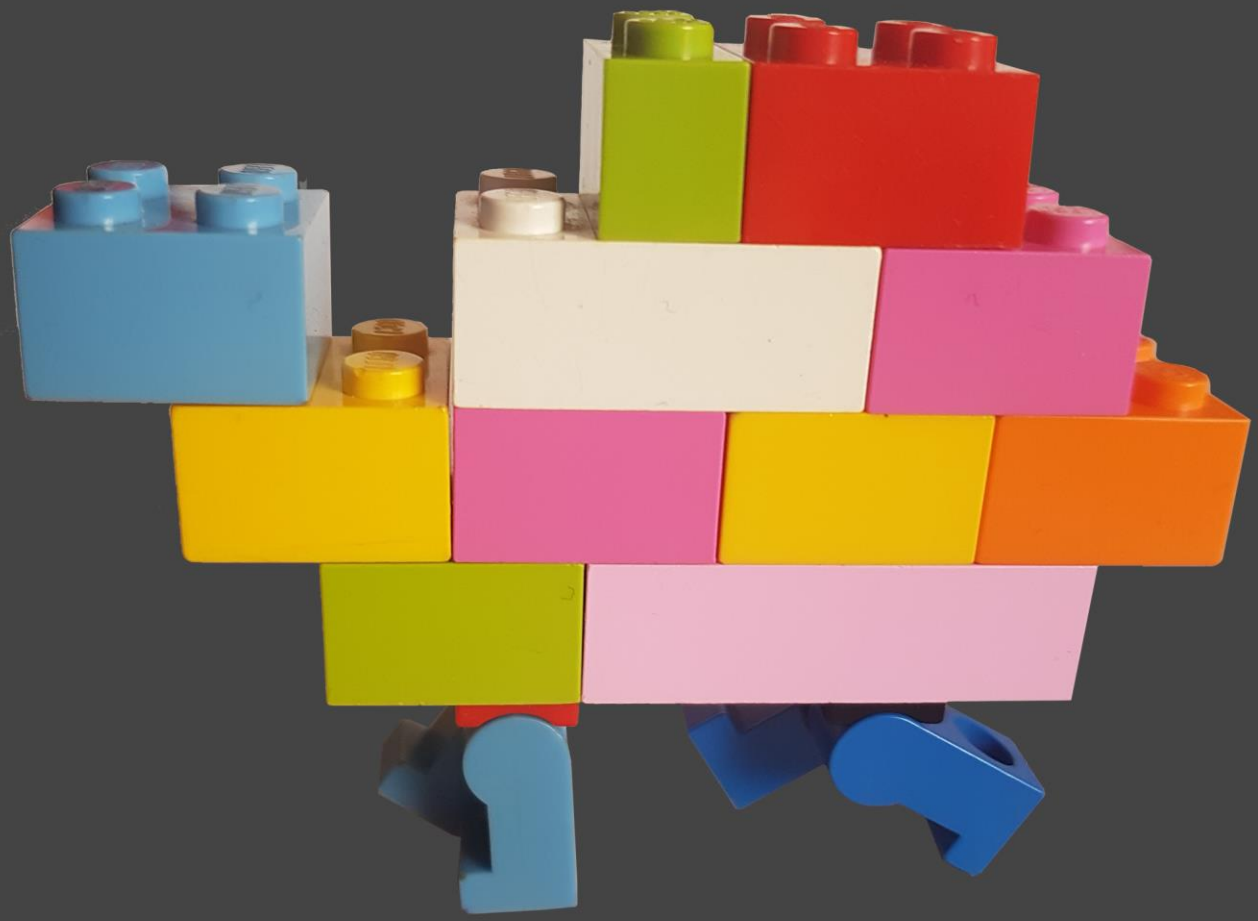
LEGO® for university learning: Online, offline and elsewhere

Chrissi Nerantzi and Alison James



LEGO® for university learning: Online, offline and elsewhere

A few words about this book

This book is the second edition of *LEGO® for university learning: inspiring academic practice in higher education* (Nerantzi and James, 2019). It is an updated practical guide, bringing together the thoughts and experiences of the editors and colleagues from the higher education sector. It focuses on their use of LEGO® bricks, and the LEGO® SERIOUS PLAY® method in all aspects of higher education practice. We are updating it to reflect the continued growth in use of LEGO®-based approaches, particularly during, and after, a time of global pandemic.

The book has been produced as a resource for higher education professionals who would like to start using such approaches in their own contexts, but need some additional ideas, guidance and inspiration. Our first edition explained some of the basic principles underpinning the use of LEGO® in higher education. It supplemented this with resources relating to academic development and preparation for various kinds of fellowship or award. In this revised second edition, we retain some of the introductory aspects, but move to new case studies and different perspectives. Our title 'Online, offline and elsewhere' recognises that in the last two to three years many educators have been trying to find ways to use LEGO® in remote and distance learning situations, rather than face-to-face. 'Elsewhere' suggests that some of our engagement with LEGO® bricks is not simply physical or digital, but internal and cerebral as well.

While the book celebrates the LEGO® SERIOUS PLAY® approach, it makes a clear distinction between this method and other activities and approaches inspired by its principles and practices. LEGO® SERIOUS PLAY® has territory in common with other creative and playful approaches which also use materials, objects, models, metaphor, story and reflection. Suggestions are made as to how such other activities may be intertwined with the use of LEGO® to encourage further experimentation and gain new insights that can create stimulating learning experiences.

Authors

Chrissi Nerantzi and Alison James

Contributors and acknowledgements

We would like to thank all practitioners who contributed a case study or two to this book: Professor Catherine Hayes, Dr Gaynor Wood, Roger Saunders, Harvey Humphrey, Hazel Marzetti, Dr Holly Henderson, Dr Briony Supple, Alan Wheeler, Professor Susannah Quinsee, Dr Caitlin Kight, Sam Pulman, Dr Karen Walshe, Nayiri Keshishi, Dr Sarah Hack, Dr Claire LP Garden, Dr Jackie Brodie, Julia Reeve, Alex Morgan, Florence Dujardin, Rebecca Thomas, Dan Trowsdale, Rebecca Edgerley, Sarah Paddock, Dr Pen Holland, Professor Thorunn Helgason, Dr Alex Moseley, Micael Buckle, Alastair J McGregor, Mark Arnott-Bowl and Dr Liliya Terzieva. Finally, we would like to thank especially Prof. Johan S. Roos for writing the prologue and Prof. Sally Brown for writing the epilogue for this book.

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Cover design
The cover is based on a LEGO® model Chrissi created while thinking about this second edition. It encapsulates where she feels LEGO® SERIOUS PLAY®, and LEGO® more generally, currently are within higher education. The initial slow progress and spread represented by the snail (yes, it is a snail) has been speeded up in more recent years as many practitioners (can you see the legs?) have now embraced the use of LEGO® SERIOUS PLAY®, LEGO® and many other creative methods. In so doing, they have recognised that these can be valuable and transformative for HE learning and teaching.

The cover has been designed by Odysseas Frank, current first year undergraduate student at Norwich University of the Arts studying towards a BA (Hons) Digital Game Art and Design, portfolio at https://www.artstation.com/odydigitalart email: ody.digital.art@gmail.com

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About the authors

Chrissi Nerantzi (@chrissinerantzi) is an Associate Professor in the School of Education at the University of Leeds in the United Kingdom. She is passionate about the use of creative, innovative and open approaches to learning, teaching and research that have the power to stimulate engagement, learning, boost confidence and build community. Chrissi became an accredited facilitator of the LEGO® SERIOUS PLAY® (LSP) method in 2013 and completed the online micro-certification for LEGO® SERIOUS PLAY® facilitator training in Higher Education by Inthrface in 2021. She has experience using LSP in a wide range of HE contexts with educators, students and the wider public. She has carried out related research into its use and varied applications gaining new insights into how the method is experienced and the impact it has on engagement and learning. Chrissi has shared her work widely through open access publications; including the first iteration of this book, and a special issue on the use of LEGO® in Higher Education, both with Alison James.

Chrissi has developed a range of workshops and short courses based on the principles of LEGO® SERIOUS PLAY®. She is often invited to support colleagues and facilitate tailor-made workshops and courses with staff and students using this method. Her research interests are in the area of creativity, innovation and open education. Chrissi is a National Teaching Fellow, a Principal Fellow of the Higher Education Academy and a Fellow of the Staff and Educational Development Association. She was awarded the Learning Technologist of the Year 2017 by the Association for Learning Technology. In 2018 she received the Award for Best Open Research Practice by the Global OER Graduate Network (GO-GN). In 2020 she became a GO-GN Fellow, in 2021 she received the OEGlobal Open Innovation Award, and in 2022 she and the #creativeHE team were recognised with a Collaborative Award for Teaching Excellence by Advance HE. During the pandemic Chrissi continued using LEGO® SERIOUS PLAY® in her practice remotely. Online learning does not need to be flat and exclusively digital. Combining different media and approaches was key during the pandemic to bring learning alive, make it enjoyable, deep and bring people together. Chrissi's website.

Alison James (@alisonrjames) is Professor Emerita of the University of Winchester, a National Teaching Fellow and Principal Fellow of the Higher Education Academy in the UK. Her longstanding interests in higher education are the use and development of creative and alternative approaches to tertiary learning. In particular she has explored these in relation to curriculum design, critical and self-reflection and in multidisciplinary contexts.

She is co-author, with Stephen D. Brookfield, of *Engaging Imagination: helping students become creative and reflective thinkers*, published by Jossey Bass in 2014. Alison is the author of numerous other publications on imaginative, creative and playful pedagogy, and is an experienced workshop facilitator and speaker. She trained in the LEGO® SERIOUS PLAY® method in 2013 and has used it extensively ever since. In 2015 she was commissioned by the Higher Education Academy to produce a report on her work using LEGO®. Although the context for this report was art and design, as the creators of LEGO® SERIOUS PLAY® themselves make clear, the method crosses all disciplinary boundaries.

In addition to this work, Alison and Micael Buckle, CEO Inthrface, have co-designed and launched an online bespoke facilitator training programme for LEGO® SERIOUS PLAY® in HE. It is the only facilitator training programme to be endorsed by its co-founder, Professor Johan Roos.

Since December 2019, Alison has been a free-range academic, working in diverse capacities, including consultancy, teaching, advising and coaching. In particular, from 2019 to 2022, Alison conducted a research study, supported by the Imagination Lab Foundation looking at the use and value of play in HE. This attracted participants from over 20 countries and collected over 270 examples of play in Higher Education (HE). The book of this study is freely available from Alison's website via this link: https://engagingimagination.com/the-value-of-play-in-he-a-study-free-book/

Further information about Alison can be found on her website https://engagingimagination.com

Alison meets Chrissi

Alison's and Chrissi's professional paths joined when they first met in Bristol at the annual Staff and Educational Development Association conference in 2013. Their love for playfulness in learning and teaching connected them.

Since meeting, Alison and Chrissi have been working together on a range of projects. One of them is the double issue of *Creative Academic Magazine*: Exploring play in HE (2015), the link to which you can find in the reference section.

Together they also co-edited a special issue in the field of management and applied research with a focus on LEGO® in higher education (link provided shortly under LSP Resources). Alison and Chrissi also co-edited and co-authored the international collection *The power of play in HE: creativity in tertiary learning* (2019). As of January 2022, this book had been downloaded over 36,000 times and includes several pieces on the use of LEGO®.

For some time now, both Alison and Chrissi have been offering introductory and more advanced workshops and courses to educators new to LEGO® SERIOUS PLAY® (LSP). We advise academic practitioners who are keen to use LSP to also participate in specialist development workshops or courses to learn the fundamentals of the method.

About this book

Its general premise

While the use of LEGO® in some form is relatively commonplace now in higher education, there is still an appetite for guidance on how to use it. We hope that this revised book will help new and experienced practitioners and researchers in tertiary learning do this in face-to-face, online and blended settings. The second and third of these settings have become particularly important in a time of remote learning. The book is being revised with this in mind, and also to reflect the growth and variety in LEGO®-based applications since 2019 across disciplines, professional areas and geographical locations.

In particular, it considers the principles and structure of LEGO® SERIOUS PLAY® and how using this creative method, and others inspired by it, can form part of our academic repertoire. As with any pedagogic resource or approach, judicious use of it and a clear sense of its academic purpose should be the main drivers. With specific regard to the LEGO® SERIOUS PLAY® method or related approaches, we advocate taking care to allow enough time and space to reap its benefits, if you want to explore issues in depth. This does not mean that you cannot use LEGO® bricks for quick activities and simpler outcomes; just that such activities are different to LEGO® SERIOUS PLAY® itself.

Differences between the first and second editions

Both editions offer an introduction to ways of using LEGO® SERIOUS PLAY® in HE, particularly for those new to the method, while the case studies are likely to appeal to all readers in terms of sparking ideas. In our first edition we dedicated a lot of space to thinking about how creative approaches involving LEGO® could be valuable ways of thinking about demonstrating knowledge, skills and evidence for a range of different awards, or achieving levels of academic fellowship. In both editions we include numerous case studies to illustrate the breadth and difference of use across the disciplines. However, in our second edition we decided it would be timely to think about how to use LEGO® based approaches when learning remotely, as well as together. Our case studies cater for both those kinds of situations.

So, if you have not come across this book in its original form, it may be that both editions have something of interest for you, and you can use them as joint resources, rather than the second being a replacement for the first.

Notes

As David Gauntlett sets out in the 2010 Open source guide to LEGO® SERIOUS PLAY®, the method and its materials were originally restricted in use to trained facilitators. Since 2010 the LEGO® Group has made the method available under a Creative Commons licence ('Attribution Share Alike': see http://creativecommons.org/licenses/by-sa/3.0/ for licence details).

A welcome was extended to the method's international community of users to develop new applications, some of which could be shared online. It is in this spirit that we and our fellow contributors share this book and is in accordance with the position stated in June 2010 whereby the originators of the LEGO® SERIOUS PLAY® became open to 'creative uses of these tools, and innovation in the community' (Gauntlett, 2010).

The two main principles of use for LEGO® SERIOUS PLAY® are set out in the Open Source booklet and can effectively be summarised as follows. One is that activities closely following the applications and principles of LEGO® SERIOUS PLAY® - as set out facilitator training courses and materials - can be called LEGO® SERIOUS PLAY®. Anything that uses LEGO®, but deviates noticeably from these systematic applications, should not.

One way in which this difference might be seen is in terms of time; to complete all the stages of a LEGO® SERIOUS PLAY® workshop, set out in training manuals and other documents, requires anything from 3-4 hours to 1-2 days to be implemented. Another difference is the stipulation that specific bricks are used for LEGO® SERIOUS PLAY®.

We write as advocates of the method and as academics who respect ownership and copyright. We therefore pass on here awareness of any caution required, and also are careful to comply with such strictures ourselves. However, as creative educators, we also know that some of the principles of LEGO® SERIOUS PLAY® are shared by other methods (metaphor and storytelling, for example and the use of a 'mediating artefact' to explore experience or knowledge). We are also supporters of innovation – believing that even the best approaches can also benefit from imaginative interpretation and modification, based on evidence and related research.

Furthermore, we are realists; the time and resource constraints of HE often means that activities have to be completed within much shorter time periods than we would like. Limited finances also mean that we cannot always provide new, bespoke kits for every activity; we therefore turn to the materials that we have close at hand or can re-use. We endeavour to make clear in this book where we are referring to LEGO® SERIOUS PLAY® in its pure form, where we are discussing LEGO®-related activities which are different to this, and where we are suggesting blurring the lines and combining such approaches with other creative methods and materials. However, with many contributing voices, this may be more obvious at some times than at others. We ask you as reader to bear these distinctions in mind as you navigate the various examples from practice.

Footnote

Within the broad LEGO® SERIOUS PLAY® community, robust warnings circulate as to the care that must be taken when referring to activities using LEGO® as LEGO® SERIOUS PLAY®. (There is also a publication setting out the legal basis protecting the LEGO® trademark which you can find here: https://www.lego.com/r/www/r/seriousplay/-/media/serious%20play/pdf/2017/lego%20serious%20play%20trademark%20guidelines%20version%202017.pdf?l.r2=527136104

LSP resources

Further detailed information about the LEGO® SERIOUS PLAY® method can be found on the following sites and publications:

- Professor Johan Roos and Professor Bart Victor have written an excellent backdrop to how they came to create the LEGO® SERIOUS PLAY® method, and this is the perfect place to start. You can find their article in our special issue of the *International Journal of Management and Applied Research* under: Roos, J. and Victor, B. (2018), "How it all began: the origins of LEGO® SERIOUS PLAY®", In: *International Journal of Management and Applied Research*. *5*(4), pp. 326-343. https://doi.org/10.18646/2056.54.18-025

- The LEGO® SERIOUS PLAY® method has been described in detail in this open source guide by Prof. David Gauntlett: The LEGO® Group (2010). *Open-source/<Introduction to LEGO® SERIOUS PLAY®*, available at http://davidgauntlett.com/wp-content/uploads/2013/04/LEGO_SERIOUS_PLAY_OpenSource_14mb.pdf

  David is perhaps the most prominent user of LEGO® SERIOUS PLAY® in a university context and has been working for many years with the LEGO® Group and others to explore the use of LEGO®. Access his website at http://davidgauntlett.com/portfolio/lego-collaborations/ where you will out more about David's LEGO® related activities, projects and publications.

Other publications in a context broader than HE include

- Blair, S. and Rillo, M. (2016) *SERIOUS WORK. How to facilitate meetings and workshops using the LEGO® SERIOUS PLAY® method,* ProMeet.

- Kristiansen, P. and Rasmussen, R. (2014) *Building a better business using the LEGO® SERIOUS PLAY® method,* Hoboken, NJ: Wiley.

Related work by the authors of this book

Within HE specifically, Chrissi and Alison have also written extensively about, and disseminated, their thinking about the use of LEGO®-related approaches in a wide

range of publications, such as academic papers and articles in magazines and have led workshops in this field nationally and internationally.

- Alison's HEA report in the Innovative Pedagogy Series provides an introduction to the use of LEGO® and LEGO® SERIOUS PLAY® in a specific higher education context https://www.heacademy.ac.uk/knowledge-hub/innovating-creative-arts-lego. (James, 2015).

- Alison wrote about LEGO® and LEGO® SERIOUS PLAY® with Stephen Brookfield in their book *Engaging Imagination: helping students become creative and reflective thinkers.* (2014).

Chrissi was lead in the following outputs:

- The Open Educational Resource LEGO® SERIOUS PLAY® on the University Teaching Academy's (UTA) website of Manchester Metropolitan University when she was working there. This introduces the method and provides access to further resources, scholarship and research.

- Special Issue around the use of LEGO® in Higher Education and this can be accessed at Nerantzi, C. and James, A. (eds.) (2018) Discovering innovative applications of LEGO® in learning and teaching in higher education, Special Issue, In: *International Journal of Management and Applied Research*, *5*(4), http://ijmar.org/v5n4/toc.html. https://doi.org/10.18646/2056.54

- The first edition of this book can be found at Nerantzi, C. and James, A. (2019) *LEGO® for university learning: inspiring academic practice in higher education.* DOI: 10.5281/zenodo.2813448

These outputs and publications together with their other related work are useful for the higher education context together with a growing body of research in this area (see https://b4bricks.org/il-metodo-lego-serious-play/academic-publication/ for a selection).

Examples of other writings on LEGO® SERIOUS PLAY® in HE

- Ajibade, B. and Hayes, C. (2020) Ajibade, Benjamin Olusola (2020) *An investigation of the sociocultural factors impacting on the transition to higher education by Nigerian nursing students in the UK via the use of LEGO® SERIOUS PLAY® methodology.* Doctoral thesis, University of Sunderland. https://sure.sunderland.ac.uk/id/eprint/12554/

- Lopez-Fernandez, D., Gordillo, A., Ortega, F. and Yaghue, A. (2021) LEGO® SERIOUS PLAY® in software education. https://www.researchgate.net/publication/353113372_LEGOR_Serious_Play_in_Software_Engineering_Education

- Nolan, S. (2010) Physical Metaphorical Modelling with LEGO® as a Technology for Collaborative Personalised Learning. In: J. O'Donoghue (ed.) *Technology-supported Environments for Personalised Learning: Methods and Case Studies*. New York: Hersey, Information Science Reference, pp. 364-385

Please note, that there will no doubt be many other resources available that have not been included in this list. Increasingly, LSP practitioners share their work via social and open media and capture their LSP activities and development via blog posts and articles.

Prologue by Professor Johan S. Roos: LSP is about freedom

Mark Twain's memorable character Huckleberry Finn wants to be free of social conventions. Perhaps more than anything Huck wants to think independently, follow the moral intuitions of his heart, that is, to be himself. Huck finds his freedom in nature and by moving around a lot.

It is difficult not to sympathise with Huck, especially if you delight from creative and expressive arts-like methods, like LEGO® SERIOUS PLAY® (LSP). Two decades ago, I too wanted to break free from conventions and imposed norms, in my case, traditional executive education. Inviting managers from serious multinational companies to present their ideas and case solutions as hand-made LEGO® constructions, instead of on flipcharts and slides, noticeably broke quite a few conventions.

On the surface, what I did challenged both the traditional mode assumed in such conversations (work-like; productive; serious) and medium of communication (two-dimensional; paper-based). More profoundly, the new approach encouraged the imagination and integrated cognitive, social and emotional dimensions of people interacting. In other words, in our micro-cosmos and at that time and place, I was enabling these managers to think beyond conventions, to be more themselves, and to see the same in a different way and together create entirely new insights. To some extent, I intentionally set them free. It worked, and the rest is history.

Two decades later I am delighted to see how the LSP method has spread throughout the world. There are many capable facilitators, so many participants of LSP- enabled workshops, and so much valuable experience to learn from. This is why I have initiated a major research project on how LSP help readiness of change and will continue to do research on LSP-related activities in organizations.

Over the last few years, we have experienced a pandemic with lockdowns, online work, the great resignation and frustration, geopolitical shifts, an invasion war in Europe, explosive inflation, and extreme weather. Incidentally, before the pandemic hit, I helped developed a series of LSP products about how to get ready for and deal with change.

Based on a research project with an academic colleague and with one of the best LSP facilitators I have ever met, Micael Buckle of Inthrface in Copenhagen, I helped develop *Real Time Readiness for Change* and *Real Time Crisis*. Grounded in research I did in in 2005-2007, we also developed the more inclusive *Real Time Change* LSP application. Change is everywhere and all the time, but I had not anticipated the relevance and timing of these LSP products. More importantly, even the LSP community needs change and I wanted to create some.

This practical guide may not be "approved, authorised or endorsed by the LEGO® Group," but I am sure the freedom it represents is endorsed and welcomed by many people in the UK and beyond, in higher education and elsewhere. *It is now endorsed by me as the co-inventor of LSP.*

LSP is still breaking conventions in organizations, industries and countries and I hope it continues to help set people a little more free. Just remember: LSP is about freedom.

Johan Roos
Professor and Chief Academic Officer, HULT International Business School and Co-inventor of LEGO® SERIOUS PLAY®
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Overview

This book introduces some ways in which LEGO®-based approaches, such as the LEGO® SERIOUS PLAY® method, can be used for learning in Higher Education (HE); in face-to-face, online and blended settings. It is enriched by practitioners' case studies from different disciplines and higher education institutions in different parts of the world. Their case studies evidence the diversity of ways in which the principles of LEGO® SERIOUS PLAY® can be applied across disciplines, modes and situations to make learning and teaching stimulating and engaging. A section with a range of prompts for learning and teaching activities, that can be applied and adapted further, has been included. Furthermore, we offer suggestions for the ways in which LEGO® can be used in online and distance learning situations. We also consider how we might extend, integrate or repurpose principles which inform the LEGO® SERIOUS PLAY® method.

We are also well aware that the number of trained LSP facilitators in higher education has increased steadily over the last ten years. Perhaps you are one of them, and experienced in its use? If so, we hope you will find in this book additional inspiration from the work of people like you who are using LEGO® and LEGO® SERIOUS PLAY® in a wide range of HE contexts.

If you are new to LEGO® SERIOUS PLAY®, we also recommend that you follow the standard method so as to embed your grasp of its principles and potential effects. It is a highly engaging and all-encompassing, approach which takes attention and energy; not least when you first start to work out where you might adjust or reshape your sessions. You will quickly learn that while you can plan a session meticulously you cannot pre-empt everything that people will say and build and exactly how long it will take. So, keep the activities short and be inventive in how you use the sharing time.

At times, it may be appropriate to work as a whole group, in smaller groups or even in pairs. While you might find that familiar symbols recur in terms of people's metaphorical building (e.g. bridges for connection, travel, development), people will surprise you by their inventiveness in building and in the things that they may say. This method, properly applied, can challenge you and your participants in ways that neither you nor they may anticipate.

As part of your own development with the method, reflecting on facilitation experiences, asking for participants' and colleagues' feedback, will be invaluable. In addition, adopting an evidence-based approach and engaging in related scholarly activities and research, will also help you to develop and refine practice, generate ideas on further study and use of LEGO® SERIOUS PLAY® that can be shared with the wider academic community and further widen and deepen our collective understanding and evidence-base about the method.

Book structure:

- Part 1 Background and method
- Part 2 Facilitating LEGO® SERIOUS PLAY® workshops online
- Part 3 Activity prompts

- Part 4 Case studies
- Part 5 Variations on LEGO® SERIOUS PLAY®
- Part 6 Conclusion and further conversations

PART 1: Background and method

This section provides an introduction to the LEGO® SERIOUS PLAY® method as well as to the potential of some of its applications for learning and teaching in higher education. For much fuller information you can read any of the texts listed in our opening section.

1.1 How LEGO® SERIOUS PLAY® started

If you want the story 'from the horse's mouth' then you must read *How It All Began* from the IJMAR Journal (Roos and Victor, 2018).

