights that building incrementally on formative feedback is a characteristic which makes studio teaching very distinctive from lecture-based approaches. Consequently, however, it is an approach that is often described as time-intensive. As Schwier notes in Chapter Three, "Not everyone can, or wants to, take on this kind of messy, heavy teaching" (p. 35).

The term 'studio teaching' brings to mind a space – the studio itself; an art studio, or perhaps a media studio. However, Chapters Ten and Eleven explore the notion of studio teaching as a technique, focusing more on means and methods, independent of space. Studio pedagogy is characterised by learning-by-doing, with less focus on content and more on the experience of learning, often in real-world scenarios. Chapters Nine, Thirteen and Fourteen discuss how the studio can exist in whole or in part in a virtual learning space. Whilst highly pertinent to new directions in higher education, this field of inquiry is particularly challenging given the emphasis placed on dialogue-driven critique being so fundamental in traditional studio pedagogy.

Interestingly the majority of the chapters in the book are concerned with instructional design programmes, and therefore will be of particular interest to those teaching programmes in this field. Others are from

more traditional design programmes, such as interior design (Chapter Eight) and theatrical design (Chapter Twelve). As someone who has taught extensively in a design studio, I inevitably approached this book with preconceptions about the challenges and rewards of studio teaching – many of which were reinforced. However, it was something of a revelation to discover that much of what I was familiar with from a traditional design studio also occurs in instructional design courses; this demonstrates how adaptable the approach can be to other programmes.

Schön (1985) argues that many other disciplines could learn a great deal from the design studio, because it is a setting in which to acquire competencies through learning-by-doing, and due to the subtle and complex way students learn from and with one another. The studio is a valuable precedent for student-directed learning environments; one that encourages high levels of engagement, active learning and collective working. This book is relevant to teachers in many subject areas who are seeking alternatives to teacher-centred approaches. Chapter Nine, for example, provides a particularly informative appraisal of the nature of studio teaching and the experience of applying it to an existing programme; it also includes a range of references to literature on applying the studio model when designing programmes of study.

In summary, this book provides a comprehensive insight of different approaches to studio teaching, including the difficulties that can be encountered and the outcomes which it can reward. It would be of interest to both those who already engage with it, and to those considering an interpretation of it.

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