What follows here is the story of the method in shorthand. The first use of LEGO® SERIOUS PLAY® was largely in the business world, for strategic planning, team building and identity workshops. LEGO® SERIOUS PLAY® has transformed business meetings and decision-making in the companies who have embraced it (such as Novo Nordisk, Harco Technology, ABSA and VodaCom, and many more). Over the last decade or so, the use of LEGO® SERIOUS PLAY® in education has been steadily increasing, with more and more educators training in the method and using it in their practice (Gauntlett, 2007; Frick et al. 2013; James, 2013; James and Brookfield 2014; Nerantzi and Despard 2014; Nerantzi, C. and McCusker 2014; James 2015; Nerantzi, Moravej and Johnson, 2015; Nerantzi and James, 2018; James and Nerantzi, 2019). The multiple examples shared on social media and the increasing volume of related publications and conference contributions evidence this.

This suggests to us that the use of LEGO® and LEGO® SERIOUS PLAY® is now recognised as a valid alternative way of learning in more playful ways. Many participants in Alison's study of the use and value of play in HE (James, 2022) also suggested that universities are reassured by the longevity and global nature of LEGO® SERIOUS PLAY®, while they might still be cautious of other forms of playful learning.

LEGO® SERIOUS PLAY® was developed out of a dissatisfaction with the outcome of strategic meetings. There was an urgency to find new ways that would activate innovative thinking and creative problem solving, especially when the LEGO® company was facing problems such as strong competition from digital toy makers threatening its existence in the mid 1990s (Frick et al*.,* 2013). The LEGO® group was seeking a way to empower individuals and teams and use their ideas to make the company stronger and thrive in a rapidly changing market. Kjeld Kirk Kristiensen, the CEO of LEGO® at the time, recognised that strategic meetings needed to be transformed into exciting, idea-generating events that empowered participants. LEGO® looked to its own bricks as a tool to enable its people to come up with innovative solutions.

The original team of Kjeld Kirk Kristiensen, together with Johan Roos and Bart Victor from the IMD Business School in Lausanne, had shared values and recognised the urgency and necessity of an alternative approach for strategic decision making. They started development of the LEGO® SERIOUS PLAY® method and were keen to make it available beyond the LEGO® organisation and market it as a product.

Based on the research and development work by Johan Roos and Bart Victor, including many experiments with many executives at the Imagination Lab Foundation, the method was officially launched in 2002 by Executive Discovery, a subsidiary of the LEGO® Company. Robert Rasmussen was brought on board in 2000 by the CEO of Executive Discovery, Bart Victor, to help him improve the product, Imaginopedia and training process for LEGO® SERIOUS PLAY® facilitators.

In 2010, the company decided to make the method open source under a Creative Commons v 3.0 licence, which enabled the spread of use more rapidly across the globe, transforming practices on a much larger scale. Training in the method today is provided by certified facilitators who have completed the original training with the LEGO® Company, and others. The pandemic underscored a need for online facilitator training, while cementing a longer standing interest in LEGO® SERIOUS PLAY® which spoke the language of higher education. As Micael Buckle and Alison describe in their case study, it is now also possible to undertake facilitator training online. It is also worth noting that there is a difference between the extent of use for workshops in an organisation and facilitation training. While there is extensive LEGO® related activity in universities, far fewer are providing any sort of in-house facilitator training, and fewer still are running accredited facilitator programmes. We are proud to note that two contributors to this book are from universities which are exceptions to this rule; it would be great to know if there are others.

Specialist LEGO® SERIOUS PLAY® kits are sold by LEGO® to be used for systematically designed applications which require all participants to have access to certain kinds of bricks. What we will show in this book is that it is possible to use LEGO® SERIOUS PLAY® approaches using non-standard bricks, and that once you have mastered the principles of the method you will find your own imaginative ways to apply these. Remember, less can be more!

1.2 The LEGO® SERIOUS PLAY® process

The full detail of the process is painstakingly set out in materials which are made available through official training programmes. Even if you have dabbled with the method and its principles already, undertaking this training does add significant dimensions to your ability to use it. More and more higher education practitioners are completing certified LEGO® SERIOUS PLAY® training or other LEGO® SERIOUS PLAY® development workshops and courses especially developed for higher education and are keen to use it in their practice. This enables wider engagement and experimentation which further opens up new possibilities for our understanding of the method in a higher education context. Furthermore, scholarship and research activity around the use of LEGO® SERIOUS PLAY® has increased over the last five years or so, building a stronger evidence-base for its effectiveness. This also points to the challenges and opportunities the method brings to learning and development.

What follows here is a condensed version of its principles.

The process is based on the premise that **the solution is in the system and the answers are in the room**. It encourages everybody to participate actively and become part of that solution. Everybody has a voice and shares their thoughts,

reflections, ideas and feelings, to move the collective forward and become the solution to a specific problem or intervention through building LEGO® models.

The models and their metaphorical meanings are owned by their creators; that is to say that there is no hidden truth or pre-set meaning in the bricks. What they stand for is entirely the choice of the builder. Furthermore, the creativity in expression has nothing to do with the representation of an idea from an artistic standpoint. It is not about building something attractive (although many models are) nor is the main aim to create something that is aesthetically pleasing. It is about the expression of something that the builder wants to say. There is no right or wrong way of doing it. Each participant is unique and expresses themselves in unique ways.

The **LEGO® SERIOUS PLAY® workshop can be conducted face-to-face or online**, as we discuss later.

The process is based on a series of challenges set as questions, a visual response to these, and the sharing of stories. Limited time, usually between one and eight minutes, depending on the build, is made available to construct models as a response to individual questions. More complex applications require slightly longer, however the focus is not on a lengthy, pre-prepared build. Immediacy in responding to the task is key to acting on the impulses, intuitions and ideas that first present themselves, rather than over-analysing or editing what is built. Workshops can last from a one hour introductory session to one or two full days. How long will depend on what you want to achieve and the timeframe and resource with which you can operate. Another way of using the method is to include a shorter activity as a complement to other approaches. Building such activities into a course from early on will help participants become more familiar with the method and get a better understanding of what it enables.

The LEGO® SERIOUS PLAY® training materials set out **a four-stage process**, which involves:

1. posing the question
2. building the model
3. sharing the model
4. shared reflection

This is mirrored by LEGO® Education in the stages of the 4C process: Connect, Construct, Contemplate, Continue. In effect, these four Cs are in play with each build; connecting to the question or topic, building in response to it, reflecting on and discussing it with participants and then extending or building further in accordance with more questions or additional thoughts.

The unfolding of the LEGO® SERIOUS PLAY® process

As with all good stories, the LEGO® SERIOUS PLAY® process has a beginning, a middle and an end.

The beginning: As mentioned above, working practices need to be agreed and the process and desired outcomes explained at the start so that everybody is clear.

Then building begins. A progressive approach works best, starting with a warm-up or skills development section. This helps individuals develop their LEGO® building skills and move them slowly from building instruction-led, literal models, to ones with metaphorical features. At the same time, facilitators start the process of sharing and opening-up in a non-threatening and non-judgemental way, while also starting the reflective process. The making of their models increases participants' ownership of that which they represent. As time goes on in a workshop, many quickly find it hard to dismantle their creations, as they start to identify closely with them, sometimes as an extension of themselves.

The middle: The main LEGO® SERIOUS PLAY® process is the following:

1. Posing the question: the facilitator asks a question which is addressed to the whole group. This acts as a trigger and helps participants to focus in on a thought, an idea or a situation. The question needs to be clear and open-ended, so that participants understand what they are asked to do. It should enable participants to feel free to reflect and respond to the question in a way that is meaningful to them and encourages further exploration.

   Socratic questioning techniques provide this opportunity, as explained in this paper. They are based on "The Socratic Method" (Nelson, 1949, vi) that creates the space for open dialogue, debate, reflection, ideas generation and individual and collective problem finding and problem solving (Savin-Baden, 2008). These questions help us explore and analyse complex and/or challenging ideas and concepts, as well as uncover some of our assumptions. Questions may start with "what" and "how", and are open questions that reason, seek clarification, and identify implications, viewpoints and assumptions. "Why" questions tend to be avoided as these can sound judgemental, and the facilitator does not judge.

2. Building the model: Each participant makes a model individually as a response to the facilitator's question. The model and their meanings belong to the makers, and it is not for others to tell the builder what they meant or thought. Building starts while everything is still messy in participants' minds as they rummage through the bricks and thoughts start to arise.

   It is advised that participants avoid "having a meeting with themselves" in the building stage. This will help them not get bogged down in thinking and planning before they build. This is the opposite of the ways architects, planners and engineers work; scoping out meticulous plans and designs before any building begins. The immediacy and intuitiveness of the construction process are important aspects. The models emerge organically, as a metaphorical visualisation of thoughts that have a specific meaning for the makers.

   The addition of small bricks as markers – say, red or green - are often used after the models have been constructed, to highlight a particular strength, challenge, priority or difficulty. This reflecting and selecting action can really help the model maker focus on a key feature and illuminate this as something that is of special significance, and therefore of value for further reflection,

sharing and exploration. This is triggered through an additional question by the facilitator.

Sometimes the facilitator may ask for participants to build a smaller “mini model”, or a few of them at the same time. This may be to provide specific examples of something, or to flesh out ideas. In addition, there are specific LEGO® SERIOUS PLAY® activities that lead to the development of shared models after the initial individual model-building phase. These can help capture the collective response in an inclusive way, as all perspectives will be represented. Furthermore, through using connecting bricks, we can create landscapes of a collection of models that depict the stronger and weaker connections between individual ones. These help us visualise the interrelationships among individual models and their size and position in the ecosystem.

1. Sharing the model: This is a very important part of the LEGO® SERIOUS PLAY® process. The model acts as a hook to reflect and share our story with others and connect with the stories shared by others. It is important to give enough time to listen to all stories and to allow them to be heard.

2. Reflecting on the model. The process of reflection kicks in as soon as building begins, and continues through the building process and sharing of stories. The facilitator and participants might ask open-ended questions to seek clarification linked to specific models or features and aid deeper reflection.

The process is repeated through a series of scaffolding activities, introduced through further questions which the facilitator has prepared, until the desired outcomes have been met. It is recommended that the facilitator is flexible and responsive.

The end: The facilitator invites participants to reflect individually and collectively to summarise and remember the key themes and ideas. These are captured in the model itself but may also be jotted down in a notebook, learning journal or online medium. In some cases, a video might be made to capture a group story or the details contained within a model that might be forgotten, but which will be important for taking ideas forward in a more traditional context, outside the workshop.

1.3 The importance of the skilled facilitator

As with any form of group activity, the facilitator plays a vital role in the use of the process itself and the outcomes. They lay the foundations for the effective implementation of the method, including the creation of a supportive and safe environment that ensures participation by all. The facilitator is tasked with carefully monitoring what happens during a workshop, to sense challenges or tensions and respond quickly and smoothly to maximise engagement and output. In the LEGO® SERIOUS PLAY® method, facilitators do not participate in the building process; they assume a position outside the participant group. Effective facilitators bring the best out of the participants and empower them to share their thoughts and ideas and become part of the solution, part of learning and learning itself.

LEGO® SERIOUS PLAY® is highly active and includes every participant. However, every participant has to be prepared to be present, engaged and make the commitment to being open to what the method may bring. Using the LEGO® SERIOUS PLAY® techniques means opening up, being honest with self and others, having a voice, discussing and listening respectfully. This openness means being prepared to reflect critically, think, re-think and un-think – perhaps revising long held views or established positions.

Such an openness can lead to personal and collective learning, development and growth. However, it can also be seen as a highly sensitive process that participants might fear will expose them or make them feel vulnerable. It often leads them to explore their values, thoughts and ideas as well as their feelings. Not everyone in the workshop will want to do this. In our experience, participants can feel a little wary at the outset or downright resistant to the notion of building with a children's toy. It is therefore vital that the facilitator is alert to the feelings and dispositions in the face-to-face room and online.

Sometimes, this might involve enabling participants to settle quickly through activities or start to understand some of the learning philosophy at work and tackle their chosen topic. As they do so, most people start to appreciate how building metaphorical representations of issues important to them can be a creative and valuable act. Participants may also need to feel that they are in a safe environment where sharing is enabled through mutual respect and acceptance of differences and individuality.

Whatever the needs of the group, the facilitator's skills are essential. This might involve negotiating and agreeing working practices and goals for the workshop. It might also be about clarifying that no one will be coerced to build or express anything that they do not wish to share, or which will make them feel discomfited. Allowing for this, however, is not about shying away from the exploration of complex issues important to the group, about which its members may feel strongly. It is inevitable - and acceptable – that there may be very different views about a topic. Building models which are the focus for the discussion, rather than the person, means that perspectives can be gathered around all kinds of issues but at one 'remove'. The conversation is about ideas expressed in the model, not about the person.

1.3 The power of storytelling through metaphorical symbols

From Tralee to Timbuktu, storytelling is an instinctive and shared human practice. It is natural for people to share experiences via stories, making them more memorable. This happens through the LEGO® SERIOUS PLAY® process too; individuals quickly move from describing their models in a mechanistic way to telling stories, as this is the way we communicate and engage the attention of our audience. Moon (2010) notes that stories are powerful for the storyteller and the listeners and are important vehicles for reflection, sharing of messages, creating opportunities for conversation and learning as well as enabling us to connect emotionally with the stories and their creators.

The models enable us to reflect through the use of personal metaphors, sometimes using familiar entities in new contexts. For example, models that include ladders, doors, walls and windows are often used to illustrate specific milestones in somebody's learning journey; opportunities, breakthroughs, barriers and options. These help us knit together and share our metaphors with others by telling a story. The metaphors play a vital role in constructing meaning in a more creative way (Schön, 1983). They also enable us to gain a deeper insight into our own thinking and as such they are a valuable tool for reflection. According to Geary (2011: 211), "metaphorical language can describe the indescribable." We find it easier to express complex ideas and emotions; for example, using metaphors as 3D representations beyond words.

Through these, we can also challenge our own beliefs and make new discoveries. The metaphors, as the models we create, belong to the maker. Both the models and the metaphors they represent transfer internal meaning to an external object, which might make it easier to talk about messy situations and thought-provoking ideas. Teasing out meaning from the model through non-threatening questioning techniques used by the facilitators and group members can help an individual make sense of their model and further the group's understanding of a specific situation, topic or experience.

New language leads to new thinking, and, as such, the learner is less likely to reproduce learned or expected responses. Instead, their responses are more visceral. The LEGO® SERIOUS PLAY® method allows these individual models to be combined or integrated into a new shared model which represents the shared understanding of the group. It is through this process that deep conceptions and misconceptions can be brought to the table and - through exposition, conflict and resolution; familiar concepts to storytellers - new knowledge and understanding are co-constructed within that community.

1.4 LEGO® SERIOUS PLAY® and playful learning in higher education

The playful university

Interest in playful learning in all its forms has spread across higher education. While educators still encounter misapprehensions about playful learning at university, the use of play is increasing. Through our own experiences, we have become aware that since (and often due to) the COVID-19 pandemic, many educators have become more adventurous and experimental in their teaching and have been resourceful in bringing hands-on learning into online settings. There has been a similar increase in the use of active and participatory pedagogies, game-based learning and social media technologies, as well as open educational practices.

A few books which were born while the pandemic was raging, or which are appearing shortly, include *The Professors at Play Playbook* (eds Forbes and Thomas, 2022), *Play in Adulthood* (Whitton, 2022), and *Ludic Pedagogy* (eds Lauricella and Edmunds, forthcoming). An example of books which address a range of topics in specific contexts, and which have strong themes of play and learning running through them, is Trew's (2022) *The Icarus Solution: The Lure and Logic of*

Airmindness. Separately and together, these are helping to spread the bug for playful learning, teaching and research, and expand the evidence-base regarding its value and impact in HE (Nerantzi and James, 2015a; Nerantzi and James, 2015b; James and Nerantzi, 2018; Whitton, 2018; James and Nerantzi, 2019, James, 2022).

Most recently, Alison has provided an overview of current resources on, and evidence of, playful learning in *The Value of Play in HE: A Study* (2022). In addition to collecting a great many examples of play across the disciplines, she surveyed literature on play in general and play in HE in particular, provided an update on playful networks and invited study participants to name the writers and theorists that influenced their play. All of these together make a strong case for the presence, value and growth of playful and play-based learning at university. The full account of her findings is freely available at https://engagingimagination.com.

The pedagogic premise of LEGO® SERIOUS PLAY®

Multiple theories form a foundation for LSP which fits with tertiary learning and with both independent and collaborative enquiry. The process starts with an individual building activity, which then leads on to a group activity. Individual models are then shared with others, discussed and perhaps added to, or configured, and grouped with, those of fellow participants. Gauntlett (2011, 4) states that making a model helps individuals to focus and identify creative connections beyond the obvious and notes that "thinking and making are aspects of the same process". Papert developed the idea of "learning through making" within his constructionist theory which claims that knowledge is constructed through mental or real models (Papert and Harel, 1991). Frick et al. (2013, 8) note that constructionism is "about making formal and abstract ideas more concrete and tangible, therefore easier to understand." Learning is not a process which occurs in isolation. The constructivist view is that learning is achieved through experiences, and the integration of new knowledge with existing knowledge. The co-constructivist view extends this to allow that learning is achieved through the sharing of meanings, conceptions and understandings, within learning communities. In this domain, LEGO® SERIOUS PLAY® has a great deal to contribute.

Furthermore, a characteristic of LEGO® SERIOUS PLAY® is learning through play and the personal and collective expression through visualisation of LEGO® models via thinking with our own hands. These models represent external images in 3D of our internal reality, thoughts and ideas (James, 2013). Brown (2010, 101) states that "play is like fertilizer for brain growth. It's crazy not to use it." While this is widely recognised especially for children, play is still often dismissed as a valuable learning and development strategy for adults. This is something that we, and numerous colleagues, explore in *The power of play in HE: creativity in tertiary learning (*2019*).* There are indications, however, that the landscape is changing and that more and more educators consider and apply playful learning approaches with students and other educators, as mentioned earlier.

When the potential benefits and personal and collective gains of the process are made clear to adults (who tend to be goal-orientated, according to Brown, 2010), they start to take greater risks and experiment with new approaches which may have been alien to them initially. Some might experience what Csikszentmihalyi (1996)

calls “being in flow”; an ideal state of intrinsic motivation, which can transform LEGO® SERIOUS PLAY® sessions into immersive, enjoyable and highly effective learning and development experiences. LEGO® SERIOUS PLAY® is a playful method that has the power to help participants feel more relaxed, although some may be wary or resistant to start with. Positivity towards LEGO® SERIOUS PLAY® can be achieved via the creation of a safe environment, a learning community, that will enable participants to loosen up, immerse themselves in the process, take risks and engage in less common and more playful activities.

PART 2: Facilitating LEGO® SERIOUS PLAY® workshops online

While LEGO® SERIOUS PLAY® workshops are traditionally organised in face-to-face settings, it is also possible to offer them remotely using webinar technologies. We have seen this happening during the COVID-19 pandemic where there often was no other option.

Here we offer some suggestions based on our experience of hosting workshops with LEGO® SERIOUS PLAY® online during the pandemic and since.

2.1 Advance logistics

Think through your plans in the round. What situations might your participants be in? What assumptions are you making about what they will have to hand, what they might need, where they might be? Are there any things you really need them to have attended to in advance; such as use of camera (on or off), bandwidth and connectivity issues, being in a physical space where they can talk or make noise, whether or not they can 'green screen' their surroundings if needed, for their own privacy and comfort. Do you need them to be familiar with a digital resource to accompany your workshop? How digitally confident are they with familiar tools, like Zoom, or Teams, or other platforms?

What physical equipment do they need? When organising such workshops online, make sure that all participants have access to LEGO® bricks. Ask yourself whether you are in a position to send out LEGO® or other materials in advance of the session. Can you have/do you need any support with this? If you can't, how might your participants get their hands on appropriate resources? Solutions we are aware of are using your own LEGO® supply, crowdsourcing LEGO®, asking friends and neighbours to borrow theirs, checking if you can find some second-hand, raiding the children's toy boxes, having a central departmental supply that can be shared. Your institution could also consider purchasing a larger amount of LEGO® bricks and make sets available for educators and students to lend as part of a resource bank.

Collection, return, cleanliness:
Assuming that a supply can be identified, there may be other considerations. If participants are borrowing LEGO®, how will they return it? Is there an expectation, if there are ongoing concerns over contagion, or even just basic cleanliness, that the bricks will be washed before return? If not, is brick-washing something you want or need to cater for?

Fair access and participation: Further points to reflect on may include equity of experience. What do you know of participants needs with regard to participating? Or in terms of how they might react to having different kinds of LEGO®? How can you mitigate any negative effects of this or turn into a matter of collective curiosity and celebration? What are the implications for any activities you want to design?

2.2 Online participation

General points: When facilitating online, it is important that all participants have access to a webcam and are willing to be visible during the workshop. They may

also want to give some thought to where they might be broadcasting from, and to the use of greenscreens, or other resources, to give them some privacy/hide their backgrounds. You can also think about inviting students to add a background using one of their LEGO® models, if this is possible.

Seeing participants as tiles in small windows is not the same as seeing and being with the whole person in a face-to-face session. However, a skilful facilitator will manage to bring people in and create a lively atmosphere that encourages participation. There may be times when cameras can be switched off, however. This might be during the building process, if desired, to allow participants to focus on the task. When completed, the group can come together again, in breakout rooms or in a single digital space depending on the size of the group and what you are hoping to achieve.

Group size: If you want to explore issues in detail think carefully about your group numbers. With LEGO® SERIOUS PLAY® you want to observe the key tenets that "everybody builds, everybody shares and everybody speaks". In a large, face-to-face group, having too many people can result in a loss of attention or momentum if it takes too long for everyone to speak. If it is just a question of going round a group and inviting a one word comment of some description that may not be a problem. Better therefore to either limit your overall group size, or keep plenary activities carefully managed and divide groups into smaller ones that can work together in breakout rooms. You can then reunite together and hear from each of the groups individually and conjoin your ideas in a single shared resource such as a GoogleDrive, PowerPoint, Padlet or a shared whiteboard.

Breakout rooms: If you have a lengthy session planned, breakout rooms can be a good way of keeping up energy and allowing for deeper conversations and shared working. Breaks are also important. Invite participants to take short breaks to get some fresh air, move around and go away from the screen to re-energise.

Sharing of models: How will participants share their models? Is holding them up to the camera sufficient or possible? Do you need them to photograph them and upload the image to a shared resource? What are the time and capability implications of this for the group? Sharing can also happen via a photograph of the model in a collaborative digital space, if the workshop is conducted online. A Padlet or any other interactive whiteboard can work well. And a video link during the workshop will enable participants to see and discuss the models in real time.

Creating a shared landscape: What kind of visual landscape do you want to create? What do you want participants to do within that landscape? Walk through your ideas beforehand and plan carefully how it will work, with timing and capability issues to the fore.

Making connections and reflecting: An online collaborative space provides an additional opportunity for capturing the models and reflection that is shared in writing also. Models can also be shared in discussion spaces, digital portfolios and used there as part of a reflective narrative linked to their learning, research or an assessment. Furthermore, they can be encouraged to add a digital layer to their

model using a drawing programme or app they have on their device, if this would add something to the task.

What about recordings? Mmm, this is a tricky one. If the recording is used for the group itself and is not shared more widely, then this may be of value to trigger further reflection. However, conversations in these workshops are confidential and as they are often reveal sensitive ideas, thoughts and issues, it is important to carefully think about making a recording available, or not. From our experience we have seen that individuals participate more openly and freely if the session is not recorded. Something to think about.

2.3 Gremlins: things to look out for that might throw your workshop off piste

Disconnection or lack of engagement: Some participants may be new to this type of working. It may be the first time they are using LEGO® bricks. Factor this in. Be patient. While you may want to jump straight away into a LEGO® activity and immerse participants in the process, it may be useful to provide some information in advance about the theoretical and pedagogical underpinning. You can do this in the form of providing readings in advance, a short video clip and perhaps explain this at the beginning of the workshop. We know that this takes the magic or surprise away from discovery learning. However, it may be useful to do to boost engagement, confidence and connection - especially for those who may be a bit sceptical.

Lack of online etiquette: Agree with participants how you are going to work together during the workshop. Come up with an online etiquette that is inclusive and respects diverse perspectives and views of participants. Make clear that what is discussed and shared in the workshop stays within the workshop. Confidentiality is definitely something that needs to be mentioned, as often participants share very personal and sensitive information via the models they create and the related stories they share.

Energy drop: This can happen and does happen. Repetitive activities can trigger this, but also tiredness and perceived disinterest. Try and keep things varied in your workshop. Add choice so that participants can make decisions themselves and get the maximum out of it. Improvise when things don’t go according to plan and adjust. Shorter activities, working in pairs and small groups will also help, as will time away from the screen. And from the LEGO® bricks too. Keep it simple and scaffold the tasks so that participants can fully participate. See our next item - Zoom fatigue.

Zoom fatigue: Being online can be exhausting for all of us. Remember to take a break, invite participants to switch cameras off during the building process (some individuals actually told us that this helps them to focus more), invite participants to go outside for a few minutes. A flexible and responsive workshop structure that takes into consideration those participating will be important. Check the temperature of participation throughout the workshop and be responsive and proactive. Make changes to your plan when needed to recharge and re-energise.

Less might be more

Finally, we suggest that there is also a happy balance to be achieved in terms of the frequency of use of LEGO® based activities. As with anything, used too often, or in

too shallow a way, may mean that participants become jaded with it. The reverse argument is that, when used sufficiently frequently, staff and students have the opportunity to build on their skills in using it – just as they would when developing other capabilities. Good judgement is vital and variety is key!

2.4 What about LSP kits?

As already stated, LEGO® SERIOUS PLAY® activities often depend on all participants to have access to certain kits or types of bricks for particular applications. These are great if you can get them. We have found through our own practice, and no doubt because of the financial constraints experienced in higher education, that this is a luxury that we cannot always afford. As a result, many educators using LEGO® have put together their own collection of bricks and re-use them regularly. These also work well, as their use is predicated on the fact that that it is not about the bricks, but about the conversations they enable.

There is no need to put extensive and expensive kits together. A basic collection of bricks will work, with research suggesting that creating with fewer bricks actually can make our imaginations work harder. Professor David Gauntlett is one who has been exploring the potential for working with a much smaller number of bricks; this can be seen as an opportunity to be more resourceful and see what kinds of ideas can be expressed according to the motto "less is more", rather than seeing a limited number of bricks as a barrier to richer expression. If we want individuals to make more novel and surprising connections, giving them a) a limited number of bricks and b) a limited type of bricks, preferable simple ones and no ready-made object bricks, can stimulate their creative imagination more and also surface their resourcefulness in more unique ways. Try it!

There are also differing views concerning the pros and cons of abstract (no recognisable representation other than colour or shape) and literal (recognisable – dog, cat, hat, chair etc) bricks. Some research suggests that ready-made bricks which can be used for bridges, windows etc. also direct and limit imaginative expression and metaphors to emerge that go beyond making the obvious connections (Nerantzi, 2018). Opposing views are that they provide scaffolding for associations and a launch pad for ideas. Plus they do not have to be interpreted literally, if the participant does not want to use them in that way.

PART 3: Activity prompts

This part consists of suggestions for a wide range of activities inspired by LEGO® SERIOUS PLAY® that can be used and adapted for different HE settings. We call them prompts because they do not give you a complete set of instructions to create a LEGO®-based workshop, but rather some questions and builds you might integrate into something of your own design. The aim of these prompts, together with the materials already referenced, processes outlined, and examples provided, is to help individuals, practitioners, researchers and learners start designing LEGO®-based activities for their own contexts and needs.

The activity prompts are organised into the following sections:

- warm-ups
- learning and teaching
- coaching and mentoring
- research and scholarship

Here is a brief reminder of the stages of the LEGO® SERIOUS PLAY® Process described earlier:

1. Step 1: Posing the question
2. Step 2: Building the model
3. Step 3: Sharing the model
4. Step 4: Shared reflection

As we said earlier, it is recommended that, in designing workshops, you follow the method closely, so that all four stages are included.

As with any learning activity, the important part is thinking about why you are using LEGO®. What is your main purpose? What kinds of instructions do you want to provide (or not)? Who are using this activity with? What kind of preparation or facilitation do you need to be mindful of? What are the needs and interests of participants? Where might conversations lead, and how will you handle this, even if you can't predict them exactly?

An illustration of what a four step activity might look like is included in this box:

Topic: Identity

Step 1: Posing the question: Who are you as a professional? *(You can flesh this out in any way you like)*

Step 2: Building the model: Make a model that shows who you are as a professional. *(Remind builders that they will be speaking through their model, therefore it needs to be able to represent all the different things they might want to say)*

Step 3: Sharing the model: Allow all members of the group/ a partner to talk the others through their model. *(Remind those speaking and listening that the story MUST relate to the model they have built; not be something separate from it).*

Step 4: Shared reflection: Ask for clarification/further information by asking questions about the model and/or different parts of it. *(Encourage those listening to show they have paid attention through asking questions or commenting, but not interpreting)*

After this step there might be a moment where all participants reflect on what has emerged thus far, but this should be invited as a matter of discretion by the facilitator, and avoid comments which suggest that some models are more interesting/better than others.

Use the four stage format when designing your activities using the prompts included in this part of the book. This simple example is also an illustration of a key point in using LEGO®. We mentioned it earlier but it's worth repeating. This is that the main aim is not to make something aesthetically pleasing (although it may well be), but rather to create a model which embodies and sparks ideas and discussion.

3.1 LEGO® SERIOUS PLAY® warm-up prompts

It is important to remember to start with a brief warm-up activity, especially if it is the first time LEGO® SERIOUS PLAY®, or an activity inspired by it, is being used with a specific group. This will help participants practise putting LEGO® bricks together and become more confident in the technical side of using them, as well as transitioning from building something that is obviously recognisable to constructing models that have a metaphorical meaning.

The warm-up activities are normally done individually within a group and focus on building, while also introducing the sharing of the models created. The various publications and training materials on LEGO® SERIOUS PLAY®, as well as our own, make explicit how participants should be working (On their own? In a group?). They also give guidance on how to help participants become comfortable with developing their own metaphorical language. Some will dive straight in and be instantly articulate, others might struggle to move away from the literal. In such cases, using animals or recognisable bricks and working as a group can help generate associations and possibilities.

With participants who are familiar with the LEGO® SERIOUS PLAY® approach, you might also like to engage them in coming up with their own warm-up activities; a deviation from the method but one that fits with a student-centred and co-design approach to workshop facilitation.

Sample warm-up prompts
Set 1 (for new group)

Make a tower with a window. (Helpful to see how participants interpret 'window' and to demonstrate how the simplest of tasks results in diverse creations)

Make an animal (using six bricks).

Add something to this animal that shows that this is your animal i.e. personal to you.

You can also create your own variations on the animal exercise for groups comfortable with metaphor and storytelling. Alison sometimes invites participants to pick an animal out of a selection of Duplo/LEGO® creatures and asks them to introduce this animal as a latecomer to the session. Participants mobilise in their heads everything that they associate with the animal (abstract, factual or other) and use it to fashion an off-the-cuff introduction. For example, a whale might suggest to someone that 'their latecomer' is a bit of a loner, stately and slow in their behaviour, endangered, great musically, or something else entirely.

Note – three participants each with a whale may give them opposing characteristics. This does not matter. Whatever the builder decides the bricks mean, is what they mean, irrespective of what anyone else has used or created.

Set 2 (for new and more experienced groups)

Make a wall.

Make a bridge.

Add something to this wall that says something about you.

The bridge activity, from original LEGO® SERIOUS PLAY® workshops can be a great collaborative build, with the odd technical challenge thrown in – such as inviting the group to work together in making one with arches that you can slide a hand through without the touching the sides. This can be a really illuminating activity – not least if you invite a debrief afterwards about how they built as a team, or how well they responded to the brief.

Set 3 (for a more experienced group)

Make a vehicle.

Add something that shows that this is your vehicle.

Set 4 (for a more experienced group)

Make a plant.

Add something that shows that this is your plant.

3.2 Activity prompts for learning and teaching

This section offers prompts for creating activities inspired by LEGO® SERIOUS PLAY® principles and applications. These can be used in specific learning and teaching contexts across a wide range of programmes and modules, disciplines and professional areas. Some may be about how you feel about progress or how you

have worked together; others, like unpacking big topics, may be something you want to explore as you and your students embark on a new and complex exploration. This might be about a threshold concept in your discipline – semiotics in English Language, ergonomics in Engineering, the principles of human-centred design, the application of the UN Sustainable Goals and their implications for study, society, life. And so on. They will all be a means of enabling everyone in the room to contribute from their perspective, to find common ground and areas of dissonance and surprise. All of this helps round out participants' experience and understanding.

The prompts are gathered into the following areas

- Identity, relationships, belonging
- Reflection and evaluation
- Team building
- Ideas generation for projects
- Problem-finding and problem-solving
- Understanding a process, a theory
- Unpacking big topics

These are just an illustration; there is potentially no end to the categories. And we are sure you will have further ideas when you start using LSP in your practice. One idea will generate many others, you will see.

By this point we are expecting that our guidance thus far and that gleaned from wider publications/experiences will be sufficient for you to think about how you might use such prompts in your own contexts. They are partial activities – not a whole lesson plan, however – so you will need to adjust/expand on/explain them as you see fit. The kinds of questions that you will want to pose will be for you as facilitator to identify and use. Similarly, the resulting builds and the things your participants might want to say, are impossible to predict entirely – even if some themes or metaphors are recurrent ones. If you are already experienced in using LEGO®-related approaches or the LEGO® SERIOUS PLAY® method you will no doubt be able to dive in. You probably have a whole heap of your own ideas to suggest!

So, as you scroll through the different prompts which follow, don't forget to think about all the things we mentioned already about preparing for your session.

Let's take the first two questions in the Identity prompt set in the following list as examples. How might you integrate asking such questions and building into response to them into a workshop or class, or even a one-to-one session, such as a tutorial or coaching meeting. (Each of these has their own specific needs, so obviously you will tailor their use accordingly)

You might use questions of identity with students coming into HE, who are feeling nervous about their place at a university. What is your purpose in asking them to create a model of who they are as a learner? To settle them down and create spaces for conversation? To enable them to identify and visualise their strengths and what they bring to the table? What their expectations and goals might be? Are there any sensitivities you might want to consider?

Or, in a coaching situation, you might invite your coachee (more on coaching anon!) to consider who they are, and where they are currently as a professional. If you are engaged in a coaching relationship with someone they have presumably come to you with a desire to reframe or find their direction, deal with an issue, become 'unstuck' professionally in some way. First of all, they often need to explore where they are right now, by building and visualising who they are, and the context in which they work, and the opportunities/challenges on their horizons. Through this, they start to realise that what they thought they wanted to tackle and what they actually need to tackle might be very different things.

Identity, relationships, belonging

Sample questions
1. Make a model that shows who you are as a learner/professional. 2. Make a model that shows who you would like to become as a learner/professional and how you could get there.

Other suggestions

Make a model that shows your key strengths and how you use these.
Add a red brick to your model that represents the strength you use the least. Why is this?
What could you do about it?

Make a model to show what your expectations are from your course/this term/this module.
Use a green brick to identify and mark on your model an aspect or point which matters most for you.
Make a shared model that captures the collective expectations of your group.

Note: the following can be used for a group who know each other already, at least a little bit

Make a model of the individual named on the post-it note capturing how you see them.
Share your model without saying who the model represents.
Find out who is who.
Make a model that shows who you are and how this links to the model created by your peer about you.

Reflection and evaluation
(share at least with one person)
Make a model to reflect on your recent placement/group work/learning experience/other.
Make three mini models, just with a few bricks, to illustrate what you have learnt.

Make a model that shows the challenges you faced in your last assessment/module.

Add a red brick to highlight your biggest challenge. What are you going to do about it?
Make a model for one of your peers that would help them resolve their biggest challenge.

Make a model to reflect on the recent field trip/life exhibition.
Create a shared model that shows your collective experience.
What are you taking away from this?

In pairs, each make a model to reflect on your group member's contribution to the project.
Make a mini model that shows how you feel what your peer has shared about you. (Share your model with the maker of the original model).

Team building
Make an individual model that shows what working in a group means to you.
Share your model with the group.
Make a shared model as a group that captures your collective understanding of group working.

Make a model that shows what you bring to the group.
Add a green brick to illustrate your key strength.
Make a mini model that shows an area you need to develop.

Make a model that shows your nightmare/ideal group member.
Create a shared model that brings all the characteristics of this person together.

Make a model that shows what effective group working means to you.
Make one mini model that shows how you will contribute to this and another that shows what help you would need.

Note: the reflective and team building activities can be amalgamated so that you can reflect on the way your team is operating during a project, or with an external partner, such as an industry sponsor or interested party. What sort of questions might you want to reflect on and what kinds of activities might you create, based on what you have read thus far?

Ideas generation for projects
Read the project brief carefully and create three mini models that capture your project ideas.
Add the key challenge you would experience implementing each of the mini models that capture your ideas.
Revisit your mini models. Share them and decide which idea you are taking forward.

In situations where you are given a selection of project ideas:

Select the one you would like to explore further and make a model that shows where you would like to take this idea.
Make a process model that shows the steps you would follow to work on your project.

Reflect on your model and review it based on your exchanges.

Make a model that depicts your ideas for a group project.
Each person adds up to three green bricks to their favourite ideas.
Which idea are you going to take forward as a group?

Make as many mini models as possible that shows how a specific product/concept/idea could be used in a range of contexts.
Add up to three green bricks to your favourite ideas.

Problem-finding and problem-solving

Take a case where you are given a scenario or case study. This could be in written or multimedia format.
Explore this case study and make up to three mini model that show the key issues you have identified.
Reflect on your mini model(s), listen to other participants talking about their model(s).
Make a new model to visualise your ideas resolving one of the biggest issues you identified.

Make a model that depicts your understanding of a process you have been invited to review. All participants are invited to review the same process.
Use a red brick on your model to identify the biggest challenge you see.
What could you do about it? Build up to three mini models to share your ideas with the group.
Share with the group.
As a group how would you like to take your ideas forward? Make a collective model to illustrate an agreed way forward using everybody's input as visualised through their mini model(s).

Understanding a process, a theory

Make a model that captures your understanding of the process/concept/theory X.
Add a red brick to the section you find challenging.
Reflect on your model and make any desired changes, resulting from your conversation.

After reading chapter/paper/article X, make a model that shows your understanding of this.
Use a green brick to show what stood out for you.
If working as a group, share your models
Reflect on your model and identify if there is anything you wish to change, after this sharing.

Make a model that shows your understanding of a specific theory.
Make a shared model that shows your collective understanding of this theory.
Individually, add a red brick to what you find most confusing/challenging.

Make a model that shows how a specific theoretical approach can be useful for practice.
Reflect on your model. Is there anything you would like to add/change?

Unpacking big topics
Make a model that represents what *[insert topic of your choice or popular educational buzzword here e.g. sustainability/teaching excellence/learning gain]* means to you.
Describe and share your models in turn within your group. What resonances or differences do you note?
Group your models together in a shared network, thinking about how each one might relate to another.
Review your network; is anything, or anyone missing?
Mark up the areas of the model where you feel practice in your context is already strong (you might also like to amplify this by making additional mini models that make explicit what these strengths are)
Where are the gaps, the weak links? Make further mini models to represent these.
What do you need to do next? (For deeper exploration of such topics you can also draw on the LEGO® SERIOUS PLAY® applications provided through training manuals and other sources, or design your own activity)

3.3 Prompts for coaching and mentoring

This section contains suggestions for activities that can be used in individual and/or team coaching and mentoring situations. They can also be used to support the professional development (initial and continuous) of coaches and mentors. While the prompts may be wide-ranging, we are concentrating here on their use in terms of academic contexts, including those of the professional educator.

A quick overview of the roles of, and differences between, coaches and mentors

Many of you reading this section may already be quite clear, through your own experience, as to how the coaching/mentoring relationship plays out. If, however, you are new to the subject and would like this defined, the following summary is for you. We also recommend that if you are thinking of undertaking a coach/mentor role you also engage with suitable training and support, including external literature and your own professional practice.

Coaching is a supportive, dialogic relationship between coach and coachee, with the specific aim of moving the coachee forward with a goal of their own defining. It differs from mentoring in a number of distinct ways: a coach does not advise the coachee what to do, set out specific options for them, or give examples from their own experience and knowledge-base to influence the coachee's decision-making. A coach does not judge, nor would they start sentences with leading phrases such as "if I were you...", "what I think you should do is...", "when I was in a similar position I did x...". A coach will have been chosen to be an impartial and neutral thinking partner, who helps the coachee identify their own options and make their own choices.

A professional or academic mentor is more likely to have been chosen on the basis of their experience, specialist knowledge or career trajectory. They can give the mentor specific information or examples to help them decide what to do in certain situations. In short, a mentor is more directive than a coach. There can also be

connotations of age and experience within the mentoring role: a mentor might be more senior, or more experienced. (However, there are many cases where younger mentors help older or more experienced mentees, perhaps- but not necessarily - in the areas of social media or digital skills. See also reverse mentoring arrangements for example that are also used in higher education settings).

Note. Coaching and mentoring approaches may not always mutually exclusive when you are working to support someone. It may be appropriate at times for the coach – with the permission from, or at the invitation of, the coachee – to step out of the coaching role and into a mentoring one. Good coaching and mentoring training resources will be a valuable source of guidance on this.

LEGO®-based activities for coaching and mentoring situations (including at the start of any coaching or mentoring arrangement) follow.

As in the previous sections, our recommendations for what to think about before you start are relevant here as well.

The coaching contract
(or coach and coachee who both participate, build and share. This can also be used in team settings)

- Build a model that shows your expectations from a coaching relationship.
- Build a shared model that shows your expectations collectively.
- Tell the story of your shared model.

What do you learn from this?

What to work on
Build a model of your current situation, including your own headspace, aims, frustrations, confusions, as well as your role and context.
Using a coaching framework, such as TGROW, create a model or models that help you discuss each of the stages e.g.

T – Topic – what do you want to discuss
G - Goal - what is it you want to achieve? What are you aiming for?
R – Reality – what is your present situation?
O – Options - what are the different courses of action open to you?
W – Wrap-up/Will – what are you actually going to do now? How strong is you determination to do this? What might get in your way or help you?

Becoming Unstuck
Feeling stuck in a situation or way of being/feeling is often what prompts people to find themselves a coach. Often, the activity above will have relevance for how to get past the sense of blockage. Or you could try building with the following prompts:

- Where at the moment do you feel most stuck?
- What impact is this having on you?
- What/who around you can help with this?
- What do you/will you prioritise?

This activity is a good one for pairs, or, if undertaken in a group situation, maybe one where the partner or members can help build solutions and suggestions for the coachee.

My ideal coach/coachee
Build a model that shows the key characterises of your ideal coach/coachee.
Add a green brick to indicate the most important characteristic.

Real and ideal self
(Self-coaching to enhance performance)

- Create a mini model that shows who you are today.
- Create a second mini model that shows who you want to become.
- Create a model that shows your current performance.
- Add a red brick to indicate your main challenge and a green brick to show what really works.
- Share your model through a note you write to yourself.

After a week, revisit your model and your note. What can you do to optimise your performance? Create a model that shows your options.

Brainstorming to generate ideas

- Create as many mini models as possible to generate ideas linked to a specific topic/situation.
- As a group, create a shared model using the ideas generated through your individual mini models.

Analysing and solving complex issues

- Build a model that shows a complex issue you are facing.
- Identify the three most challenging aspects of it and add three red bricks to your model that depict these.

Nurturing good habits and choices
Perhaps you are struggling with an ingrained habit (procrastination, poor time management, finding it hard to delegate to others – assuming you can):

- Build a model that shows how you feel about, and the impact of, this habit on your present way of working
- Use the TGROW model outlined earlier to adjust your model or create mini models to show your options and what you are going to do
- Create a complementary, aspirational model that shows how you want to feel by overcoming this habit and replacing it with a more helpful one

Managing setbacks

- Build a model that shows the setbacks you have experienced in a particular situation.
- Build three mini models that show how you could manage these.
- What will you commit to doing? Create a model that shows this.

Overcoming conflict

- Build a model that shows specific strategies you use to overcome conflict.
- Identify one of your strategies that hasn't worked. Add a red brick to the area on your model which shows this.

What else could you try? Build three mini models.

Developing as a leader

- Build a model that shows who you want to become as a leader,
- What do you need to do to get there? Build a new model that shows your development needs.

Progressing a project

- Build a model that shows where you are with a specific project
- What do you need to do to progress this project? Create three mini models that depict the strategies you could use.

Empowering others

- Build as many mini models as possible that depict the approaches you use to empower others.
- Select the three that seem to work better. Share these.
- What else could you try? Create further mini models.
- Share these mini models and select the one you are going to try.

Developing personal/professional skills

Create a model that shows the skills of need to complete a specific task in your job.
What are the areas you need to develop further? Add a red brick to highlight this.
Create a model for somebody else in the group suggesting what they could do to develop in this area.

Motivating individuals

Build a model that shows the strategies you use to motivate others.
Add a red brick to the strategy that doesn't work well and a green brick to the strategy that works well.
What else could you try? Build a mini model and share this.

Defining goals

Build a model that shows what you want to achieve in the next 6 months/3/5 years.
Build a model that shows how you could get there.

Using TGROW to achieve goals

Build a mini model that shows what you want to achieve.
Build another mini model that shows where you are now.
Build a mini model that shows what you could do?
What do you commit to do?

Career progression

Build a model that depicts were in are in your career.
Build another model that shows were out want to go next.
Discuss what you need to do to get there.

My perfect role
Make a model that shows your perfect role.
Build a model that shows how you will secure this.

My perfect line manager
Make a model that shows your perfect line manager.
Build a model that shows how you will support your line manager to operate as its best.

My perfect team
Make a model that shows your perfect team.
Build a model that shows how you will support your team to operate as its best.

My future life
Build a model that shows where you would like to be in three to five years
Create a mini model that shows how you would feel achieving this.
What could you do to get there? Capture your ideas in mini models.

3.4 Prompts for research and scholarship

In this section, you will find a wide range of activities all relating to scholarship and research as an academic activity and process and a series of activities that will help doctoral students prepare for their viva in a more hands-on and creative way. The sub-sections are:

Section A: Activities supporting research activities and scholarship
Section B: Activities supporting viva preparation

Section A: Activities supporting research activities and scholarship
These are for researchers who would like to explore specific aspects of research linked to a specific project, plan or current activity (on their own or with others), or are interested in helping colleagues develop capacity in a specific area. The following activities can be used in workshops, one-to-one settings or for self-analysis and reflection.

Planning research
- Build a model that shows what steps you need to consider when planning your study.
- What will be your biggest challenge? Mark it using a red brick.

Research proposal
- Build a model that shows what you need to consider when planning to put a research proposal together.
- Where do you need most help? Mark it on your model using a red brick.

Research questions
- Build between one and three mini models that show what you want to find out from this study.

- Which one is the most important mini model for you? Build another mini model to illustrate what this means to you.

Support
Build a model that shows what support you need to make progress and complete your research project.
What help can you realistically get? Use a green brick and add to the specific areas on your model.
Adjust or rebuild your models to reflect the impact of this support when you get it.

Funding
- Build a model that shows where you can seek funding for your project.
- What else could you try? Create a few further mini models.
- Share the mini models and commit to a course of action

Methodology
- Build a few mini models that show the methodologies you consider using in your study.
- Which one is your strongest contender?
- Add the advantages of one of the methodologies you selected to the relevant mini model.

Literature review
- Build a model that shows the literature you intend to review for your study.
- What could you do differently? Create three mini models that show your ideas.
- Share the mini models and commit to one change, as illustrated through one of your mini models.

Data collection
How might LEGO® SERIOUS PLAY® or the use of LEGO® in some way enable you to collect data for your research? Plan this out in a model.

Separate from, or together with, the previous activity:

Build a model that shows the process you followed to collect data for your study.
What would be the ideal way of collecting data if you could ?

Findings
Build a model that shows your key findings and how they related to each other.

Discoveries made through the project
- Build up to three mini models that show specific discoveries you made during this project.
- Select one of the mini models and create a further model that shows where this discovery could take you.

Research design
- Build a model that shows the key features of your research design.
- How would your ideal research design look like?

- What modifications would you make to your original model? Make them.

Dissemination

- Build a model for your project dissemination strategy.
- Add a red brick to identify your biggest challenge.

Reflection on completed research project

- Build a model that shows your journey from the beginning until the end.
- Highlight three things you are proud of.
- Use a red brick to identify on your model one thing you would do differently in another project.
- Share and explain the red brick area to others.

Section B: Activities supporting viva preparation

A viva can be a stressful experience while preparing for it, and during it. There are many useful guides and resources available online that help doctoral students prepare for their big day. However, more creative approaches could also be considered, such as LEGO® SERIOUS PLAY®. Below, you will find a series of activities that are based on commonly asked questions during a viva. These can be further personalised and contextualised by the doctoral researcher and their supervisory team and used perhaps in advance of a mock viva. Some of the activities could lead doctoral students to consider bringing a small LEGO® kit into the viva and using this to respond to one of the questions raised by the examiners using a model that they have prepared earlier. Doctoral students could also make a model on the spot when asked a specific question that is complex and needs to be explained with clarity. Making such a model, could provide a valuable reflective tool and help the doctoral students to stay focused and articulate with precision the key points.

Motivation for the study

Build a model that shows your main motivation to conduct this study.

Literature review strategies

- Build a model that shows what strategies you used to conduct the literature review.
- Build a model that shows the key areas of the literature you explored and how these link to your study.
- Build as many mini models as needed to show the gaps you found in the literature.

Theoretical framework

Build a model that shows key features of your theoretical framework.

Your research design

- Build a model that shows all the elements of your research design holistically.
- Build a mini model that shows what you would do differently and why, looking back at the completed study now.

Your methodology

- Build a model that shows key characteristics of your methodology.
- Add a red brick to the biggest challenge you faced linked to this.
- Add a green brick to highlight the benefit for using this methodology for your study.
- What other methodology could you have chosen? Create at least one mini model that depicts this.

Data analysis

- Build a model that shows the process you followed to analyse your data.
- Add a red brick to the area of the model that shows your biggest challenge.
- Build an additional model which shows how you overcame this.

Findings

- Build a model that shows the key findings of your study.
- Show on your model how the findings are linked to each other through using connectors.

Contribution to knowledge

- Build a model that showcases the unique contribution you are making through your study.
- What are you most proud of? Add a green brick to the specific area.

Implications

- Build a model that shows the implications of your findings.
- What do you consider the biggest opportunity? Make a mini model to depict this.
- What do you consider the biggest challenge? Make a mini model to depict this.

Research journey

Build a model that shows key milestones of your research journey and what you have learnt.

Emerging and continuing work

- Build a model that shows key developments in your area since submitting your thesis.
- What do you regard as the most significant? Add a red brick to the area of your model that depicts this.
- Share the red brick area and explain what this means for your work.

Dissemination

- Create a model that is a dissemination map of your work. What could you do?
- Add a green brick to the area on your model that shows what you will do first.

PART 4: Case studies

In this part, diverse educators and students provide short accounts of their own use of LEGO® or the LEGO® SERIOUS PLAY® method. The examples included are brief descriptions of practice from a range of disciplines and professional areas within higher education, and/or testimonials to the benefit of the approach. They have come from educators in different parts of the world, which indicates the popularity of the method, and of LEGO®. They do not contain exact recipes to follow so you can replicate step-by-step what has been done. Rather, the aim of these is to provide food for thought to anyone considering using LEGO® related activities in their practice. As we said earlier, you will also find a mixture here of accounts which describe LEGO®-based activities which don't have all the distinct characteristics of LEGO® SERIOUS PLAY®, and those which do.

In the spirit of our title, you will also find that some accounts are about using LEGO® in digital arenas, or accompanied by digital apps and resources, and others are about using it in face-to-face situations without these.

4.1 Capturing the Meaning Making of Emotional Labour with LEGO® SERIOUS PLAY®

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LEGO® SERIOUS PLAY®/LEGO® application

For those UK healthcare professionals working at the front line of emergency care in the global COVID-19 pandemic in 2020, resilience became an expected norm, rather than a desirable trait (Hayes, Corrie and Graham, 2020). The need to focus on the ability of these staff to recognise and acknowledge a far broader concept, which ultimately had the potential to temporally impact on their mental health beyond the context of the pandemic response, became apparent – emotional labour. Emotional labour, operationally defined, is the process of controlling internalised feeling and the expression of these feelings to ensure that the emotional regulation of highly complex, psychologically painful, and negative situations can be maintained, such as in life and death scenarios, where dying people and their families necessitate reassurance and support. The global pandemic magnified and exacerbated the need for this ability and with an overall recorded death toll of 6,384,128 people and 570,005,017 million cases, to date, it is not hard to acknowledge the enormity of their roles and their need to fulfil the emotional requirements of a job (World Health Organisation, 2022). More specifically, workers are expected to regulate their emotions during interactions with their peers, suffering patients and their families and carers (Vázquez Bandín, 2020). To articulate the acknowledgement and articulation of experiences and stories capturing this emotional labour in practice necessitates careful facilitation if these are to remain trustworthy and authentic accounts of historical lived experience. Using LEGO® SERIOUS PLAY® approaches within this process, remotely and with due regard for the ethical sensitivity of healthcare professionals offers a qualitative means of speaking through objects as a mechanism of reflection and critical reflexivity. Using processes of LEGO® SERIOUS PLAY®, facilitated a construction of meaning making of this experience from the front line of care. The process offered insight into situational specificities of care, and elements of emotional labour of greatest perceived significance to healthcare staff.

Outcome

Formal evaluation of the process of meaning making using an adaptation of the RE-AIM framework, enabled capture of how the processes of implementing LEGO® SERIOUS PLAY® approaches had enabled participants to articulate stories relevant to their emotional labour in research practice. The following aspects of using this approach were regarded as having made a difference across four key areas:
Sense of Consolidating and Making Meaning of Experience: Traditional mechanisms of reflecting on experience, such as reflective diaries, speaking with colleagues and engaging in active dialogue necessitate an immediacy of response and recollection. The handling of bricks enabled ‘thinking in action’ and the construction and deconstruction of specific elements of experience, which could then be drawn back together to make sense (Hayes, 2022). This did not alter the impact of the

experience but made consolidating it an easier process, particularly for those people who were working in the same places.

Sense of Temporality, Awakening and Place within Time: Whilst the death of patients was an expected norm, the age of the patients dying and the suddenness of many of them was something not experienced before by healthcare professionals. Their identity as a human as well as an individual was perceived as being highlighted for the first time. The degree of control that participants felt they could have over a situation, was negatively impacted upon by the death of peers and the lack of knowledge as to how quickly a vaccine might be available was also unknown. This awakened a sense of place and time that many participants had never fully acknowledged before and despite feeling that the pandemic was having a negative impact on their lives, some reported never having felt more 'alive' and that their will to survive was greater than it had ever been. The LEGO® SERIOUS PLAY® approach had also provided a means of acknowledging their sense of loss and sacrifice and the emotional release they were feeling but not necessarily articulating. Sense of Self Reflection on Life Trajectories and Mortality: In relation to self-identity and self-concept the LEGO® SERIOUS PLAY® approach was perceived as having enabled a sense of reflection on the relativism of the professional to the personal and the significant influence that each had on the other in terms of being able to prioritise how life, and the remainder of it, are to be spent (Hayes, 2021). Mortality was a concept that many participants found difficult to acknowledge they were grappling with but amidst the most severe cases of COVID-19, death and dying had become normalised in a world that six months prior, the pandemic could not have been imagined. The process of building with the bricks was also perceived as a means of looking forward, as opposed to being stuck in the moment or rooted in the negativity of the pandemic. For example, the inherent goodness of those people supporting the NHS in the pandemic was also tangibly expressed through building with bricks and this appeared to reinforce reflection on not only what had been bad about the pandemic but also what had demonstrably contributed to being able to sustain working practice through it.

Sense of Shared Collective Experience: Participants reported a sense of collegiality and shared collective experience that only they could have, and which would stay with them a lifetime. However horrendous their experiences had been, to acknowledge, with the bricks that they had been part of a wider collective effort, was something that came out as significant from being able to build and articulate stories of experience from the pandemic. Feeling the bricks triggered visual associations of grief, release, and hope, as well as a sense of having contributed to the nation's eventual recovery.

Possible changes

The approach adopted within the study was one of curating the individual lived experience or stories of individuals who had lived through what will inevitably become an historical legacy, in the same manner as the Spanish Flu Pandemic of 1918 (Basco, Domènech and Rosés, 2022). Not only can this work contribute to the attribution of meaning, it could become a contribution to historical medical sociology. In terms of the research methodology underpinning a future process, I would integrate a phenomenological approach so that the essences of those whose lives

have been impacted could be captured beyond relevance of the immediacy of the ongoing pandemic.

New ideas for the future

The post-pandemic phase of the COVID-19 pandemic will leave significant opportunities for the integration of LEGO® SERIOUS PLAY® approaches within the context of building authentic co-constructed curricula with medical, health and allied healthcare practitioners. Widening further the robust methodological implementation of the technique within the context of health professions pedagogic practice will be the focus of ongoing work in strategic gamification.

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4.2 Playfulness: LEGO® SERIOUS PLAY® as a fun intervention in enterprise and entrepreneurial education

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application
The two- and half-day Business Innovation Competition (BiC) held at UCLan was designed as an enterprise and entrepreneurship (EE) competition by Fahad Ahmed (Propeller, Business mentor https://propellerhub.co.uk/) and I as a trained LSP facilitator and Senior Lecturer in Enterprise and Employability.

Open to all second and third- year students it was designed as a cross curricular and extracurricular event, aimed at developing the students' EE skills in creativity, problem solving, communication and collaborative working.

The competition was also designed to introduce students to the idea of social enterprise and opportunities which favoured social, ethical and responsible entrepreneurship (Rae, 2003). The brief was suggested by our chosen organisation, St Vincent's School for the Blind, Liverpool. As a Centre of Excellence for the education of young people with visual impairment (V.I.) St Vincent's wanted the students to develop a creative, educational tool for their students, named Sight Box.

We had decided that BiC would not include pitching their ideas to a set of judges which we felt was outdated and pressured. The point of the competition was that it would be fun, so we asked the teams to complete the Social Business Model Canvas (Social Enterprise Institute, 2018) and to display their results, research, drawing, photos and models on a table or display board in the room. The judges would then walk round and speak to each group in a more informal manner.
Six teams of competing UCLAN students were required to generate a product that would become part of a suite of tools and resources that would help to support V.I. children's access to education.

Why did I use LEGO® SERIOUS PLAY® (LSP)?
As a trained LSP facilitator I have used LSP with professional, external groups looking at leadership, team working and product design, and internally within UCLan including Professional Practice sessions with BSc Midwives, employability with BA Historians, enterprise and entrepreneurship with Propeller clients and team building with staff groups. I have observed that using LSP engages people immediately, can be challenging but creates energy and "flow" (Csikszentmihalyi, 1990) and is fun – most people enjoy the process.

EE aims to develop students "capacity to generate ideas and the skills to make them happen … include demonstrating a can-do approach and personal innovation to problem solving" (QAA, 2018, 9). So, it is important that EE is experiential, using creative pedagogic approaches which tap into the students' curiosities about novel and future opportunities (Rae, 2003). Teaching and learning "combine serious intent with fun" (Burke and Smith, 2007, 11) and playful techniques are "powerful

motivational tool(s) ... fostering interaction through participation, interaction, exploration and collaboration" (Burke and Smith, 2007, 11-12).

How did I use LSP?
During BiC the LEGO® box was prominently displayed during the three days and all the participants were encouraged to come and play with the pieces either with or without a LSP trainer. There were two more formal workshops timetabled into the programme for groups that intended to use the kits to help develop their ideas. Three out of the six groups chose to use the kits.

As part of the BiC programme of workshops that students could choose to access, two short LSP workshops were offered and were based around two of the three Build Levels: individual and shared levels (Blair and Rillo, 2016).

A short discussion prefaced each workshop, in which the simple guiding principles of using our creative imaginations by using metaphors and telling stories about our models were explained. Each participant was reassured that there was no right way to build and that we focussed only on the model and accepted that what the builder said about their model was true. The LSP core steps of posing the question, building an answer, sharing what we think and reflecting on our learning, were outlined.

Introductory Workshop One
The very first activity was a timed warm up exercise of building a tall tower using only 20 bricks of any shape and any colour. This allowed everyone to become more acquainted with the bricks, developing confidence, dispelling any problems (usually fear about personal creativity) whilst putting a little competitive pressure on, so that people do not hesitate to long over choosing bricks meaning that the activities moved along reasonably quickly and were fun.

After some discussion of how people felt about this exercise, which was generally positive, everyone moved on the Individual model building by building a model of an enterprising skill that they thought they had. This led into a short discussion about skills that teams needed and how this contributed to the development of their team's product.

In building a Shared Model we focused on the "ideal" team and what this looked like, the mix of skills involved and linking it to the entrepreneurial and personal values exercise (Vitae, 2020) that they had discussed in another workshop offered in the BiC programme.

Workshop Two
This was a follow-on workshop and was one hour long. After the introductory reminder, the first activity was a warm-up to refresh our understanding of LSP. We each built a small duck from five pieces of LEGO® and then used it to tell a story about ourselves which involved an example of personal creativity. We set creativity into the context of enterprise and entrepreneurship as a key competency.

After this we moved on to their challenge, the development of their product, the Sight Box. After discussing the brief and checking on progress, the group built a shared model of their product and discussed how it met the required criteria: its design, the

estimated costs, stakeholder analysis etc. This created a lot of discussion and the groups continued to make changes to their model. After the workshop had finished some of the groups continued with their build and kept the model for reference later in the competition.

What happened – the context of the event

Initially the winning group, Team Fossil struggled with the brief as they had no experience of business terminology or managing a project with deadlines, resources and costs. However, they were supported throughout the competition by mentors and attending the other short workshops.

“The main thing that I learned is how you have to budget properly and things like that, because that’s the thing with archaeology we don’t get taught anything like this. So, by working together with others who are actually doing things like this as part of their course, I learned a lot about how to do that properly. Also, through the workshops I learned a lot more skills as well, which I can take into any job or even to interviews and stuff like that”.

They were determined to succeed, and their key motivational driver was that this was a real-world problem for pupils with V.I. Using LEGO® helped them to refine their ideas,

“It was challenging at first, but we kept on building and thinking about what we can do that would be beneficial to them like the sounds and feeling, it became a lot easier.”

They developed more creative opportunities,

“I suppose I learned how to incorporate other areas of the world into archaeology (there are) so many different skills and aspects into archaeology and just how many windows and doors that you can open if you put your mind to it.”
and,

“I learned a lot about history in particular, and what you can do with sound. I thought that was absolutely amazing and I guess that these guys helped me bring out the creative side in myself.

They also began to appreciate other people’s skills and values,
“You can just expand the reach of archaeology exponentially by utilising other people’s skills.”

Through their LEGO® model they were able to articulate their winning design, which created an immersive, experiential sound experience for V.I. children, to the judges. They used it to tell the story of the Romans who had lived in their city which archaeologists had excavated and reconstructed, including the sounds of the cityscape and artefacts which VI pupils could handle and identify, so that the senses of touch, hearing and perhaps even tasting, where being used.

After winning the competition, Team Fossil applied for and won a bid for £700 to purchase a sound bar for sound projection. It was very likely that with the help of St.

Vincent's influential and highly networked head teacher they could access other external funding for the product.

Conclusion

A critical success factor for winning the competition was identifying strongly with the project and seeing it as an opportunity to do something that had meaning for others, and the self-efficacy to believe in their own capacity to complete the brief.
The two LSP workshops offered at BiC were very short, because of the pressures of the timetable for the event. However, Team Fossil was an active and engaged group who found LSP useful: it helped develop their creativity by making new connections with other disciplines and encouraged problem solving through shared storytelling. We could redesign BiC as a hybrid event with face-to-face events and also online activities. To use LEGO® effectively in on-line workshop I would suggest the following:

Make sure that the participants have a small LEGO® kit with a range of bricks, possibly investing in the LEGO® starter kits or making up your own kits from the Identity and Landscape kits for distribution to participants. Each participant would have the same number and the same type of bricks.

Perhaps send out some brief instructions beforehand so that each participant is clear about the activities and why they would meet the enterprise brief.

Make use of Zoom for the sessions and also for the chat rooms so participants can gather to work on their shared model, although only choosing one person to work physically on that model and post the photograph for discussion.

Choose a platform such as Padlet or Google Jam Board where students can upload photos of their individual models.

Suggest groups meet to work on their models – changing the designs etc. – on a virtual platform of their choosing.

Offer a mentor or chat session to groups as they work on their business idea.

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4.3 Icebreakers and eggs

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application

I have used LEGO® as an ice breaker for first year students for a number of years. Students were split into random groups and each group was given a box with one set of LSP in and a boiled egg. They were then asked to create a vehicle and a ramp to transport the egg over the longest distance possible. The vehicle could not be pushed, it could only be released from the top of whatever ramp they built and the egg had to remain on or in the vehicle until it had stopped for the distance to be counted. Students were invited to video their own efforts and to post these to social media.

Outcome

Transition into HE can be a frightening and bewildering process frequently made harder by the need to move to a new location and to meet a large number of people. Some students are extremely outgoing, but many are more reserved, or shy. Students often worry about being judged and making a good impression. LEGO®, in all instances, has helped overcome these issues. It enables discussion, interaction, planning and, most of all, fun so that the students relax. A potentially awkward situation becomes one in which students can share memories, ideas and even surprise, though few seem not to have interacted with LEGO® before, and they start to develop social links.

It provides an opportunity for students to explore group dynamics, planning, building, testing and all in a collaborative setting. They also have the opportunity to engage with deeper processes such as reflection. Within a marketing setting the element of competition is something they also seem to enjoy. Giving the students an external focus encourages them to be able to articulate their ideas and by the end of the session it is notable how many students appear deep in conversation and frequently have smiles on their faces. Most importantly it provides not just a sound educational development context but also an opportunity to play. Students leave having made friends, been inspired, often by other people's ideas and having had fun, which increases engagement. It is always commented on positively in evaluations and provides the perfect starting point for induction or many business modules.

Possible changes

We might provide all teams with the same ramp rather than asking them to build one from the LEGO®. We could give them more than one go, so that after their initial attempt they could have a further half hour to make changes based on their acquired knowledge. This would mean the opportunity to apply their reflection (Gibbs, 1988) and learn by doing, which can then be taken as a concept into further activities. It would also be interesting to vary the task, for example asking them to make a bridge to support a vehicle (or potato) crossing. If this were a follow up task later in the semester then students could reflect even more deeply on whether the process around team-working could be improved.

New ideas for the future

I want to integrate using LEGO® to think about learning with my first year students as we need to spend more time getting students to understand the learning process and how assessment, feedback and evaluation fit within it. What might be interesting in terms of co-creation would be for the students to design their own problems, for other students to address.

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4.4 Making space; Making self: Using LEGO® figures and creative practice to facilitate queer early career researchers' academic development

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LEGO® SERIOUS PLAY®/LEGO® application

In an online Zoom event aimed at queer Early Career Researchers (ECR) we used LEGO® and craft boxes sent to attendees to think through how to make space for ourselves in academia. This facilitated conversations on how it is we make space for ourselves, and find others, in academic contexts and how those external contexts shape those experiences. We were destabilising linear notions of 'career trajectories' – that there is a right way to get into academia, a right way to stay, or milestones attendees (and ourselves as queer ECR facilitators) should have achieved by now. We asked attendees to decorate their box-spaces to represent and express themselves using craft supplies we provided including stickers, craft materials, and magazine cuttings. We also asked them to represent what might facilitate them staying in academia. This created a space for them to place their LEGO® figure. We provided LEGO® body parts to help them create a representation of themselves for this space, as well as colleagues, collaborators or supporters to show other relationships that helped them stay in academia. This allowed them to highlight important relationships in these contexts. All attendees were currently employed in higher education (HE) or current PhD students. Many of the attendees were precariously employed on temporary, short-term or fractional contracts reflecting wider issues in academia (Butler-Rees and Robinson, 2020; Rao, Hosein and Raaper, 2021). This work facilitated the work of researcher development as a form of learning and teaching practice in HE. For us, researcher development as early career researchers is linked to research culture within institutions and across the networks and groups we forge for ourselves outside of our own institutions. Researcher development is the work of HEIs, through their learning and teaching practice as well as through research commitments, but it is also the work of wider networks filling the gaps where contracts and precarity mean some of us are left out of development schemes. This work of academic development in the context of the COVID-19 pandemic meant the use of Zoom and online interactive spaces (Jamboards for sharing images of LEGO® selves and boxes) were essential for this researcher development work and broader researcher community development work. This also offers an example of thinking through online technologies as well as creative practice for the development of inclusive research cultures.

Outcome

The fast pace of academia often means that individuals do not get time to be mindful about the decisions they are making in their everyday academic practice, and instead are driven by the practicalities of day-to-day teaching and research or institutional timeframes and milestones which can exclude a diversity of researchers, participants and students (Humphrey and Coleman-Fountain, forthcoming). This event gave participants a dedicated time and space to slow down, pause and reflect on their academic practices, optimistically re-imagining what academia could be in a

future we could create. The collective practices of reflecting and reimagining were supported through the use of LEGO®, cardboard boxes and crafting supplies. Their use gave the event a playful feel, which we used to try and rekindle and nurture optimism amongst participants for the possibilities of what academia could be in the future, which was particularly important in light of the exclusions that have been faced by queer, and particularly trans, academics in UK Higher Education (Pearce, 2020; Slater and Liddiard, 2018; Vincent, Erikainen and Pearce, 2020). Many of our conversations focused on big picture, future-oriented, imagining academia and our future places in it, because many of us were on fixed-term contracts and imagining a different future felt like an important challenge in the face of that precarity. A different cohort of attendees may have focused on different areas and the challenges faced by queer and trans academics do not evaporate once a permanent post has been secured.

These activities also allowed us to bring an element of joy to a topic that can be hard to talk about: the ways in which queer academics can be excluded within normative academic spheres (Taylor, 2016). For example, as noted by Taylor, there can be complex relationships between research, researcher and researched and queer academics may occupy multiple positions across these. These situations are not unique to queer academics and others occupy insider/outsider positionalities. However, in recent years there has been a rising hostility toward trans academics, and their allies, across a range of disciplines (Hines, 2021; Pearce et al. 2020; Slater and Liddiard, 2018). As early career researchers, many of whom were trans, our attendees faced struggles with the normative academic activities expected of them such as knowing which conferences and publications would welcome their work and knowing which academic departments would welcome them as colleagues. For many of us these are ongoing concerns. In designing these activities however, we were mindful that whilst using arts-based methods are praised for being able to get people to think differently about their experiences and express feelings where words fail, they can also be intimidating if the activities are not designed for people with a range of creative abilities in mind (Cuthbert, 2021). By using LEGO® figures and collage techniques to represent participants' experiences and express their feelings, we were able to facilitate the participation of both people who were confident and comfortable using arts and crafts and those who were less confident about their creative abilities. This facilitated the expression of difficult feelings of isolation, exclusion and sadness, as well as more joyful reflections on the ways in which participants had proactively and creatively forged connections, communities and collaborations.

It was through this process of individually creating our box-spaces in small groups and then digitally sharing them with all participants using the digital sharing space on Google Jamboard, that new connections within the group were able to be built on the foundations of shared experiences. For us as facilitators, the forging of these connections was a key aim of the session. Many of the participants had started new studies or new job roles during the pandemic, which has involved extensive working from home and absence of the types of informal networking that had previously been provided in 'over the kettle' conversations in one's department or in the breaks at face-to-face conferences. This event therefore tried to be explicit in its aim to connect participants who could be facing additional pandemic-related, work-place isolation with one another, transcending institutional and disciplinary boundaries, to

create supportive communities for sustainable collaborations, connections and support.

Possible changes
We allocated one hour to the 'Making Space, Making Self: academia in and out of the box' activity. However, given the time it took to explain the activity, construct box-spaces and share them by photographing, uploading, and discussing them, it was clear that additional time would be beneficial. We also provided all workshop materials used by post, and due to budgetary constraints we were only able to provide a small amount of LEGO® to each participant. In future, we would provide additional LEGO® components to allow participants to represent a wider range of people in their box-spaces if desired. Using LEGO® meant people could represent themselves with a LEGO® figure even if they didn't feel creative. This included more people and opened up the accessibility of the event to a range of ECRs with different relationships to creativity.

New ideas for the future
Since this event Dr Harvey Humphrey has used LEGO® to facilitate writing planning sessions for ECRs and PhD students. Harvey is currently developing this work as part of work on researcher development and creative academic practice. They plan to use LEGO® figures as an accessible way to represent the self in writing and research for a range of researchers that may feel under-represented in academia. They recently ran a session for this queer ECR group on using LEGO® figures to plan writing. Following that session, their future plans involve thinking through the use of LEGO® to represent ideas in writing.

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4.5 Research Leadership Induction via a Hybrid LEGO® SERIOUS PLAY® Facilitation

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LEGO® SERIOUS PLAY®/LEGO® application

Since 2019, LEGO® SERIOUS PLAY® (LSP) has provided a cornerstone to enabling online, hybrid (both online and face to face participants interacting in the same session) and face to face learning in my Higher Education practice with students, academics, and professional services. This has included using it for online conferences (e.g. United Kingdom Research and Innovation Circular Economy Hub, the South West Educator Developer Forum and Wellcome Fund Researcher Exchanges), teaching on modules in both one-off sessions and longitudinally across the modules (e.g. operations management, leadership, equality and diversity, engineering and health care), or for initiatives (e.g. wellbeing and transitions). Since 2019, I have had the pleasure of delivering 182 LSP sessions reaching 6,468 people. It simply has transformed my pedagogical practice.

The LSP case study being provided is for the Bournemouth University Research Leadership programme which provides academics with skills and knowledge to plan and deliver research projects, and to get the best out of research teams. The 2022 Research Leadership Programme induction was delivered in a hybrid format from an LSP session outlined in this case study. The rest of the Research Leadership programme was formal online modules and hybrid action learning sets.

Outcome

The session was attended by 27 academics: 12 face-to-face and 15 online. The hybrid session had two facilitators in the room coordinating the delivery, one focusing online and the other the room, sharing and group reflections to ensure and enable integration. The welcome session started with an introduction to the team and the modules that the academics would be undertaking. This then led to a current research leadership Mentimeter poll that started putting the focus on themselves. Questions within this process included participant hopes and fears about the programme, their desired outcomes from the programme and their perceived self-assessment of their research leadership status – ability and experience. This then framed the link to the LSP session which the group then transitioned to. The LSP method had been contextualised for research leadership.

- The technical build: Build a module of a research leadership duck with a leadership superpower
- The metaphor build: Explain this topic such as governance, ethics, integrity, impact and networking etc.
- The story telling build: Build a model to show your leadership skills, qualities, and style
- Session build: Build a model of what effective research leadership is.

What did the session achieve?
The hybrid session achieved so much in so many ways, as it allowed participants to honestly share their emotions and mindsets which enabled an open and supportive conversation. The use of Mentimeter as an alternative presentation tool supported this, as it allows participants to interact via their computers/phones/tablets to a session and answer questions or make suggestions. The outputs of the voting tool can be word clouds and graphs etc so any perceived barriers are broken down. The use in this instance helped share hopes, fears and ability. It supported benchmarking of perceived research leadership. It helped develop a conversation that engaged both in-room participants and virtual.

The LSP component broke the ice and developed a common understanding for the cohort moving forward onto the taught modules. The technical build of research leadership superpowers showed common themes; both show empathy and new ideas, such as playfulness and humour, were also discussed.

The storytelling build considering leadership skills and qualities really supported the Mentimeter hopes and fears, which meant the reflection was far deeper and in more detail than previously seen. The session build of what effective research leadership is enabled the interdisciplinary nature of the cohort to shine through as with the nuances. This then brought a request for more of the same to enable the networking to develop beyond the programme requirements so that participants of the programme could work together on bids, papers and new ideas.
The initial feedback from the session included:

- *“I was blown away with the power of LEGO®. It has a stress relieving aspect to it also and certainly helped break the ice.”*
- *“This has been a really eye-opening session.”*
- *“Talking through a model about my leadership skills and qualities really made me think about what I need to work on during the programme.”*

In addition to this, within the action learning set eight weeks later the cohort were again asked to reflect on the use of LSP and the feedback included:

- *“Super keen on more LEGO® sessions within the programme to support reflection.”*
- *“There is something about putting the bricks together that helps develop solutions.”*

Possible changes
Given the successful use of Mentimeter to support the framing of the session add at least another 30 minutes to facilitation for further discussion and reflection.
The deep reflection of the hopes and fears versus skills and qualities needs developing into the mentoring systems at the University so that further support can be given to the participants' development.

New ideas for the future
Use of LSP longitudinally across the Research Leadership programme and develop a systems build that can be revised and refined 6 months post-programme and 12 months post-programme to understand the impact further.

4.6 Using LEGO® SERIOUS PLAY® as problem solving

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LEGO® SERIOUS PLAY®(LSP)/LEGO® application
The Postgraduate Diploma in Innovation through Design Thinking is a fully online program taught across both the School of Education and Business schools at University College Cork. Students come from a range of backgrounds and disciplines. Students undertake relatively complex projects in each semester – group-based in semester 1 and individual projects in semester 2. Each comes with their own challenges. I will focus the below on the semester 1 output.

I have used LSP in order to help students tease out challenges they are facing within their projects. As the course is delivered online I ask students to supply their own LEGO® and/or other materials they might find around the house (such as string, wool, stones, household utensils and so on). I model my sessions on the LSP 'formula' of the skills build, individual build and shared build.

The first task is the 'build a tower with you in it' as an icebreaker activity. The second build is focused on problem solving. For semester 1 the question to respond to with LEGO® 'build a challenge you are currently facing in your group project or the end goal/vision for the project'. The final build/activity is then 'build your shared vision of the end goal for the project'

As students are located in different places, we use MS Teams and I ask students to share images of their builds via Padlet so that we can see the work from others in the class. This works really well from a pragmatic standpoint as students are able to see images of each other's builds close up, rather than relying solely on seeing their classmates hold their builds up in front of the camera. It also means I have a really nice catalogue of student work from the different sessions (which I am sure I could share with permission).

Outcome
Students have reported that these sessions have helped them become 'unblocked' or 'unlocked' in terms of teasing out problems and solutions to their projects. As the students are all interested in innovation and creativity and run their own design sprints, some of them have gone onto using similar methods within their own sessions. I have student feedback reporting that the LEGO® sessions were the highlight of the program for them.

The 'word of mouth' impact has now meant I have been asked to facilitate a number of additional sessions outside of my regular teaching, for example - as part of centralised professional development coordinated by Human Resources at the university, as part of strategic planning for a consultancy organisation attached to the university and by external organisations seeking input into solving challenges around organisational culture.

Possible changes
I am always learning as I go. Remembering to ask participants to write a full description of each build is key and something I need to do more regularly as part of evidencing their learning through the narratives they produce.

New ideas for the future
More of the centralised offerings through Human Resources would be valuable. However, these need to have a group with a similar goal in mind. I had attendees with differing needs at the first session but I think a common shared goal or theme needs to bind the participants. I really love using LSP in so much of my work.

4.7 Exploring learning gain with LEGO ® SERIOUS PLAY ® and visual ethnography

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application

Prior to the 2020 pandemic, I had enjoyed 4 years of designing in-person workshops as an LSP facilitator at Middlesex University, exploring a wide range of Higher Education related issues. These included assignment and dissertation planning, cohort dynamics, academic integrity, referencing and departmental strategising (Wheeler, 2020).

In addition, just before the pandemic arrived, I was ready to submit my doctoral research proposal which sought to explore the issue of learning gain (Kandiko Howson, 2017, 2018), employing LSP as the method. At its simplest, learning gain refers to how far a student has progressed during their educational journey. Furthermore, it is split into hard (progression, grades, employment outcomes) and soft (confidence, wellbeing, sociability) skills. My focus within this study is very much an exploration of the soft skills associated with the student experience.
For obvious reasons, after March 2020, the idea of putting participants in a room together became quickly unviable. As a result, I redesigned my proposal by incorporating LSP as a method to collect data for visual ethnography (informed greatly by the work of Sarah Pink (2008, 2021). Visual ethnography explores the interactions and subjective realities of participants via many different technologies. I still wanted to explore the experiences of students by employing LSP, but I also wished to use the principles of video ethnographic enquiry to explore representations of how individual/group dynamics on-screen impacted the holistic experience of building and sharing. Visual ethnography also stresses the importance of the researcher on the study, you're not an observer, you're a co-participant. Therefore, acknowledging my presence as an impact on the process was key.

To recruit volunteers, I took advantage of students returning to campus by attending a series of 1st year psychology seminars in person, presenting a short talk on what I was proposing to explore. Interested students were then interviewed informally, where more details of the study were provided. Subsequently, seven students accepted the opportunity to take part in the study.

The study itself consisted of three LSP workshops of approximately two hours duration, conducted via Zoom. All workshops were recorded and all volunteers were asked to have their cameras on throughout. For three of the participants, this was the first time they'd appeared on screen since starting at university.
Participants were posted the same LEGO® to their homes, split into three discrete bags of different numbers of bricks, so workshops could escalate from relatively simple builds to potentially more complex structures.

Each of the workshops explored different interrelated aspects of Learning Gain, touching on motivation, wellbeing, confidence and social experiences. The builds, detailed more fully below, sought to provide students with opportunities to construct examples (both positive and otherwise) related to these concepts and, equally importantly, share them in an environment that felt supportive.

Having never conducted LSP via screens before, I was interested to see if the lack of physical closeness appeared to impact on the readiness of participants to share experiences. Moreover, by conducting this research in all our living spaces, how would that manifest during the workshops?

Outcome

The three workshops, conducted between October 2021 and April 2022, produced seven hours of recordings, which I am currently analysing using principles adapted from visual ethnography. All seven participants attended all three workshops. As I write this, in 2022, those recordings are yet to be shared with the participants. Therefore, with the second stage analysis ahead of me, I will focus on what happened in the workshops themselves and the evidence for impact. Any participants mentioned directly will be identified by their initials.

The first 45 mins of all three workshops were structured similarly, starting with simple models to familiarise/remind participants of the underlying principles of LSP. Namely, ask questions of the model, stick to what you've made when describing your models (no backstory!), be respectful and don't build what you don't want to describe.
No two warm-up builds were the same, as I was concerned there should be no repetition across the workshops to keep things fresh. Examples of early-stage builds included ‘build a machine or invention that would have been useful during the pandemic’, ‘build a piece of furniture’ and ‘build a model to represent something you enjoy doing when not studying’. Builds that would be fun and not anxiety inducing was paramount for each warm-up stage.

Later builds, in keeping with the soft skills which surround learning gain, included ‘a model to represent your first day on campus’, ‘a model to represent something that makes your ability to learn harder’ followed directly by ‘a model to represent a potential coping strategy’ and finally ‘a model to represent something you know now about yourself that you didn’t know when term started’. The overarching themes of these and other builds, were to offer participants an opportunity to demonstrate and share moments of resilience and progress.

In keeping with the principles of LSP and visual ethnography, I didn’t want to do all the talking. Within that spirit, these quotations from the participants are in response to the question ‘build a model to represent what these workshops have been like for you’.

AC: “basically the wheels represent the journey we’ve all been on together, the flowery things represent us all growing together, you’re the one [minifigure] in the blue guiding us via the internet connection with each other and because it’s also been a bit of fun I’ve got the aeroplane I built [which is a call-back to an earlier model] which was a fun thing I built”.

CO: “So… these bits are because it’s been fun, enlightening, affirmational… is that a word(?) … very life affirming… this bit represents transparency… blocks of clear… I’ve been really inspired by how open everyone has been and it hasn’t always been easy so that’s the red… but yeah that’s the transparency and that’s one of my themes as well… the truth shall set you free… I like being open and honest and it’s very easy once you get past the hard part <laughs>. This bit, the pink blocks, and

they’re quite big… because this… erm… experience has been very tender. It’s been a tender experience… soft… emotionally… everyone’s been really open and kind…”

CP: “Mine is more of an abstract concept, this is me and through the workshops I learn how to speak about myself and all the different aspects of myself that before I wasn’t able to”.

IK: “This model represents how creative everyone’s minds have been, all the different colours and shapes represent creative that individuals have in the group… yeah… and it was really nice to see that everyone used their creativity to explore abstract thoughts and create something… really nice”

SL: “Mine looks very simple and basic because I had trouble deciding what to build or how to represent it…erm… It’s just mainly been an eye-opening experience, that’s why I’ve got the eye on top of the head… yeah… we’ve been… it’s been eye-opening for I guess myself and to see everybody else’s creativity or just… how everyone has just shown themselves through the LEGO ® and these <points to model> are the different workshops and what I’ve been able to take away from each one…”

SZ: “this is like a representation of the three different bags of LEGO® at the start and how it was all organised and neat and tidy. Then by the second and third [workshop] it’s like I got to see everyone’s perspective and even though it was a complete mess it was a lot of fun to see what we came up with, being given the same categories which is a lot of fun”.

VG: “these three <points to minifigures> represents all of us and how we all have different minds and different ideas. We had all the same LEGO® pieces, but it was really interesting to see how we all came up with very, very different things, depending on what we’ve all been through”.

These responses, towards the end of an emotionally revealing and very honest final workshop, were indicative of how participants had largely experienced their learning collectively. Despite the question asking what these workshops ‘have been like *for you’*, overwhelmingly, the responses incorporated the whole group within the resulting build. It has led me to consider the possibility that learning gain can be a social undertaking, incorporating the notion that what we learn about each other adds context to that which we learn of ourselves.

Possible changes

If I were to conduct LSP via Zoom again, it would probably be for a different outcome. Technologically, I would ask for more background details concerning cameras and lighting if sessions were due to be recorded. If I had the opportunity again to explore learning gain with a group, the possibility of asking them to build individually, post-workshop as a reflective tool is something I would consider.

New ideas for the future

It is not yet known how much teaching is expected to be on campus from September 2022. This makes it difficult to plan sessions in the near future. However, what has been discussed with lecturers is the possibility of an in-person LSP session exploring

the concept of academic integrity. This would probably be a non-LSP session but would use LEGO® to demonstrate concepts such as plagiarism and referencing.

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4.8 Flourishing with LEGO® SERIOUS PLAY® (LSP): Using the LSP method online to support resilience and mental health during the pandemic

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application

I have been developing my LSP practice since I qualified as a facilitator in 2018 in a number of ways. Firstly, I have used it with students on an academic leadership programme to develop models of their leadership practice and how they wish to develop. Secondly, I have used it strategically as part of my role in supporting the design of the University strategy to develop approaches around graduate attributes and the student experience. Thirdly, I have used it as part of coaching, both group and individual to support wellbeing and compassion. The specific example I would like to focus on is my use of the method during the pandemic to support online group coaching to support wellbeing and development. This came out of discussions with colleagues around their mental health, resilience and general wellbeing during the first lockdown. These colleagues were all in senior leadership roles in the university and all on the frontline of our covid-response whether running services or supporting the transition to online learning. Initially I had two motivations for running the sessions, firstly I thought that the LSP method would give a creative and safe space in which to share challenges promote positive engagement. I was also planning other online LSP sessions with leadership students and I wanted to see how the method could translate online. The first workshop looked at resilience and support needs. This was so successful that I was then asked to do a further workshop which addressed supporting wellbeing using Martin Seligman's (2011) framework. The final workshop then looked at refreshing and support needed as we moved beyond the pandemic. I took a group coaching approach to adapt the method online and to ensure it met the needs of the participants.

Outcome

LSP has been instrumental in contributing to the support of senior staff wellbeing in four core ways: 1. Community building; 2. Engaging participants; 3. Improving resilience; 4. Creative solutions, which I will discuss in turn.

1. Community building: The pandemic had created a sense of distance between participants because the usual community building activities had been removed or made inaccessible. Constant online meetings and literal confinement to home had contributed to a sense of disconnection and isolation. Bringing participants together in a safe space that was creative and different, encouraged a new form of community and participation. This created new bonds and connections between the participants which also supported their wellbeing and mental health.

2. Engaging participants: During the pandemic there was a sense of fatigue with online meetings and stress in terms of workloads. All the participants were in high workload, high stressful roles and had often felt disengaged from some meetings due to stress. Using the LSP technique enabled fresh thinking and for participants to

re-engage with each other in new ways. Participants referred to the LSP sessions outside of the workshops and it created new conversations and relationships.

3. Improving resilience: Feedback from the sessions was that participants felt more positive and had new skills in terms of resilience after the workshops. Participants commented on the quality of the thinking and the outcomes and how these were efficiently reached in the timeslot. The freshness of the approach, even during the third workshop, and the mental release of doing a different kind of activity again released positive thinking and engagement from participants.

4. Creative solutions: One of the strengths of the LSP method is to enable participants to create solutions that they had not anticipated. This was the outcome of the workshops contributing to mental wellbeing and resilience. Participants welcomed the opportunity to engage creatively and also were surprised at the levels of meaning created the sharing of ideas and the way that current issues were brought to life.

Using the LSP method for these workshops, provided a different approach for staff to engage at a time of high stress, disconnection, and strain on wellbeing. Staff fed back informally that they were energised after the workshops and enjoyed having legitimacy to “play”. LSP helped bring people together and enabled some challenging conversations to be had in a safe environment. It also enabled people to share more emotional responses to the issues via their storytelling around their models. LSP also enabled people to make connections and participants commented positively on how themes and connections were brought out in more tangible ways.

Possible changes

Next time I run these workshops, I will be more relaxed and open about adapting the method. Initially I was hesitant to change the structure for the participants and environment. I have learnt though that changes can be made, and the outcomes are still positive. I adapted the LSP method to work online and also to work in a coaching environment which needs to be less directive. Therefore, I adapted some of the style of the LSP questions and reduced some of the stages, for example, less skills building time. Reducing some of the skills building time and focusing on the core questions, would enable greater insights and shared discussion around the models as in some sessions the significant model building questions were slightly rushed. I would also gain some more feedback formally from participants concerning how they found the approach, how they could use it in the future and what they would like to be different or adapted. I would also follow up with more coaching sessions and adapt the workshops to run face-to-face.

New ideas for the future

In the near future, I would like to run these workshops more widely with larger groups of staff. I am keen to model use of play as a leader as I believe that it has so many benefits and LSP is a very good way of doing that. I am also mindful of over-using the technique, so I need to think about the most effective use. I would also like to work out how to adapt the workshops to draw out simple guiding principles.

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4.9 Building an institutional LEGO® culture using a community of practice approach

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LEGO® SERIOUS PLAY®/LEGO® application
In Autumn 2019, we established a LEGO® SERIOUS PLAY® (LSP) community of practice (CoP) to support the widespread training and support of LSP practitioners at the University of Exeter. This was initially funded by our Education Incubator under the banner of 'Success of All'.

Two initial cohorts of LSP facilitators were selected, through a competitive application process, to attend online accredited external LSP training. Subsequently, we developed in-house training (delivered by our Academic Development and Skills (AD and S) team tailored more specifically to the interests and needs of educators delivering in our higher education (HE) context. We explicitly provide advice for successfully delivering in virtual and hybrid conditions, and for integrating digital tools, such as Padlet and Menti, into LSP sessions.

Over the past three years, training has been provided to students, professional services staff, and academics, across all colleges and subject disciplines and career stages, to support uptake of the technique in a variety of contexts – e.g., employability and study skills workshops, strategic planning sessions, institutional conferences, and in-module discussion groups.

A central store of LEGO® is available, via the AD and S team, to everyone in the LSP CoP, ensuring that all facilitators have access to bricks and baseplates. Further, a dedicated Microsoft Teams site was created to support the growing CoP. This provides a place where facilitators can ask for advice, e.g., about how to overcome constraints associated with room or group size; which learning technologies could be used in conjunction with LSP to improve the experience; or how to improve prompts. Facilitators also use the Teams site to request co-facilitators to help deliver or observe and provide feedback on sessions.
The space also acts as a database of useful slides, images, LSP-themed pedagogical papers, and other resources that our facilitators share with each other to enhance practice and save time.

Outcome
When the community of practice was established in 2019, LSP was primarily being used on only two disciplines (Business and Engineering) based on only one of our campuses, and nearly all sessions were designed and delivered by a single facilitator. Three years later, LSP is regularly incorporated into activities across multiple disciplines in each of our three Faculties, provided to students and staff based on all four of our campuses, with sessions being created and delivered by nearly 100 trained facilitators. LSP has truly become embedded in the pedagogical culture of the University of Exeter.

One of the main benefits of growing the LSP community has been increasing the flexibility with which we can respond to requests for LSP delivery. Even after our first cohort of six facilitators was externally trained in Autumn 2019, the fledgling community of practice struggled to support all educators who wanted to run an LSP session for their students: Multiple facilitators were requested for online delivery to large classes, and it was impossible to meet this demand. Development of the (informal, non-accredited) in-house training allowed us to quickly upskill a larger number of educators so that they could design and deliver their own sessions (albeit often with advice and assistance from more established facilitators); this also allowed us to cover topics such as inclusivity and accessibility that had not been addressed in the external training. This not only reduced reliance on a select few facilitators, but also, through diversifying the community of practice, provided the entire group with opportunities to advance their practice by hearing about novel contexts and approaches elsewhere at the institution.

Additionally, and perhaps inevitably, LSP has also influenced our externally-facing activities. Facilitators in our community of practice have employed the technique with colleagues at partner institutions (e.g., to support strategic discussions while also teaching the method during education away days); collaborators in the business and charity sectors (e.g., to support brainstorming and group work); and outreach (e.g., community-based sessions delivered to Boy Scouts and in local schools). This has provided the facilitators with unexpected, but much-appreciated, opportunities for networking and professional development.

Several facilitators have had success in disseminating their practice more widely, for example at conferences, in academic journals, and in informal pedagogical articles online (e.g., Kight and Henderson, 2021a, 2021b). Each of these outputs has been produced collaboratively by two or more members of the community of practice – who found it easier to engage with this work when sharing the mental and time commitment with a colleague. These efforts have been supported by dedicated writing spaces, run weekly via Microsoft Teams using a ‘Shut Up and Write’ format (Preece et al., 2021), to provide the facilitators with the headspace and encouragement needed to focus.

Thanks to our CoP approach to LSP, a success for one facilitator is a success for all. The facilitators have supported each other in continually improving their practice and finding increasingly inventive ways to embed LSP across the institution, which, judging from our consistently positive session feedback, is greatly appreciated by staff and students alike.

Possible changes
If we were to start again, we would:

- Develop a strategic communications plan designed to advertise LSP opportunities (both facilitator training and support with delivery) more effectively. Our approach was relatively organic, which meant that we did not immediately have widespread understanding or take-up of the support that we were offering.

- Establish a centralised supply of LEGO® bricks earlier on. Because of funding limitations, there were many LSP requests that had to be denied before we obtained a university-wide brick collection that could be reused across departments.

New ideas for the future

There are two main areas we aim to address in the future:

- The LSP CoP (including facilitator training, maintenance of the Teams space, lending of bricks, etc.) is performed by a single person on a voluntary basis; LEGO® activities are not officially factored into the workload model of any LSP facilitators at the institution. This is a significant limiting factor, as LSP is popular and so facilitators can easily be overwhelmed by requests from students and colleagues.
- We do not have a formal onboarding process for new facilitators joining the community of practice and the associated Teams site. They are therefore not always immediately aware of the resources available, or how to get the most out of the group. A routine induction process – perhaps in the form of an interactive digital course or resource that can be accessed asynchronously – would alleviate this.

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4.10 Building bridges: using LEGO® to foster communication, collaboration, and connection

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LEGO® SERIOUS PLAY®/LEGO® (LSP) application

As our international student population has grown, we have looked for ways to create a more welcoming, accessible, and inclusive environment from Day 1 by innovating induction and focusing on supporting students as they transition into Higher Education. In particular, we have sought to move away from didactic and enculturating activities that signal a desire for international students to 'conform' to local ways of engaging with education. Instead, we have explored techniques that create a cohesive and supportive community that fosters two-way dialogue and collaborative approaches to learning. LEGO® SERIOUS PLAY® (LSP) has been key to this initiative.

One notable success story comes from our Graduate School of Education, where each Master's cohort comprises a significant number of international students (predominantly from Asia). We have introduced a two-hour LSP workshop early on the first day of induction, where the activity both serves as an icebreaker allowing students to become familiar with their peers, and facilitates a cross-cultural exploration of epistemology, pedagogy, and practical tips to support learning. (For a permanent Dropbox folder featuring all iterations of the workshop, along with a generic template that can be adapted by others for their own use, please visit: https://bit.ly/3dHAobi).

Students are invited to visualise learning – in terms of their own path to HE – but also more generally – in terms of how people engage with new knowledge. We explore potential barriers to a smooth learning journey, as well as techniques for overcoming these challenges. The session culminates in a discussion of learning goals and personal study plans for the year ahead – which, by that point, often involve communal activities such as peer writing groups.

While the induction often begins with 'home' and 'international' students sitting and talking in discrete groups, by the time the LSP workshop has finished, they are more integrated and relaxed – a sign that the LEGO® has worked its magic as intended.

Outcome

Response to the LSP induction activity has been phenomenal. Facilitators who had been involved with previous induction activities noted that the students were much more engaged during the LSP workshop – they were laughing, talking, listening, and generally showing signs of connecting with their peers. This was particularly heartening because our international students consistently noted (in their LEGO® models as well as in one-to-one discussions) that one of their biggest concerns

about studying in the UK was overcoming the language barrier. As is commonly seen amongst such cohorts (e.g., Zhang and Min, 2010), our students struggle significantly with language barriers; they almost unilaterally express a desire to have more opportunities to practise English in supportive, welcoming, low-stakes environments like the one we create through these sessions – and being able to use the visual aid to support their spoken vocabulary is a clear bonus. This is likely one of the reasons that the students themselves also provided positive, enthusiastic feedback on the session.

Many of our students, especially those from abroad, are unused to more interactive modes of learning, where lecturers spend more time listening than speaking, and where students are given opportunities to control the flow of conversation. Introducing that approach in induction signals the sort of education environment to be expected at the University of Exeter, but does so gently, without the pressure of needing to learn as they go while scribbling notes and wondering how the material relates to the assessment. Further, by providing opportunities for students to reflect on their previous experiences of learning, as well as on their own learning preferences, we create an environment where students and staff can co-create approaches that can be woven into future learning activities. For instance, student comments about language barriers have led us to explore language cafes and scheduling optional practice sessions in advance of class or conference oral presentations.

Throughout the induction session, we have woven a golden thread about narrative – the importance of the stories that we learn and tell about others and about ourselves. While it is generally easy for all students to tell a story, it is often more challenging to reflect on what those stories mean – and reflection is a key part of being a good educator. The LSP method, with its emphasis on metaphor and storytelling, therefore, provides an excellent entrée to this fundamental activity, while also allowing us to gently address related equality, diversity, and inclusivity (EDI) issues such as the prejudice and unconscious bias that may be inherent in stories we tell ourselves and each other (e.g., Ryan and Mooney, 2018; Price, 2010). At a bare minimum, the session offers students an opportunity to hear stories from other cultures, opening their eyes to different ways of being and learning.

We use Padlet (please find an example here: https://exeter.padlet.org/crkight/GSELSP2022) to capture photographs and descriptions of each of the models that the students build during the sessions. Collectively, these illustrate a wealth of learning journeys, approaches to education, and techniques for ensuring a successful Master's experience. In collaboration with our students, we are working on using these images as the foundation of two resources to be disseminated within the University: first, a blog post to support other students; and second, a how-to guide for facilitators who are interested in introducing a similar workshop into their own induction activities. These will support other staff and students who are exploring how to incorporate this approach in their own induction programmes.

Possible changes

Because of space constraints, these sessions are usually run in a room with lecture-style seating. This is not conducive to working with LEGO® or in groups in the most

relaxed and effective way possible. Ideally, we would address this by finding another location or running the session multiple times for smaller groups who can fit into seminar spaces; in the latter case, we could make use of digital teaching technology to allow groups to easily communicate and share between rooms. In fact, we have successfully run many other LSP sessions virtually, so another alternative would be to host this session entirely online.

We have revised our build questions several times in response to student feedback; overall there has been a shift from more philosophical builds e.g., ('how could narrative be used in teaching?') to more practical ones (e.g., 'how can your teachers best support you on your learning journey over the next year?'). Rather than guessing at which prompts would be most helpful, we wish we had collaborated with the students from the start in order to co-create the questions.

New ideas for the future

We recently provided bespoke LSP facilitator training for postgraduate researchers (PGRs) who teach at the University. We have subsequently involved these educators in induction delivery, giving our Master's students a chance to learn from their more experienced peers and perhaps have frank discussions that they would not feel comfortable pursuing with staff. This networking opportunity could also raise aspirations and provide inspiration (e.g., Hopkins and Ryan, 2014), encouraging our Master's students to consider progressing to doctoral programmes after their current degree. Indeed, the PGRs have collectively designed a 'mini-series' of LSP events designed to support postgraduates and other early-stage researchers with a range of issues; this suite of activities can be signposted during our induction session, and discussions in / feedback from all these sessions can inform our support provision for students in the future.

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4.11 LEGO® SERIOUS PLAY® and reflection: its use during the academic writing process

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LEGO® SERIOUS PLAY®/LEGO® application

A key aspect of our Psychology Foundation Year is a focus on learning to learn, which requires students to be reflective. Reflection is arguably a threshold concept (Meyer and Land, 2006) and as such is troublesome, with students' understanding developing as an iterative process. We wanted to make this clear to students by integrating a social constructivist approach to learning, allowing them to grow in 'liminal spaces' by experimenting with applying and connecting concepts. As activities such as group work, discussion and reflection are powerful within these transitional learning spaces (Walsh, 2020), we designed a LEGO® SERIOUS PLAY® (LSP) workshop to complement the requirements of the reflective component of an academic writing assessment.

This assessment, an essay critically reviewing ethnocentrism in Psychology, included a one-page reflection on the process students went through to develop their argument. The content and structure of this reflection was reasonably flexible. Students were encouraged to consider a discussion of the steps they took, the resources they used or how they decided on the criteria to use to structure their argument. The reflection did not have to follow a model of reflective writing, for example Rolfe et al. (2001). Instead, this was optional and only if learners would find it helpful to structure their writing.

The workshop applied the following process:

1. An explanation of LSP
2. Who uses it and why?
3. A description of the four key steps (Question, Build, Share, Capture)
4. Helpful tips to complete the four steps (no overthinking, thinking in metaphor/ story)
5. Warm up activity (students were given a random set of topics and had to build something, in three minutes, that represents it. They then took it in turns to tell the 'story' of their model to a small group of peers. The group were encouraged to ask clarifying or probing questions to help get more insights. They were asked to capture their thoughts on post-it notes.)
6. Main activity (students were given five minutes to build a model of the process they went through to develop their academic argument. Again, they were given the opportunity to share their 'story' and answer questions from peers. Any themes, comments or general reflections were captured on post-it notes and photos of these were shared for class discussion.)

Outcome
As per the module learning outcomes the aims of our LSP workshop were to allow learners to:

- demonstrate skills in reflection
- develop confidence and self-awareness in becoming an independent learner
- display an ability to assess own capabilities against a given criteria.

Based on the workshop process outlined above, we believe these aims were met. For example, whilst initially hesitant in the use of LEGO®, students were able to see connections between what they built and reflective writing models such as Rolfe et al. (2001). For example, one model of an elephant overpowering a boat, represented the student's feeling of 'imbalance' when structuring their argument and inability to find relevant resources to address this and write an effective essay. During discussions with this student, they were able to link this with the 'what?' and 'so what?' stage of Rolfe et al. (2001) reflective model, understanding that they were describing and analysing the situation.

We were also delighted with the insight students showed in relation to themselves as learners. In explaining their models, students were able to articulate the steps they had taken, and the challenges faced, more confidently than when we have directly discussed their written work in feedback sessions. One explanation might be that using a model provides distance from the student's writing and the emotional investment inherent in summative assessment, allowing them to speak more confidently about the challenges they faced. In addition, talking about their writing through the model may serve to ameliorate the power imbalance that can prevent students from articulating the challenges they experienced within the presence of the perceived 'expert'.

Of particular interest was that in discussing their models, students demonstrated awareness of key elements of the marking criteria, for example, the importance of an argument having a clear and coherent structure. Comments regarding where they felt they had struggled suggested an ability to evaluate their capabilities against the marking criteria.

An unexpected outcome was the sense that this activity and the process of sharing the struggles many experience with academic writing served to strengthen relations within the group. In addition, realising that others similarly find academic writing challenging may help to address the imposter syndrome felt by many students, normalising the feelings of frustration and self-doubt that often accompany academic writing tasks.

It is worth noting that there is another summative assessment, based on reflective writing, which the students submit later in the semester. So, in addition to the above benefits, this initial piece of assessed reflection provided an opportunity to practise ahead of the reflective writing assessment.

Given this was the first time we had run the workshop, we were delighted with student engagement and the feeling of excitement in the room. While we cannot

show a direct link between workshop participation and assessment grades, anecdotal student and overall module feedback has been very encouraging.

Possible changes

In the future we plan to design a longer session, which includes a writing activity. This would provide the students with the opportunity to consolidate their understanding whilst the discussions are fresh. This writing would in turn be used as the basis for their assessed one-page reflection. Following the initial discussions we will ask the students to upload a photo of their model to a web platform such as Padlet/ Wakelet. They will then write brief notes loosely structured around Rolfe et al. (2001) What? So what? Now what? model of reflection.

How the model represents the process of developing an academic argument. (What?)

How they felt about the process of developing an academic argument. (So what?) (Most importantly) consideration of the next steps, how they will apply what they have learned to future academic writing requiring an academic argument. (Now what?)

New ideas for the future

We would like to use LSP as a tool to help students reflect on feedback. Specifically, we intend to ask students to produce a model which represents barriers to engaging meaningfully with feedback. The session format would be similar to that described above, including the proposed writing activity. It is hoped that sharing experiences of reactions to feedback might help to ease the emotional impact of feedback.

Discussing ways to address the barriers would also provide a toolkit of techniques that students might use to engage effectively with feedback in the future.

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4.12 Online LEGO® SERIOUS PLAY® in a coaching context

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LEGO® SERIOUS PLAY®/LEGO® application

Having delivered many face to face LEGO® SERIOUS PLAY® (LSP) sessions for staff, researchers and students prior to the pandemic, the move to online teaching meant a total re-think of my LSP practice (blogpost). Although teaching had moved to MS Teams, I wanted to preserve the essentially tactile and visual experience of LSP. We had the opportunity to try out delivering a 'hands-on' online LSP session for DMU's PG Cert Professional Coaching in late 2020 and developed the experiential workshop together.

As well as offering the chance to explore LSP's online potential, this session allowed us to consider the considerable synergies between coaching and LSP. For example, the use of metaphor is important in both these worlds: Alison James (2014, 121) describes students "gently coalescing principles of metaphorical building into their builds" during a LSP workshop, whereas coaches may use organisational metaphors (Scholl and Schmelzer 2022). Experiential learning is a factor in both LSP and the development of coaching skills, and this session aimed to embody this link (see below). The LSP workshop was placed under the umbrella of Approaches to Coaching, alongside sessions on psychological approaches and neuroscience developments, and was described as Creative Coaching: exploration and practice.

The course leader's objectives for the session:

- Embed the link between coaching and experiential learning
- Show how the use of metaphor (in this case LSP models) can give coachees a stronger sense of visioning the future and the emotional content of the problem/dilemma to be solved
- Show trainee coaches that the traditional method of coaching (i.e. non-directive questioning techniques) can be supplemented by modelling and metaphor (and other creative techniques)
- Create a natural bonding session between course participants, so that they could share their desired development journey towards being a coach

Mini bags of LEGO® were posted out to participants beforehand (the fact that this was a small, UK-based cohort made this not too expensive or time-consuming). The online session using Microsoft Teams followed the following format:

- Introduction to definitions, history and theories behind LSP
- Establishment of ground rules
- Outline of benefits of LSP in a coaching context including: offering an inclusive, non-hierarchical approach where everyone in the group has a voice, appealing to those who prefer kinaesthetic, visual forms of coaching,

providing a catalyst for verbal communication and a ‘bridge’ into the use of other tools such as reflective journals.

- LSP activities carried out remotely and shared with the wider group via cameras with spoken description of model 'stories':
- Build a creature with 4 bricks
- Build an individual model showing how you currently see yourself as a coach
- Make 5 changes to your model to show you’d like to see yourself in the future as a fully-formed coach
- Participants then shared photos of their individual models on a shared PowerPoint slide (I have also used Padlet for this), then added text to indicate shared themes and connections between models.
- Links to LSP materials and training were also shared, plus a selection of further reading articles.

Outcome

The participants, some of whom were also members of staff, engaged enthusiastically in the session, and enjoyed the novelty of experiencing some online learning that had a multisensory element.

Feedback from students and programme leader:

Participants valued the clear links that were drawn between Lego Serious Play, and experiential learning in general, to coaching practice. They were challenged, engaged and amused by using LSP in this context and found the session invigorating and creative.

Possible changes

Although this approach to LSP online worked effectively in many ways, the identification of connecting themes between individual models was less fruitful in with face-to-face sessions. Providing a framework or template in the form of a PowerPoint slide or Padlet, would encourage further input, both during and after the session.

New ideas for the future

Encouraged by the growing interest in LSP within the coaching community (Quinn, Trinh and Passmore 2021), we'll be working with colleagues on the PG Cert Coaching programme at DMU and externally to further embed LSP into coaching programmes and practice, both online and face to face.

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4.13 LEGO® figures and photovoice: doing 'Legography' online

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LEGO® SERIOUS PLAY®/LEGO® application

COVID created new challenges for academic development workshops that use object-based approaches to engage all senses, support metaphorical thinking, and create a framework for sharing reflections on teaching practice. To explore academic identity with new lecturers, we adapted our use of LEGO® for online learning. The synchronous online workshops that we designed articulated academic and non-academic influences.

The workshop design was partly inspired by LEGO® SERIOUS PLAY® (LSP) principles; in particular, metaphorical thinking and playfulness (Nerantzi and James, 2019). A second influence for the use of LEGO® was the work of Portsmouth photographer Andrew Whyte who coined the portmanteau word 'Legography,' meaning LEGO® + photography. Using his iPhone, Whyte photographed a LEGO® figure holding a camera, staging adventures for his miniature alter ego in a variety of settings such as city streets or beaches (as described in Berkowitz, 2014). After introducing Whyte's photographs and our own Legographic work, we asked workshop participants to create their own Legographic adventures: they used LEGO® figures (rather than bricks as in LSP) to allow for identification, and placed them in a backdrop created by objects at hand in the participants' offices or homes that conveyed facets of their academic identity (e.g. a laptop or a book on academic writing).

The workshops then incorporated mobile learning elements. Participants used their mobile phones to take close-up photos of their LEGO® figures displayed within their miniature imagined worlds, thus following in Whyte's footsteps. Participants then shared their images on a Padlet site, thus drawing on the well-established digital practice of 'sharing' which has been repurposed for pedagogical purposes during the pandemic.

We provided examples to help participants visualise how they could use their figures and objects in their environments, to convey facets of their academic identities.

Our third influence for the Legographic workshops was the visual participatory research method called photovoice which invites research participants to take photos, provide the story behind the photos, and if appropriate, share them within their communities (Call-Cummings et al., 2019). We asked participants to add a short reflective narrative to the photos posted in the Padlet site, to explicate the meaning of the figurines and backdrops captured in the photographs. The resulting Padlet gallery then became the focus for synchronous discussion, a common digital practice with Padlet (Shuker and Burton, 2021), where we identified commonalities and differences between images and narratives.

Outcome
Inspired by LSP, Andrew Whyte's photographic work with LEGO® figures, and the photovoice method, we created a novel format for academic development workshops where the focus is reflection on practice. The design of the online workshop affirmed our commitment to using object-based learning to model alternative teaching practices. The online dimension enriched the workshops as participants created a lasting trace of their Legographic work through postings to a Padlet site, something that might have been omitted in a campus-based workshop.

In the online workshops, we could have used well-tested writing techniques to encourage reflection (e.g. automatic writing, textual prompts based on models of reflection). However, we recognised that writing reflectively can be problematic for many people. Using visual and material prompts can help colleagues develop their reflective skills, which can be enriched by sharing the reflections (Radović et al., 2021). We also wanted to diversify the range of online learning experiences that we offer to our academic colleagues. The tasks used in the workshops address three types of knowledge creation: monological, dialogical and trialogical (Paavola and Hakkarainen (2005).

1. *Workshop phase 1 ('monological' knowledge creation)*
   The playful use and staging of LEGO® figures enabled participants to engage in individual reflection without the pressure of having to write at the same time. By the time participants wrote short narratives to enhance their photos as expected in the photovoice method, they had 'rehearsed' these narratives mentally and had embodied them in the staging of their figurines (monological knowledge creation). This made reflective writing easier, particularly for participants whose disciplines do not explicitly include reflection.
2. *Workshop phase 2 ('dialogical' knowledge creation)*
   As per the photovoice method, participants shared photos and narratives. We used a Padlet site to allow for a social or 'dialogical' knowledge creation with peers – a digital practice that has been foregrounded in online learning during the COVID lockdown (Shuker and Burton 2021).
3. *Workshop phase 3 ('trialogical' knowledge creation)*
   Discussing the postings on Padlet invited participants to revisit and amplify their narratives, thus providing space for a 'trialogical' form of knowledge creation where individual and collective contributions resulted in an emergent mediating artefact – the multivoiced Padlet site itself – which participants could download as a PDF file for further reflection.

Observation and feedback suggested that participants enjoyed the playful nature of the tasks and the experience of mobile learning for personal development activities. They recognised the value of the playfulness involved in staging LEGO® figurines as an aid to supporting personal reflection. They also appreciated the community elements of the workshop and enjoyed discussing photos and narratives to enrich their perspectives.

However, the unfamiliarity of object-based learning was an issue for some participants. Rather than discuss our completed Legographic examples, we could have demonstrated the process of putting together a miniature imagined world to model object-based learning. Also, our examples were based on our current practice

as academic developers; replacing those with examples drawn from the disciplines we used to teach might be more meaningful. Another criticism from participants was the difficulty of using this kind of teaching method in their disciplines. The topic we chose – academic identity – perhaps made it more difficult to see a potential for transferability to student settings, as not all disciplines consider that identity has a part to play in the curriculum. To address this point, an alternative topic for future workshops could be the teaching of academic skills (e.g. bibliographic skills): this would make it easier for participants to see connections with their teaching contexts and help them create Legographic materials that invite students to identify themselves in the learning environment.

Possible changes

Providing more detail in the rationale and instructions may seem paradoxical when encouraging free-flow play, but sometimes participants are not familiar or comfortable with playfulness as a legitimate form of expression (Whitton, 2018). To help participants develop confidence with LEGO®, we will encourage participants to consider carefully the setting in which they display their figures; any object at hand, including the figures, can be imbued with meaning and the background can also convey elements of the reflective narratives that participants are sharing.

Simple instructions on using camera phones will be provided before the workshop to enable participants to take 'richer' photographs; for example, photographing LEGO figures outdoors, or using the focus function in the camera to sharpen areas in a photo while blurring others can help convey the importance of some elements while recognising other elements have a secondary role. Phone apps could also be used to crop or modify the photos (e.g. Snapseed).

New ideas for the future

An extended version of the workshop could incorporate digital storytelling to build on the discursive and metaphorical characteristics of Legography. This form of digital expression combines still images with text and an audio track. An extended workshop would require participants to develop some appreciation of digital storytelling as an academic genre for learning, teaching or research (Hessler and Lambert 2017). They would also acquire digital skills in audio -recording and in combining visual and audio assets into a digital story.

Participants would be guided to develop a more detailed narrative around their LEGO® figures, to explore change, contexts and timelines, for example. They would take three to five photographs, to illustrate the beginning, middle, and end of their narratives. Sharing photos and short narratives on Padlet would remain an intermediary stage, to allow participants to receive community feedback.

To generate a digital story based on the photovoice artefacts, participants would create audio narration with Audacity (or select copyright-free music), and combine it with their photos to produce the story with Adobe Express or Microsoft PowerPoint, as a short .MP4 video file. Another round of sharing would take place on Padlet for participants to give and receive peer feedback on their digital stories.

With prior discussion and agreement, we would encourage participants to share their digital work with the wider community (e.g. within the university or cognate disciplines). Allowing for trialogical knowledge creation would be in keeping with the ethos of photovoice and digital storytelling as participative research methodologies.

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4.14 Preparing doctoral students for their viva voce examination during the pandemic using LEGO® and LEGO® SERIOUS PLAY®

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LEGO® SERIOUS PLAY® (LSP)/LEGO® application
Prior to the COVID-19 pandemic, and predominantly since 2010, I was using LSP and LEGO® in various face-to-face workshops and courses. In addition, I used LEGO®-based approaches for alternative evaluations and to spice up conference contributions for social engagement, learning, teaching, professional development and scholarship in higher education with educators and students (James and Nerantzi, 2019). The pandemic changed everything. While I had used online LEGO® platforms before with digital and physical LEGO® bricks, in some remote and face-to-face sessions, this had been very sporadic. During the pandemic, remote workshops became normalised. A quick rethink, resourcefulness and adjustment were needed.

This case study focuses on a LEGO® application linked to a doctoral students' development programme offered at Manchester Metropolitan University and specifically the preparatory workshop "LEGO®, your viva and you". I used to offer such workshops on campus with doctoral students from Manchester Met and other institutions and they always generated interesting discussions, challenged thinking and presented playful ideas to consider during viva voce examinations. In these, I had used a LEGO® suitcase with plenty of LEGO® bricks and a wide configuration of activities for larger, smaller groups and pairs. A large group was up to 15 students. Evaluations had shown that these LEGO® workshops were well received and that doctoral students found them useful.

In order to continue this offer during the COVID-19 pandemic, the LEGO® workshop was moved online using web conferencing technology. Participation was capped to 12 participants. I wanted to keep it simple and not disorientate anybody through using different digital spaces and tools. Doctoral students were informed in advance that a small amount of simple LEGO® bricks would be required for the workshop. Reading materials about the use of LEGO® in higher education and learning through making were provided in advance. Doctoral students were encouraged to take pictures of their models. I was pleased that workshop participants switched on their cameras and most of them had LEGO® bricks in front of them and looked excited and were keen to participate. After a brief introduction to LSP and the viva voce examination process and after I also shared my personal story where I used LEGO® during my own PhD examination to explain phenomenography, the methodology I had used, I engaged participants in small making tasks following the process that also included shared reflection. Activities had a focus on the doctoral journey, visualising own research, the methodology, key findings and contribution to knowledge. Those that didn't have LEGO® could use alternative materials to construct a response to the brief. Some used drawings instead. The activities aimed to provide food-for-thought and inspiration to doctoral students on how such activities could be useful in preparation and during the viva voce examination across disciplines and professional areas linked to a wide range of research projects. My observations and students' reflections showed that the use of LEGO® and LSP

activities enabled deep reflection and meaningful sharing with peers and helped them think about approaches they could use during their forthcoming viva voce if they wish to do so.

Outcomes

Smooth continuation: The move to a remote workshop format secured the smooth continuation of the LEGO® workshop for doctoral students, and, while it was a different experience from the usual face-to-face workshops, it still enabled them to come together as a group, see each other and engage in playful tasks that helped them to build playful and creative confidence and competencies for the viva voce examination.

Modelling the use of LEGO® and LSP and how it could be used in doctoral students' development in online settings illustrated that it was possible to experience learning online, not exclusively as digital and on screen but also have a physical and hands-on dimension that brings learning and development alive.

Possible changes
Online LEGO® and LEGO® SERIOUS PLAY® workshops are not only possible, they also enable alternative and complementary ways to engage in playful learning and development remotely that can be social and collaborative. The constraints of the pandemic illustrated this well.

As not everybody has a LEGO® kit to hand, it would be useful perhaps to think about how institutions can make sure that every participant has these to hand during the workshop. A LEGO® bank could provide LEGO® kits to educators and students on a borrowing basis. Alternatively, students could be given a one-off voucher to purchase a LEGO® set that could be used during the workshop and other related activities during a specific development programme.

Setting up a discussion space through which resources could be shared in advance and participants could get to know each other and their research would be a useful addition and has the potential to extend engagement. However, we need to be mindful that this would be even more useful if the workshop is part of a programme. In which case, there may already be a discussion space in place which could be used to enable this additional communication, collaboration and sharing before, during and after the workshop, also of models created.

New ideas for the future
A one-off LEGO® and LSP workshop may be a trigger to introduce something new for some doctoral students. However, if such activities are more integrated into a doctoral development programme from the outset and throughout, there are more chances of building related competencies and confidence in using these not just for viva voce preparation but also more widely on the doctoral students' journey and activities (Nerantzi, 2018).Therefore, I would like to explore if any future applications and workshops could be discussed with doctoral programme developers and organisers so that playful and creative approaches are a normalised part instead and add-on or a one-off event or activity.

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4.15 Exploring team identity in a creative arts charity

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LEGO® SERIOUS PLAY®/LEGO® application
The explosion of the COVID 19 pandemic coincided with my personal choice to leave institutional life in HE and focus on conducting a study into play in HE, funded by the non-profit Imagination Lab Foundation (James, 2022). From 2020 to 2022 my play explorations included a great many online events and collaborations, using LEGO®,LEGO® SERIOUS PLAY® (LSP) and wider forms of play and games. The need for connection many felt during a time of remote learning (as well as Zoom room fatigue) led me, like others, to seek out alternatives to the way I had engaged people hitherto. Experiences included drawing, dance and movement, Powerpointless seminars, playful interactions, collaborative poetry, craft making and object-based activities. LEGO® falls into the last of these. While it featured in a small way in many of my sessions, here I focus on one specific activity. This involved my creation of an online LSP-inspired workshop for an arts charity.

Arts Foundation
The online workshop was designed to open their annual conference, also online, in summer 2021. It was a deliberate means of bringing people back together and helping them reconnect with who they are, as individuals within the group and also as a collective.

I combined a LEGO® based approach with an appreciative inquiry (AI) philosophy, for them to build, share and reflect on the following questions: “Who are we, what are our strengths and how can we be better still?”

Having started with introductory skills-focussed activities and explanations regarding LSP, we moved onto building models following the five stages of AI, using a model from the Organizing Engagement website as a basis for the following questions:

Define - creating individual identity models. Who are you in the team/organisation? What is your focus? Whose interests do you serve?
Discover - exploring team identity. How do you do what you do? What is the spirit, feeling of the team? What are the best bits about how it works?
Dream - team life models. What might be? What is the world calling for?
Design - What should the team be?
Destiny - How can you catalyse and sustain what needs to happen?

Builds took place in plenary, with participants working individually but within the single Zoom space, or in its breakout rooms. The five phases were underpinned by paradigm shifting questions from this resource at the Benedictine University, including:

- What led me here?
- What do I value?
- What is changing?
- What’s the best future I can imagine?

- What will it take to get us there?

Outcome
As the charity had a limited staff development budget, there was no question of them investing in bespoke LEGO® materials, nor was I in position to distribute my own LEGO® to a widely dispersed group of people. The team opted, therefore, to crowdsource their own LEGO®, from children, neighbours, friends and family. While not the official way to provide LSP materials, this turned into an inadvertent and positive warm-up activity which built excitement in advance of the session.

(It has been suggested that working with random or unevenly distributed allocations of LEGO® bricks is unwise as potentially unfair. I have never encountered this as a problem, nor did it manifest in this session. Rather, people were entertained and inspired by how others had managed to come by their LEGO® and what they had found.)

The workshop was three hours long, conducted over Zoom with mini breaks and use of breakout rooms flexibly built into the session. The group already had their own team nicknames and I adopted one too, which added to the playful spirit. There was a great deal of goodwill from the start, as this was the first time everyone had managed to get together for two years. The accidental fun of LEGO® collecting and the great buoyancy of mood both created an excellent environment in which to build and reflect.

An important maker or breaker in online workshops can often be the comfort and confidence of participants working on different digital platforms. It can be tricky where there are mixed levels of capability. In this session, it became quickly clear that, even though we were on Zoom, all participants were far happier with a low-tech approach to sharing models. We therefore abandoned plans to use digital sharing spaces to post images. Instead, participants - who kept their cameras on throughout - held their models to the screen and turned them around and told their stories. This brought into play the 3D aspects better than photography can, and also encouraged the speakers to physically handle attributes of their models rather than say where these were in an image. This worked well with the bigger models, and also with the smaller ones - for example when participants built the three most positive factors that affect the team’s ability to realise their dreams.

What also thrilled me was the spontaneous and inspired hijacking of a plenary storytelling session where small groups were going to tell each other about their models and ideas. Instead, the group decided to replace this with a single ‘stop motion’ performance across all Zoom screens. In this way each of the participants shared their model and part of the story before handing the narrative over to the next person. This resulted in an almost seamless, funny and powerful ensemble piece which really consolidated the group feeling and shared intentions.

Participants loved the use of LEGO® for all the reasons that we now find common among proponents of play in HE: it is creative, inspiring, imaginative, amusing, thought-provoking. It opens up different conversations and perspectives. Using LEGO® online, as so many have discovered, enlivens what can be an energy-draining environment.

Finally, as other case studies in this collection illustrate, I found the ability to hybridise the workshop and bring together different resources and theoretical perspectives was enriching. In addition to the LEGO® bricks, my materials for this session included a large gold egg timer. This was used to frame times for building and having this extra object/visual added to the play mood.

Possible changes

The workshop worked well with the adaptations made to work with this group's preferences. Another group might not want to go down the performative route or find the use of Padlet or MIRO or some other kind of visual sharing platform preferable. The main thing is to be attentive to the needs of the group; their sensitivities, prior experiences, preferred ways of working. Incidentally, I had asked in advance about digital proficiency and been assured that everyone was comfortable working with digital platforms, however on the day this did not turn out as expected. It might simply have been, however, because they relished the chance to work without additional digital tools.

New ideas for the future

This workshop was born of the particular conditions of the pandemic. It would work again as it is, online or face to face (bearing in mind the qualifiers I listed just now). Being able to have more time or offer a follow up workshop which could focus on the next steps or act as a review point further down the line would also be helpful.

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4.16 Co-designing learning brick by brick : Using a LEGO® SERIOUS PLAY® method to review and co-design modules

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LEGO® SERIOUS PLAY®/LEGO® application

Over the last three years I have delivered a number of face-to-face LEGO® SERIOUS PLAY® (LSP) workshops across my university in the UK and in China and also during international educational conferences. This experience has allowed me to develop the LSP method for use in module design, module review and evaluation. These workshops have been run with both staff and students.

The activity of designing learning environments such as courses and modules is complex. Part of this complexity is due to the following; the involvement of multiple stakeholders such as students and employers, discipline-based challenges, accreditation bodies and a multitude of pedagogical choices. In recent years, the increase in the use of digital tools, coupled with blended and hybrid teaching approaches, has added to design options. As a product designer, I am aware of the value of prototyping early in the design process. Schrage (2000) recognises the value of prototypes for early sharing of ideas during a collaborative design process. It is difficult to build a prototype of a module, however, my suggestion is that LSP offers a good option for sharing and building pedagogical ideas.

LSP workshops including both staff and students were introduced to support module design activity across all undergraduate levels. Sessions included small groups of 6, up to larger groups of 36 participants. All followed a fairly standard LSP method of challenge, build, share, reflect. In some workshops, one aim of the sessions was to introduce new thinking into existing modules. For example, discussing decolonisation of the curriculum or inclusive practice. In such cases, a presentation provided by learning designers or academics and the LSP workshop was designed to answer specific challenges around a specific topic.

To introduce empathy within a design thinking process some sessions included parallel LSP challenges and builds. Staff may respond to the instruction “Build a model which visualises the module structure including assessment of your module”, while students on the same table build “Build the employable graduate”. This co-design format has been very well received by staff to build empathy between staff and students and encourage new thinking into their module designs.

LSP Process

Module re-design sessions typically include two individual LSP stages and the workshops have been around two hours duration. The workshop has always included a 30 mins introduction to LEGO® and the LSP method. In module design workshops, one of the biggest changes I made to the standard LSP process was to provide each participant with a 32 x 32 base board to build on. In my experience this supports more novice LSP users to think about their module design without the need to think about building the LEGO® structure itself. Some longer sessions incorporated a final group build which can be very useful to combine ideas if time allows. Notably the higher level students appeared more capable of adding new

ideas to the design of modules, perhaps because they were more experienced module users.

Outcomes

The following outcomes from using LSP in module design are best demonstrated by sharing the following comments from participants.

One participant shared that “developing a different perspective really stood out as people got to share their ideas in a really constructive manner”, and “It initiated out of the box thinking which helped in realising the different steps that can be undertaken to create a more interactive curriculum”, and “Not being a creative - found it easier to be creative.” The LSP method underpins a creative process by providing a safe space for building and sharing ideas together. The experience of ‘flow’ as the playful force discussed by Csikszentmihalyi (1998) appears to stretch the imagination of the participants, some of whom seemed surprised by their new levels of creativity. Staff commented that “LEGO® seems like a surprising but useful vehicle to get students to open up about the module both in terms of feedback and new ideas.” This process provides very rich feedback from the students who participate as designers of modules, providing a powerful way to develop empathy between staff and students and include the student voice in a module co-design process. Participants were also impressed by “The way you could create a physical visualisation of a module”, and then “how ideas are informed by listening and ok to change/ amend”. One staff member commented that, “Having physical representations of ideas is very helpful and are available as reminders to move around the table, to adjust, connect, combine, discuss. One idea cannot be forgotten or ignored as it has to be physically removed.” In this way LSP can be very inclusive allowing all ideas to be considered equally as they are represented physically in the design by bricks.

The LSP method provides a simple way to prototype a module, something which is not easy to do. When this is combined with a structured approach to sharing and listening the effect is to provide a fluid design tool with instant feedback from other participants. Quick prototypes offer valuable fluidity in the early stages of a design process. Because LEGO® bricks come apart as quickly as they fit together, it is easy to test ideas and designs quickly and then iterate them by changing and amending the designs. The rapid prototyping offered by LEGO® can be leveraged to provide a creative and quick way to visualise different pedagogical approaches to allow a design’ sketch’ or ‘prototype’ early in the module design process.

The brick prototypes themselves are, of course, important, and staff often take pictures. However, one of the most important outcomes of the LSP module design workshops is often the conversation, reflection, and listening, while sharing stories between builds. The LSP method offers a safe, creative and managed ‘space’ which is ideal to support open conversations around pedagogy. Listening to others during the sharing stage of LSP can deliver surprisingly rich outputs and a level of empathy which could easily be missed by using other methods.

Student feedback from sessions appears to be far richer than any other module review processes I have experienced. When students are fully involved as ‘expert users’, they have proved to be very capable of offering substantial improvements to

learning designs. The nature of some of the feedback from students about learning and teaching experiences can be very hard hitting. Students can be critical of the course, which needs to be handled sensitively if feeding back to module leaders. More can be read about feedback from students with images of some of the student LEGO® prototypes on my website at https://dantrowsdale.co.uk/.

Possible changes

The quality of creative input and enthusiasm of the participants in all the workshops I have delivered has been surprising.

Outputs from LSP are difficult to capture, particularly when the output is a design. Another challenge of LSP is the time it takes to set up the method and run it through enough phases to develop a valuable output. Most, if not all, participants can see the value of LSP once they have participated, however the problem can be convincing some staff of the value and effectiveness of play and LSP if they have not experienced it for themselves.

New ideas for the future

Staff have been really engaged in the workshop but outputs have been ideas and approaches, rather than fully constructed module designs. My thinking to improve this, is to extend all sessions through to a group build with more refined LEGO® construction of module definition as the outcome. Another idea is to run repeat LSP sessions with the same participants to allow more time to define the module designs developed during the LSP workshops. My ultimate aim is to demonstrate a link between LSP module design workshops and positive changes in the curriculum. This will be done by reviewing updated modules the following year to capture any impact of module changes on the student learning experience.

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4.17 LEGO® SERIOUS PLAY® From the heart, outwards - building compassionate campuses

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LEGO® SERIOUS PLAY®/LEGO® application

Educator (Rebecca) I used the LEGO® SERIOUS PLAY® (LSP) approach to facilitate a learning event as part of the University of Exeter's Festival of Compassion 2021. This was a cross-campus week of talks and sessions including: art, yoga, music, poetry, therapy, spiritualism and guided nature walks. In line with the ethos and intentions of the festival, this learning event was designed to explore how higher education campuses might embody compassion for learners, colleagues, and the wider community. Furthermore, one of the festival's attending themes was around reconnecting, after what had been, for many, a long period of isolation during the pandemic and national lockdowns. Using and sharing concrete resources in a face-to-face session seemed a wonderful way to enable that reconnection, through both the physical experience of handling the LEGO® bricks and the ensuing discussions between the four other attendees who were from a mix of academic disciplines and professional services.

Journeying through the four 'skills builds', we arrived at a collaborative expression of what a compassionate campus could be. Pictures of some of the individual builds, and the final group build, were documented on a shared Padlet Board with accompanying summaries of the ideas and discussion that followed each build. What follows is an outline of the session, integrated with reflective responses from one of the learners at the session.

Educator Actions (Rebecca)	**Learner Reflection (Sarah)**
Skills Build 1 (individual) For this first build, learners were asked to construct their ideal classroom or workspace	Joining an in-person event with four other people after remote working during COVID 19 arrangements was very appealing. I perceived the first activity as "low stakes" *Jessop and Hughes (2018)* and therefore felt a high level of "self-efficacy" *Bandura (1997)*. As I selected and handled the bricks, I felt my mind go into a relaxed, focussed and calm state – the universality of the bricks stripped away all preconceptions and limitations. It was easy to represent the importance of being able to connect with nature by using a window brick. It was easy to show interest in other people's ideas by looking at their bricks and

	it was pleasing when they gave feedback on my build
Skills Build 2 (individual) Learners were restricted to 5 bricks each with which to represent one of the following (of their choosing): A park A nature-walk Belonging Kindness	Being restricted to five bricks made me focus on what was important and symbolic – handling the bricks enabled me to reflect in a more tangible way, as well as communicate my choices in a concrete way with my build. Observing others doing the same continued to enhance the connected team-based learning feel of the session. As we chatted about what we were doing and described our build, the bricks allowed for metaphorical descriptions of the concepts we had chosen, which offered up different, and sometimes surprising, perspectives on what we might think are commonly understood ideas.
Skills Build 3 (individual) Learners were asked to show how they would design and grow a healthy and compassionate campus	This part of the session provoked a great deal of discussion between us – observing and being inspired by features that the other people built and thinking about how to connect my own campus feature with it. For example, I had started with a window brick in my previous build to represent access to nature. I then transformed this into an entry point to the University campus and I added a brick to represent a “universal” baby at the threshold of this entry point. Doing so, invited a consideration of how the university community reaches out to the learner from birth; engaging with prospective learners; and, acknowledging that learning is a life-long endeavour, in the complete sense of the phrase (not just as we mature)
Skills Build 4 (group) For the final build, learners came together as a group to design our “compassionate university”. Learners took turns to add/remove elements from this build. They were invited to take elements from their previous builds if they wished	The build had a really energised feel as we worked on the whole board adding elements to each other’s builds and discussing a life path for the “universal baby”. Although this was far from the difficult task of learning *R* programming language described by *Charalambous, Hodge and Ippolito (2021),* the team-based learning approach (TBL) *Michaelsen and Sweet (2008)*, lowered any tiny elements of social anxiety. I had placed my window brick as a qualification entry point to the

	campus but as we discussed the build, one of the other people reached in and moved it to the exit from the campus - reflecting our common endeavour to remove barriers *into* the community but ensure rigour and positive change *within* and upon "exit". In a different context, where we had simply been brainstorming ideas in writing without LEGO® this might have felt as if he was disagreeing with me but in the LSP context this change represented a positive, concrete illustration of how our ideas were evolving in a collaborative way.

Possible Changes
There was no follow up to the activity apart from sharing a Padlet of the experience, including photos of the build, with the group. I would like to create a space in which some of the ideas can be shared more widely, rather than only being discussed in isolation as part of a 'one-off' event. Buy in and support from the University as well as the timing and space given to staff in the form of scheduled development time would allow for more engagement and a higher profile of this valuable activity to take place

New ideas for the future
To create a suite of LSP sessions on the theme of the compassionate campus, which would allow educators to reflect upon and share the impact of the exercises on their teaching practice, over time. To explore pedagogies that explore success of communities as part of a more diverse and inclusive offering.

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4.18 Abstract bricks: LEGO® as a conceptual tool for teaching experimental design

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LEGO® SERIOUS PLAY®/LEGO® application

The Department of Biology at the University of York runs a stage 2 practical ecology module in which students consider the theory and practice of sampling animals, plants and the environment to understand populations and communities. Teaching materials and workshops prepare students for a residential field course at the end of the module. Experimental design - how to choose, use and critique sampling methods - is a key learning objective.

Collecting 'real world' field data is time-intensive and weather-dependent and is challenging when teaching through the winter in the North of England. We developed LEGO® ecology to help students extend their understanding and engagement with data collection methods and experiment with sampling and analysis, without spending hours in the field. Students work in groups to explore a LEGO® community; a large brown envelope filled with LEGO® bricks with some shapes and colours more common, and others rarer. Each group develops a story about their own community and its place within the wider 'landscape' as the weeks pass, based on sampling and analysis tasks.

A good example of our LEGO® adventures is the problem of working out how many species are present in a given study area (see here). In this activity, students take handfuls of 6-8 LEGO® bricks from the bag and count the number of 'species' present, e.g. 3 red, 2 blue and 1 green. They draw a species accumulation curve; a graph with sampling effort (how many bricks, or how many handfuls) on the x-axis, and number of unique species on the y-axis. As their sample size increases, some species are repeated but new ones continue to appear for some time. In this way, we can explore how many samples are enough to get a good estimate of true species richness, and how this varies depending on sample size and number.

Outcome

LEGO® ecology allows students to put theory into practice immediately, at low cost, with high autonomy over the pace of active learning. One consequence is that attendance at workshops remains high throughout the year (95%+ pre-pandemic, 60-80% post-pandemic) even when attendance drops off in other timetabled events (<50%). Student feedback suggests that the use of LEGO® not only made learning more engaging, but actively helped them to understand sampling and analysis concepts, and it was clear how the activities supported learning and real-world fieldwork:

"It is a great way to teach concepts which may be difficult to grasp if it weren't for the LEGO®."

“I really enjoy the tasks as it encourages us to improve our field work skills, as well as have a bit of fun!”

“Worth getting up for a 9.00 am.”

“...using new methods to make it interesting and putting various sampling techniques into practice. It made things much easier to visualise and understand.”
“I really liked being able to put into practice what I was learning, and seeing how it was useful.”

“The workshops are fantastic. Very fun, but extremely helpful in aiding understanding of the course content. I want to do this module forever!”

Even when we had to move online during remote teaching in COVID lockdowns, the use of LEGO® in a virtual sampler still helped students to play with sampling concepts:

“Really fun and interactive… One of the most interesting modules.”

“The [virtual] LEGO® workshops were an excellent way of putting the lecture content into context and really helped my understanding.”

The use of LEGO® as an abstraction for ecological processes helped students to articulate how they use their understanding of ecology to navigate the world, and to question their own knowledge and assumptions about ecological systems. For example, the first activity in LEGO® ecology is creating a taxonomy of bricks. What defines a species in the LEGO® community - is it colour, shape, size, or some combination of those things? One approach is to classify colour as the key species identifier. Discussions arise even from that simple classification: what does brick size mean? Is it age or size? Is shape simply individual variation in physiology? Is transparency a different colour/species or a marker of disease, or a morph that might, in a real life equivalent, be difficult to classify? How do these key features of individuals affect how easily they are found in the paper bag, and how does that affect sample data? If a rare species is also small, how does the combination of commonness and size interact? These are all questions that have clear real world analogies. Using LEGO® helps students to embrace the methods (and their limitations) to appreciate structural biases in sampling:

"Absolutely incredible module! I have always found sampling the most boring topic in biology but it was somehow made interesting!! (probably the lego[sic])"

“Never before have I started a module that I thought I would despise, only to find out it was the best module ever.”

Possible changes
The current module structure has six workshops, each with preparatory videos explaining theory and applications, followed by LEGO® sampling and analysis tasks related to the recorded material. These follow a logical progression in learning but stand alone as activities. The LEGO® tasks could be structured to have more narrative between workshops, so that students try to solve problems using LEGO®

case studies and develop a coherent story about experimental design in the LEGO® ecosystem to link between workshop topics and lead into their field course projects, as well as an in-depth understanding of the separate concepts, methods and limitations.

New ideas for the future

We plan to go underground! Our abstract ecology universe revolves around experimental design for plant and animal populations and communities. We will use LEGO® to explore microbial communities in soil. Students need to decide what kind of soil to sample, and how, based on their understanding of soil structure, physical and biological properties. We will use interlocking, shape and size properties of LEGO® bricks to understand composition, porosity, and density of soils, by asking students to test how many bricks can fit into a box in different build formations and learn how to sample different soil types for microbial communities.

4.19 Belonging with LEGO® SERIOUS PLAY®

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LEGO® SERIOUS PLAY®/LEGO® application
I have been using LEGO® SERIOUS PLAY® (LSP) in a Higher Education context since 2017 for teaching, research and strategy purposes - first as Head of Curriculum Enhancement at the University of Leicester, and more recently as Head of Anglia Learning and Teaching at Anglia Ruskin University.

In 2018-19 this culminated in a major strategic project to explore and understand 'belonging' at the University of Leicester, for students and staff. Belonging is a complex and highly contextual psychological/sociological concept: Liz Thomas, in her 2012 report for the “What Works?” student retention and success project, noted that belonging at an individual level “recognises students’ subjective feelings of relatedness or connectedness to the institution” and also at a social level may relate to the “extent to which students feel personally accepted, respected, included, and supported by others in the [school] social environment” *(Thomas, 2012, pp12-13).* Together with the Dean of Students, I ran a series of half-day LSP workshops that mixed students and staff from all levels/areas of the institution, and took them through a structured process to identify what 'belonging' meant to each of them, what that looked like collectively for everyone, and which elements might detract from, or strengthen, belonging. The groups developed simple guiding principles that were then used in the wider institution to influence new and change existing practice and services.

In 2022, I applied the same approach to an academic conference (Playful Learning, Leicester) to explore whether attendees felt a sense of belonging with the conference, and to identify what could help and hinder that sense.

The Belonging Project
The Belonging project had the following two aims:

1. To be as inclusive as possible, and to value everyone in the institution equally.
2. To identify whether there is an individual and/or shared 'sense of belonging'; and if so, what can strengthen or weaken that sense.

The half-day LSP workshops were designed to meet these aims. The invitations to the workshop were open to all current students and staff, and were then stratified so that each workshop contained a mix of undergraduate and postgraduate and young and mature students, and of staff from all areas and levels of responsibility. As an example of the diversity, one workshop included an international postgraduate, a mature distance learner, a new first year student, a Pro-Vice Chancellor, a porter, and an early career researcher. I was relying on the LSP method to flatten the room, and give equal value to each of the attendees: and it was clear that within twenty minutes of each workshop, this is exactly what happened.

The workshops began with individual building and sharing to understand what 'belonging' meant to each attendee. The group then moved to a separate table to

negotiate and build a shared model: there was a clear atmosphere of respect in the room at this stage, with attendees starting to make connections with each other and to see both similarities and differences across the group. The next phase of the workshop tasked the group with creating small 'agent' models to represent things that might strengthen or weaken belonging: here the negotiations were all about finding agents that might support the whole community but didn't make an experience worse for individuals; and also identifying agents that had a negative effect on the whole community. The final activity was then for each attendee to propose a Simple Guiding Principle, based on their finished shared model: in other words, to propose a principle that would strengthen belonging for the majority.

Outcomes
It was these Simple Guiding Principles (SGPs) that were the main output from the workshops - they were synthesised across all of the workshops, so that we ended up with 10 SGPs to promote belonging. A couple of examples: "Will we (staff and students) feel proud of this?" and "Reduce the feedback steps between students and senior managers".

We then used these SGPs in targeted (non-LSP, but using LSP-like approaches) workshops with particular strategic areas of the institution: for example, with a group that were redeveloping our assessment regulations; a group that were about to redesign the digital portal for staff and student access to academic systems; and with our sustainability team. In each case, the SGPs were used as checks for any decisions or proposals in the workshops: if anything went against an SGP, it was rejected or amended; and when solutions were being developed, they used the SGPs as markers to guide the solutions.

Impact

- The impact on the students and staff involved in the LSP workshops was profound. There was a huge reluctance to leave at the end of each workshop, even after four hours of building and discussion; and those involved were keen to attend the follow-up targeted workshops we ran, to carry their thinking over into those groups.
- The impact on the institution was small but significant and is growing. The follow-up targeted workshops have ensured that the thinking from the workshops (in the form of SGPs) have guided long-term developments that will affect how all students and staff will experience the university in the future.

Unfortunately, two factors intervened before the full extent of influence of the SGPs would be realised: COVID hit shortly after, and I moved institutions shortly after that.

Possible changes and ideas for the future
I will be running an amended 'belonging' project, at a wider scale, at Anglia Ruskin University in the academic year 2022-23. My aim is to cover a wider range of students and staff at each stage and develop long-term impact that strengthens belonging across the institution and for all students and staff.
I also want to include our large cohort of distance learners in this study, and so will be developing the workshop to run online: sending LEGO® boxes out to each

student and then running the workshop using cameras and photographs in a shared online space (drawing on successful online LSP training sessions over the COVID lockdown).

To increase impact following the initial workshops, I plan to extend the use of LSP into the follow-up targeted workshops within the wider institution. Whilst the SGPs were effective for those not in the original workshops, they sometimes needed a member of the original workshops to explain the depth of feeling and ethos behind some of the SGPs, in order to fully realise their potential.

I therefore plan to run two rounds of LSP workshops in this revised project:

a) the initial diverse workshops with staff and students (as before), but at a bigger scale;
b) a second round of shorter, focused workshops for key services/project teams/leaders in the institution, to engage them more deeply with the SGPs.

I also plan to document the process this time, using a student film producer, so that the process and outcomes can be shared within the sector.

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4.20 Mindful LEGO® for Wellbeing

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LEGO® SERIOUS PLAY®/LEGO® application
Over the past few years I have developed a way of using LEGO® bricks to relieve anxiety and support wellbeing. White and transparent LEGO® bricks are used for meditative, tactile activities, focussing on the present moment, fostering an immersive "flow" state (Csíkszentmihályi, 1990). This mindful LEGO® meditation, drawn from contemplative pedagogy (Barbezat and Bush, 2014) has been used with staff, researchers and students at my own institution and beyond. It was particularly well received by groups of students on the autistic spectrum (ASD) who took part in sessions as part of De Montfort University's (DMU) New to DMU programme.

This method combines elements of mindfulness meditation with a quiet and unstructured approach to model-making, which differs greatly to my more structured and discursive work with LEGO® SERIOUS PLAY®. Applications include tackling exam anxiety, taking a mental break from academic tasks and gently encouraging social connection without the need to communicate verbally.
The activity ideally takes place around small tables in a calm, quiet environment, perhaps with some calming music in the background. It can also work well in an outdoor space, with participants sitting on the ground. Piles of white and clear LEGO® bricks are placed on each table (I use architectural LEGO® due to its variety of shape and texture) along with written directions to be followed. Guidance is also provided verbally.

Participants are encouraged to take each stage of the exercise very slowly, first of all simply looking at the bricks, noticing their texture, shape and size, then closing their eyes and touching the bricks, noticing the differences in shape and feel. The next stage is to slowly connect the bricks together one by one, without attempting to build a specific object.

Once participants are ready to stop building, they are invited to reflect on the model they have created, and to consider whether it suggests anything to them. They are also encouraged to notice how their own model may differ to those created by others on the table. Participants are asked to reflect on their feelings, both during and after building, and any new thoughts that came up during the process.

Finally, if appropriate, participants are asked to share any thoughts and reflections that have bubbled up during the process. This can be done verbally, via post-its or thought bubble-shaped cards (these can be hung onto a tree if outdoors).
Participants may also wish to photograph models and accompanying reflections.

Outcome
Participants have reported increased feelings of relaxation and wellbeing following the sessions. ASD students respond particularly well to these relaxed sessions: an ASD student commented it "allowed them to transition from a dazed anxious head space to a balanced calm one". This method has positively impacted on wellbeing across other contexts and participants, including addressing anxieties for those new

to university, tackling isolation among research students and as part of staff professional development sessions.
Resources to support Mindful LEGO® meditation sessions, including audio and text guidance, are available via the QAA Embedding Mental wellbeing website (QAA 2022). These are designed to be accessed online by individuals or groups.

Possible changes
Not everyone will have access to white and clear LEGO® bricks: although the lack of colour appears to have a calming effect, this exercise could be delivered using whatever LEGO® bricks are available. Based on feedback from the QAA online Mindful LEGO® resources, this session could be delivered to a wider audience online.

New ideas for the future
Mindful LEGO® has been adopted by student facilitators as part of DMU's Healthy DMU programme and is delivered as part of a suite of wellbeing activities run for and by students.

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4.21 LEGO® SERIOUS PLAY® in HE: designing online facilitator training in a pandemic

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LEGO® SERIOUS PLAY®/LEGO® application

Before the explosion of the global pandemic in March 2020, we had been discussing for some time how we might create LEGO® SERIOUS PLAY® facilitator training especially for higher education. The pandemic provided us with the opportunity to focus on how we could provide this in an online setting.

Our main driver was a desire to take the essential principles of the method and translate them into the language and contexts of higher education. This was informed by feedback from many university educators who really appreciated the original approach, but who wished for something with a more specific educational focus and feel.

Alongside this driver we also had specific challenges. LEGO® SERIOUS PLAY® is an approach that was designed for face-to-face use, and which thrives on important features of 'togetherness'; mobilisation of energy, emotional responses, physical presence, movement, use of space, scale and distance, sensory involvement such as touch and feel, and the sixth sense that comes into play when sentient beings are collaborating. The onset of COVID 19 threw into question how it would be possible to run workshops and train facilitators when no in-person collaborations and contacts were possible. The need to keep these kinds of senses and connections alive was never stronger, however; precisely due to the sense of distance, constraint, and threat that the global pandemic engendered.

We naturally took complementary roles in the design process. With over 1000 LSP workshops for clients and 75+ facilitator training programmes globally under his belt, Micael is highly experienced in the method and LSP training. Alison has spent most of her working life in higher education and brought to the venture her experiences of teaching and learning creatively and imaginatively (James and Brookfield, 2014; James and Nerantzi, 2019). She was in the middle of conducting research into the use and value of play in HE and was keen to embed this in the programme (James, 2022). In addition, she wanted to create new support materials on the underpinning theories and principles of the method and an LSP library which would speak directly to the needs and interests of HE professionals, researchers, and educators.

Between us, we created, shared, and reviewed an entirely new set of exercises and activities, combining them all into a two-day intensive online course. In condensing the face-to-face training by half (it usually runs over 4 days), we were mindful of several factors; the difficulty many HE colleagues report in being able to take off four consecutive days for development, and the cost constraints they also identify at a time when HE resources are at a low ebb. In addition, we were conscious that two full days online intensive training is exhausting, and four days could be

overwhelming. The online approach thus has two unexpected bonuses for participants, one of them being it reduces training costs. The other is that anyone, anywhere (as long as they don't mind what time they go to bed - or get up) can participate without having to worry about travelling.

From a programme content point of view, the easy part of relocating LEGO® SERIOUS PLAY® facilitator training online is, of course, building individual models. Participants can create these with ease. Where it gets harder is with shared builds which traditionally take place around a table; where participants can point to, touch and circle round different models while telling their story. After trying out many different approaches, Micael addressed this through the adoption of MIRO, the visual collaboration platform. He and his team produced a set of templates, documents, markers, and shared spaces which they had already trialled in other LSP fora. These enabled us to uphold the original tenet of LEGO® SERIOUS PLAY®; that participants are responsible for building, moving, situating, and building connections between models.

On a practical level, Micael's company, Inthrface, took care of the administration and posting of all course materials (including manual and LEGO® kit) directly to participants. So far, so good. However, we also were conscious that different kinds of support may be needed by participants in online training. In a physical workshop it is easy to lean over someone's shoulder and help them with issues. In an online workshop, some support is also required to help those less confident in digital spaces. Micael therefore allocated a member of his team to be at hand both days to help anyone in this situation.

In addition to on-the-day support, we created advance activities using LEGO® and MIRO to enable participants to start settling into the intensive training space. We supported this with additional reading in the shape of the article *How It All Began,* by LSP founders Profs. Johan Roos and Bart Victor. In this way, and armed with a massive manual, we hoped participants would have plenty of bedtime reading and be completely prepared to work with us online in the most creative and supportive way.

Outcome

The course was piloted in 2021 with a group of critical LSP friends; facilitators who were all experienced in using LSP in HE contexts. They gave us excellent constructive feedback, which we acted upon, and also strong encouragement that the course we have designed fulfils a need, is of high quality, works well online and provides excellent support materials for an HE context. Our highest accolade came in the form of a personal endorsement of the programme from Prof. Johan Roos – the only endorsement he has given to any LEGO® SERIOUS PLAY® facilitator training. The programme launched officially in June 2022 and is now running several times a year as a general programme. Alongside it, we are also offering bespoke variants to individual institutions. We have also deliberately designed the course so that it can run online or be easily translated into face-to-face provision with minor adjustments, so it is very flexible. It can also be adapted to suit the needs of specific teams and institutions.

Possible changes
At the outset of this case study, we identified some of the subliminal, human, or intuitive aspects to the method which we were so keen to preserve through online training. While we have addressed these as far as we can, there is no perfect or better solution to being together in a room with people than – being together in a room with people. We will, therefore, be remaining alert to anything we can do to maximise the ability for people to share, connect, build together, and feel at ease in the digital space. As tools are being developed all the time it may well be that we will come across other platforms or resources which will work even better than the ones we have now.

New ideas for the future
As a new programme we are still making minor refinements to it each time it runs, as part of its development. We are also finding that elements of this new programme work really well in other non-HE training/development situations and so are testing these out in various contexts. So far these have received very positive feedback. To support its future growth we have also developed follow-up facilitator modules which can be added onto the two-day course or run separately.

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4.22 Working with LEGO® and LEGO® SERIOUS PLAY® to foster community building beyond borders

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LEGO® SERIOUS PLAY®/LEGO® application

Breda University of Applied Sciences (BUas) started working towards the idea of becoming a HUB for LEGO® SERIOUS PLAY® certified facilitators already in the year 2016 when the first 8 lecturers successfully completed the training and started applying the method within the diverse programmes of our university (both at Bachelor as well as at Master level). Within the first years of application and learnings generated, it immediately became clear that LEGO® SERIOUS PLAY® as a method was not only serving the needs of higher education in the format provided at our university but also had the full potential to be employed for the necessities of our diverse stakeholders, such as industry players, governmental authorities, EU-funded project partnership consortia and many more.

Prior to the pandemic, in the year 2019, Breda University of Applied Sciences became a partner in a three-year EU-funded project called InnovaT (Innovative Teaching and Learning) where in total nine universities (three from Chile, three from Peru, one from Austria, one from Spain and BUas from the Netherlands) united forces in the quest towards innovation in teaching and learning approaches fostering modernization in Higher Education Institutions in Chile and Peru. Despite all initial plans and the very detailed approved project proposal, the pandemic made us realize we needed to completely reframe and redesign everything. At the end, this turned out to be one of the best experiences and experiments created and implemented along a bumpy and very challenging road. And all the above would not have been possible to be reflected upon, shared and showcased without the LEGO® bricks and the LEGO® SERIOUS PLAY® method.

But before I go more in-depth and try to explain all the details, let me mention that in the summer of 2022 our team of LEGO® SERIOUS PLAY® certified facilitators grew with 21 new ones. Now it is no longer just the beginning of a HUB but actually, the mature existence of a vibrant community of practice of people from diverse backgrounds, academies, domains and functions within the university who are continuously able to foster education differently, challenge the status-quo and build upon the ideas and the experiences of one another.

This case study focuses on a LEGO® SERIOUS PLAY® application linked to two special final trainings (Show and Share (and reflection) sessions) within the InnovaT project, one conducted in Chile (29th and 30th of August 2022) and one in Peru (31st of August and 1st of September 2022) with 30 participants each. The participants were lecturers from the project partner universities from diverse faculties and backgrounds. All the above had taken part and successfully completed all activities of the InnovaT project such as webinars, online exploratory workshops, Massive Open Online Courses (MOOCs), interactive sessions, pilot classes, and conferences. The objective of the training was to exchange good practices, to showcase what had been learned, to sustain the generated insights and at the end

to be able to create posters for an exhibition with all best practices. Thus, forming a network which goes outside the borders of just the project itself.

How it became clear that LEGO® SERIOUS PLAY® would be the most relevant choice for designing and organizing the training was something that the respective participants already identified when they described their expectations and requirements towards the outcome(s). Together with my colleagues (lecturers and certified LEGO® SERIOUS PLAY® facilitators), we ran an online co-creative session with representatives from all organizations and potential participants. All of them shared openly their wishes and expectations. First and foremost, there was expressed the need of play – natural, genuine and authentic; second – the importance of belongingness and ownership – both to a community/network and second of the ideas that would commonly be generated; third – everyone emphasized upon storytelling as a logical component of what the training needed to look like.

Based upon the co-creative session, we held a demo LEGO® SERIOUS PLAY® workshop at the InnnovaT conference in Peru in June 2022 where everyone agreed on the presence of all elements identified as important for the training. The main theme of the workshop was Designing the Future of Higher Education.
Then we moved to the logistics of making it happen. We were already aware that in order to successfully run the training using the LEGO® SERIOUS PLAY® method, there was a need of first 6 certified LEGO® SERIOUS PLAY® trainers and also sub-facilitators from the EU partner universities from Austria and Spain. Our ambition was to also set the foundation for new universities (both in Europe as well as in Chile and Peru) to realize the need of creating and sustaining a LEGO® SERIOUS PLAY® community by experiencing it first-hand themselves. Therefore, we held two preparatory online webinars and consultancy sessions where we showed the preliminary design with all activities, explained the basics of the method, went through all the LEGO® bricks that would be necessary. We also provided the sub-facilitators with reading materials about the use of LEGO® in higher education and additional online consultancy showing specific the LEGO® elements and bricks. The participants also received basic information on the LEGO® SERIOUS PLAY®.

The day prior to each of the training sessions was used for preparation of the training space and also arranging the separate 6 tables (for 5 participants each) with the LEGO® bricks. On the days of the training themselves everything went smoothly. In the beginning there was such an impatience to immediately touch and play with the LEGO® bricks, and basically start. At first, we had a small introduction, shared some experiences, and visualized the whole journey of the whole InnovaT project with one LEGO® model. Thus, all participants were more than excited and did not have to be encouraged to take photos. Everyone was keen to not only build but to also listen, create, connect, and extract simple guiding principles.

After the skills-building exercises, there was immediately the link made to the ideal 21st century teacher. Then every participant had to individually build a model as a response to the question "which was the most meaningful project or innovative technique you implemented, as a result of all the activities you've taken part in the InnovaT project?" and another model tackling the biggest learning of their process related to new forms of education and teaching. The training continued further with

the last individual model, showcasing each participant's biggest personal challenge in implementing one or more of the InnovaT project activities. As a next activity we had the creation of a common landscape and the discussions in the small groups proved to be very valuable and opened up the space for more and diverse thoughts to be shared, exchanged and built upon.

On the second day the participants were more than excited to continue with making connections among the models on the respective separate 6 tables in order to identify related learnings/insights and challenges. As a result, each participant received three little flags to place anywhere in the landscape where they saw opportunities and had to explain why and how. Afterwards they individually continued with formulating key one-liners which had to be a new/added guiding principle for teaching and didactics in higher education. All participants shared and explained, discussed, and elaborated and this brought the co-creation sessions to a new level of understanding and perceiving the lessons learned. As a result, every participant designed an individual poster on a pre-designed template and the exhibition tour started. All the walls of the conference rooms were decorated with all the creations. The participants of the different tables exchanged, shared stories, opened up, and, organically created sub-groups for future collaboration, joint research, and project activities beyond the realm of the InnovaT project and also the scope and boundary of their universities.

My observations and the participants' reflection showed that the use of LEGO® and LEGO® SERIOUS PLAY® activities empowered a reflection that they never expected to achieve otherwise. The meaningful and relevant stories shared opened up new horizons and allowed everyone to go out of their usual professional domain and to also be vulnerable about the challenges and open towards the opportunities for cooperation. Everyone emphasized upon the factor of "play" being the catalyser in creating laughter, sustaining value and proving the impact of the LEGO® and LEGO® SERIOUS PLAY® as a method.

Outcome

Opening up: Conducting the training (the show and share (and reflection) sessions) with LEGO® and LEGO® SERIOUS PLAY® as a method enabled the participants to open up, to acknowledge the existence of a window of opportunities for cross-university, cross-academy and cross-faculty collaboration. The awareness of common learning, challenges and experiences created a safe environment for everyone to openly share and show genuine interest in each other's work.

Sustainability through enthusiasm: The joint experience of the LEGO® SERIOUS PLAY® facilitators and the sub-facilitators allowed them to create and co-create ideas, to see further possible joint activities, to understand the importance of seeing the trainings as one system where each and every element is connected to everything else and thus, the necessity of allowing smooth implementation where content and process are of the same value and importance (Nijs andTerzieva, 2015).

Possible changes

Since the idea of having the Show and Share (and reflection) sessions conducted using LEGO® SERIOUS PLAY® was born out of joint experimentation and co-design, there is currently more to be gained out of its further sustainability. There

were a lot of details to be taken into consideration and elements one would need to be careful with – the number of participants, the lack of prior experience with LEGO®, the necessity of sub-facilitators who to act as supporters and enablers, the diverse cultures, the comfort zone, etc. Therefore, for the future it would be good to have both time and space “to dry-run”, “to finetune” and to practise both with a sample of potential participants as well as with the team of facilitators.
Having the hybrid mode in terms of preparation online and real-time conduction of the trainings is not to be underestimated and everyone needs to be on-board both with practice as well as provision of LEGO® SERIOUS PLAY® kits.
Bringing all LEGO® SERIOUS PLAY® kits to Chile and Peru was fully BUas’ responsibility and not being able to buy them in Latin America is a challenge to look into if such types of trainings and sessions would need to be made sustainable.

New ideas for the future

What we would like to explore for the future is having trained and certified LEGO® SERIOUS PLAY® facilitators in Chile and Peru and continuing with them (even supporting online) the provision of such types of training and sessions.
We would like to also experiment with holding such sessions (once the LEGO® SERIOUS PLAY® kits are made available) online and/or in a hybrid mode among lecturers from Latin America and the LEGO® SERIOUS PLAY® certified facilitators’ community of BUas. The aim would be to explore the use of both innovative teaching and learning methodologies as well as of LEGO® SERIOUS PLAY® in specific so that we can further expand the borders of the communities of practice in higher education.

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4.23 Posttraumatic growth using LEGO® SERIOUS PLAY® with the Police and Military in the United Kingdom and United States

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Current applications
Currently, we have found that using LEGO® SERIOUS PLAY® with policing students on the Police Education Qualification Framework Degree and diploma (PEQF) which was created by the UK College of Policing, as a tool to explore and 'hardwire' learning around community policing, counter terrorism strategies, mental health and operational policing, has been extremely effective. Scenarios can be played out and students' learning can be challenged in a way that is very 'real life' and simulates the real stress and real application at both an operational and academic standpoint. Working closely with the Metropolitan Police Force in using LEGO® SERIOUS PLAY® as a teaching tool is undoubtedly beneficial for students' grades, as well as their operational identity and skillset.

LEGO® SERIOUS PLAY®/LEGO® application
When the pandemic took hold, I (Alastair) was working with the Nordispolissen (Nordic Police) in Norrland, remote northern Sweden near Umeå in February of 2020. The research question I was working on was: could LEGO® SERIOUS PLAY® play a role in helping police officers proactively protect their own mental health and could it be a tool to prevent suicide through psychological strength. Additionally, could it help them communicate better to prevent a psychological crisis before it began? It turned out that it could.

In our research, focusing tightly on the United States Police and conducting research with North Carolina Central University the scale of the problem of poor psychological health and lack of communication was significant. The number of years of potential life lost (YPLL) for United States police officers is 21 times larger than that of the general population (Violanti *et al,* 2016). I would estimate a similar number of United Kingdom Police officers now fall into a similar bracket. In addition, a study by Suitt III *et al* (2021) found that at least four times as many active duty United States military personnel and war veterans of post-9/11 conflicts have died of suicide than in combat, as an estimated 30,177 have died by suicide as compared with the 7,057 killed in post-9/11 war operations.

We had an explicit focus on using LEGO® SERIOUS PLAY® on protective and proactive coaching to save lives, and it did. 202 of them. Indeed, for many years now the field of Positive Psychology has seen LEGO® SERIOUS PLAY® and Positive Psychology coaching to have a natural and complimentary relationship. There was one problem. It relied on a coach with experience and qualifications in psychology to be able to perform this, which was hard to find in the Police and Military. After several years working on this model and researching this with United States Police departments and Military, British Military and the Metropolitan Police Force (MET) in the United Kingdom - the issue seem to be that, despite psychological supervision and not needing a qualification to coach, there was still too much stigma around

mental health and personnel's own intelligence and confidence to use LEGO® SERIOUS PLAY® to help people and save lives. It was just too complex. The root cause of this lack of confidence, as it turned out, had previously been studied through an educational lens (McGregor, 2017). This work discussed how United Kingdom state education as a manufacturing process was doing damage to people's psychological health, perceived intelligence and confidence. It was found that Positive Psychology could provide some solutions to this and that personnel knowing what to do when they encountered difficult times could save lives.

In our action research we then found too many military and police personnel believed that they lacked academic intelligence and had been trained to be unselfish, hold true to their values and to merge their own identity with that of the unit or team. There are many advantages to this - dealing with life or death situations to name but two. However, the idea of using LEGO® SERIOUS® play for individual benefit or addressing mental health challenges was uncomfortable individually; so we worked around this by working in small teams and using the team to discuss the builds. As long as this was under supervision from a mental health nurse or psychologist, this worked extremely well. That said, it became clear that at this level LEGO® SERIOUS PLAY® was ineffective when used individually 'one- on-one' and without the supervision of a psychologically qualified person.

Predicting Suicide and Depression?

Seth (2022) argues that we live in a 'controlled hallucination' and actually the brain almost 'predicts' its reality from the inside out, not the outside in. Consciousness, it seems, although seemingly infinite and a very difficult concept to define, held an unseen possible answer. The positive impact and the therapeutic benefits in healing, preventing and treating PTSD, anxiety and mental ill health in the police and military could be of significant worth. Could this indeed contribute to rendering Post-Traumatic Stress Disorder itself harmless?

A significant part of our research looked at a corner of the field of Psychology called Post-Traumatic Growth. In Brooks *et al* (2016) the study of positive change after trauma highlighted the academic science behind those who manage to survive adversity and those who do not. Indeed, it was possible to predict Post-Traumatic growth. To us, if this could be understood fully and harnessed holds huge benefit for the military and police in higher education and in the streets or combat zone.

With a combination of research using technology and the; *Values in Action* Character Strength tool (https://www.viacharacter.org/) the field of Positive Psychology was beginning to realise that it could predict depression with accuracy based on the language used Eichstaedta et al. (2018) We began to work with professors and colleagues at various UK universities to see if it was possible for military and police personnel to predict and then construct solutions and identities to problems. What really works with this approach is the lack of having to talk about problems, but rather build them, giving the space to conceptualise and present an idea or problem in part and in small teams have the other participants help construct and reconstruct meaning together. This was a very natural and fluid process. The key to success here seems to be intense positive communication, not necessarily psychology.

Further Research
Further research is needed in these domains, however there has been some success and lives saved so far. Research points to the beneficial use of Military and Police Psychologists being trained in LEGO® SERIOUS PLAY® in a therapeutic setting with some potential benefit to mainstream personnel using LEGO® SERIOUS PLAY® under supervision. One solution that shows promise is The Stealth System® as it combines the releasing and unconditional positive characteristics of coaching, positive psychology and hope (Scheier et al., 2000; Scott, 2007; Sheldon and Elliot, 2009; Snyder, 2000) with the creation and assimilation required from post-traumatic growth, (Joseph and Linley, 2005; Joseph and Linley, 2008; Taylor, 1988).

In conclusion, we suggest that LEGO® SERIOUS PLAY® should adhere to the same five general principles of the American Psychological Association (APA) Code of Conduct, which states that all psychologists must strive to conduct themselves with beneficence and nonmaleficence, fidelity and responsibility, integrity, justice and respect for people's rights and dignity when working with Military and Police. The need for solutions for improving our emergency services and military's mental health, particularly in higher education, has never been greater and LEGO® SERIOUS PLAY® seems to be one possible solution.

Editors and Authors note: It is clear from this case study that its specific use of LEGO® SERIOUS PLAY® requires additional expertise in many areas. We include it to illustrate the scope of LSP use, but not to support or suggest any untrained adoption of this particular approach, or of LSP for therapeutic purposes in general, without relevant, qualified supervision, in appropriate conditions and with any additional, necessary guidance and/or disclaimers.

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4.24 Sharing International Student Stories: Building Resilient Post-Covid Learning Communities

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LEGO® SERIOUS PLAY®/LEGO® application

This Quality Assurance Agency Scotland–funded mini project focused on the Resilient Learning Communities Enhancement Theme. We sought to identify enhancement to support building of resilient learning communities for International Postgraduate Taught students (IPGT) who we identified to have particular needs having moved country (often with families) and studied remotely during the pandemic. This cohort also paid international fees to study at a time when opportunities for paid work significantly decreased. We used LEGO® SERIOUS PLAY® (LSP) to support story sharing amongst eight IPGT students of different African and Asian nationalities over three face to face sessions studying Applied Sciences or Business at Edinburgh Napier University.

One researcher took part in the build to try to re-balance the power dynamic between the facilitator/researcher and the student participants, while the other kept field notes. Students were told that the idea was to explore and share their experiences as IPGT students. They carried out build challenges individually:

1. Skills building – we used the classic LSP tower and duck build challenges to demonstrate and explain 'the rules' (everyone builds and everyone speaks; everyone's contribution is equally important; ask questions about the model, not the person; there is no right or wrong, only different perspectives) and the build – share – reflect cycle. We also added a confidentiality rule where we agreed not to share each other's stories.

2. Transitional build challenge – we used this as a bridge to the more focussed challenges, and as a way to encourage students to talk about their transition experiences as international students. Students were asked to 'build something that shows what it's like to be a student in Scotland'.

3. Build challenges designed to address aspects of resilience (https://www.theresiliencedoughnut.com.au/), focussed on building something that shows.. 'how your studies here are affected by money and work'; 'what community means to you'; 'what it is like being in a classroom in Scotland' and 'how you could support others while you are at University'.

Importantly, students were gifted vouchers to acknowledge their work on the project, in accordance with common participatory research practice.

Outcome
Ethical approval was secured, and informed consent obtained from participants. LEGO® builds were photographed and their stories were audio recorded and transcribed. Themes were identified independently by both researchers who then shared and discussed their findings after the final session. Key agreed themes cannot be generalised but allowed us to draw initial conclusions.

Key Findings and Recommendations:

1. Timely opportunities to foster belonging and strengthen resilience are essential, not optional. This includes welcoming physical and social spaces for students to meet to develop a sense of place and connection.

Students described feeling lost and vulnerable upon arrival in Scotland, sharing stories of “bad people” and feeling literally and metaphorically “out in the cold”. Others spoke of needing to overcome barriers, and the importance of a “foundation” for resilience. “P: the storm will definitely come... I came here in 2020 so during Covid. So what kept me going with my, my balance and the foundation that I had already built as a human being and at times I felt like giving up, you know, it was a… terrible time to be away from home so I guess my condition was solid”.

We know that relationships are central to students’ ability to thrive (Medina, 2021), contributing to a sense of belonging, and supporting resilience. We recommend that relationship building is prioritised before arrival and throughout the students’ learning journey. Programme teams should go beyond supporting 'communities of inquiry' to work with students to identify social opportunities to foster community and inclusion.

This will support foundation building and help reduce feelings of vulnerability, isolation and loneliness, which were particularly apparent in the move to online teaching. “K: my experience of online learning is only by myself. Which I don’t like it but there is nothing I can do because of the special circumstances. That’s the only sad part of my study here, yah because I am a social type of person”.

Students also described how they used welcoming spaces such as the library on campus as a social base, when possible. “S: My fond memory is here in the library… If we have a session in the morning… I come really early and I sit there and do my work and she’s my friend, she joins us. We have this spot, it’s to the side … there is a group of us… Mainly it’s not just studies we have common things to share… being in a university, being in a different country.” Therefore, we also recommend they remain available to students as a safe place for relationship building to take place.

2. IPGT students are often aspirational. Effective support for their drive and ambition to succeed is needed.

Students often included representations of themselves and/ or money in the Tower and Money/ Work/ Study task and described them in terms of building and investing in a better future. “M: You could build this tower, like all those towers, like this like penthouse building and then sometimes you might feel that you get broke in the process”.

We are aware that the overall cost of study for IPTG students, both monetary and non-monetary can be high and so perhaps an aspirational outlook is required to help negotiate this context. We know that representation and role models are important for academic resilience and belonging (Turner and Zepeda, 2021). We therefore recommend an additional emphasis on celebrating and sharing students' stories of success throughout their time at university in order to foster resilience in the face of these challenges.

Possible changes

Recruiting participants in early 2022 was a challenge, a time of low student participation across the sector. We therefore required a longer lead time for recruitment and different ways to offer this opportunity to engage more groups of participants (e.g. during scheduled class time). We would also like to involve our student union further, although we did have the support of our student union president. Furthermore, we identified themes and research findings ourselves, it would be advantageous to discuss the emergent themes with students in the future and develop our recommendations in partnership with students and academic staff.

New ideas for the future

Our intention is to repeat the LEGO® build sessions both within our Schools and others in our university. In addition, we would like to explore undertaking the activity as a group task to support student-staff community building as part of induction for new students. We also seek to implement and evaluate our findings with Programme Leaders. Finally, we would also like to try and identify suitable University partners within Scotland to try out our build sessions with International Postgraduate students from other institutions to undertake a comparative study across the different student groups.

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PART 5: Variations on LEGO® SERIOUS PLAY®

Within this section, we share our thinking around the LEGO® SERIOUS PLAY® method and further ways to use LEGO® more broadly. This exploration is leading to possible alternative opportunities, based on some of the characteristics of the LEGO® SERIOUS PLAY® method. It also relates to other creative methods such as making artefacts and representing abstract ideas visually using a range of materials.

The intention is to create further playful learning opportunities through making models with, and without, LEGO® bricks. This includes bringing in the digital dimension where this could create new and alternative opportunities. As the LEGO® SERIOUS PLAY® method has been made available as open source since 2010, it is natural that individuals will critically reflect on the existing method and adapt this further to suit their needs; while also exploring new possibilities and being creative with the method itself. After all, as Professor Johan R. Roos said in his prologue, “LSP is about freedom”. Our explorations are based on experimental applications from our own practice partially linked to LEGO® SERIOUS PLAY®, but also on further playful and model-making approaches we have used in a variety of higher education settings. We are sharing our thoughts on these to explore alternative possibilities in the area of playful learning through making. Some of you reading will find these new, others may well be implementing these and many others in all kinds of guises.

Here are a few of our thoughts around facilitation, participants and the materials used in LEGO® SERIOUS PLAY®, as well as the digital dimension and the opportunities this may bring.

5.1 Facilitation

According to the LEGO® SERIOUS PLAY® method, the facilitator leads and directs activities without participating in these (Rasmussen, 2006). The questions are prepared and posed by the facilitator (The LEGO® Group, 2010; Frick *et al,* 2013) and form part of their workshop preparation and construction. While this is of value and enables the facilitator to carefully orchestrate the session to maximise engagement and output, it still models a facilitator-driven approach to learning and development.

While planning a session meticulously is vital, good facilitators of any kind of educational development make sure this does not fossilise and exclude being responsive to what participants bring. Therefore, room for adaptation, experimentation and improvisations should be built in. There are opportunities, for example, to explore the use of questions that are generated from the group itself based on an agreed theme and allow a more responsive workshop with looser structures more owned by the participants themselves. This change would potentially increase motivation and empower learners further, but does require a skilful facilitator, able to translate their questions into valuable LEGO® SERIOUS PLAY® activities.

What we describe next takes aspects of the LEGO® SERIOUS PLAY® process and suggests ways in which LSP-inspired practices may complement the original system further.

The facilitator of a LEGO® SERIOUS PLAY® workshop is often an outsider who has been brought in to work with a group of individuals they don't know. Therefore, they might be expected to be objective and neutral. It is also important to acknowledge that a facilitator is invited to offer a LEGO® SERIOUS PLAY® session based on trust relationships. This can be an advantage when working with teams where there are internal challenges and sensitive issues uncovered. However, in some situations an outsider might not be best placed to know what would work best. For example, if an educator would like to get to know their students, finding ways where the educator and students become one united community is important to develop fruitful relationships. This might be difficult to achieve if the educator facilitates a workshop without participating in this themselves. In this case, asking students to open up and share their personal stories is equally important with the educator doing the same. One possibility would be to bring a facilitator external to this group to facilitate the workshop and ask the educator to participate. This is not always possible or appropriate. There may be implications associated with resources, cost and the pedagogical rationale. Furthermore, an outsider may be seen as an intruder and have a negative impact on the group.

We have two suggestions to make inspired by, and closely following, LSP but deviating from the lead-facilitator model. Depending on when it is appropriate and useful so to do, the educator-facilitator can participate in some or all activities in a particular workshop. Furthermore, it may be possible to introduce the role of the rotating facilitator, depending again on context.

The idea of a rotating facilitator is borrowed from Problem-Based Learning (PBL), where students are asked to take on roles when working on a specific PBL activity. These are dynamic and change from one activity to the other, helping them each time to develop different capabilities. The educator might be the first to lead a round of activities, especially if the group is new to the method, and later passes the baton to a student. This means that progressively the educator blends into the community, becomes one with the community and empowers students to take the lead in the discussions. After a little while, and when participants have become familiar with the format and the process, they will be able to take on the role of the facilitator. Alternatively there is potential for 'sub-facilitators'; that is to say, that students or group members take on the facilitation of an activity, under the experienced eye of the main facilitator.

This role adoption can work with larger and smaller groups (depending on the situation) and also online in break-out rooms. What we are suggesting enables participation by all and encourages students/staff to take responsibility of their own experiences and learning as they are unfolding. Key to this happening effectively are the questioning techniques used, as well as a positive and playful atmosphere and not just the LEGO® bricks. So, investing some time with students on developing questioning techniques that foster openness and inquiry, such as the Socratic method mentioned earlier, may be time well spent.

5.2 Participation

LEGO® SERIOUS PLAY® builds on the power of the collective that fosters participation by all present, except the facilitator, who is normally the outsider, as mentioned above. The method works well with small groups and there are also techniques that can facilitate the effective use of LEGO® SERIOUS PLAY® with larger groups. How a group is facilitated face-to-face or online and by how many, as a whole, split into smaller groups, pairs or using a mix of strategies, depends on the objectives of a LEGO® SERIOUS PLAY® session or activity, as well as the time available.

Whatever the size of the group, LEGO® SERIOUS PLAY® seems usually to be mentioned as an application that is used in a group context (Kristiansen and Rasmussen, 2014). However, LEGO® SERIOUS PLAY® always starts with an individual build, and does not have to move to a group one, although it often does. LEGO® SERIOUS PLAY®-type activities can be used in other situations with individuals, pairs or smaller groups. Located within learning, teaching and research, these include in personal tutoring scenarios, supervisory meetings, individual assessment, coaching and mentoring, as well as research interviews and professional discussions. We have already seen examples of these in the preceding pages. It is common that these are conducted as individual meetings, and in such cases, the tutor, mentor, coach or researcher acts as the facilitator. The student, colleague or external participant, depending on the purpose of the meeting, is the lone constructor who creates models in response to facilitator prompts which are then discussed to gain insights.

However, there is also the possibility that such activities are of reciprocal nature, where the facilitator and the participant are equals and not necessarily in power-relationships. Examples include paired peer-to-peer situations with both parties fully participating. In some cases, facilitation can happen in turns. This approach might also be of value when establishing tutor-tutee relationships for example where two-sided opening-up has the potential for individuals to better understand each other which is vital for a professional relationship to form.

Furthermore, using LEGO® SERIOUS PLAY® and LSP-inspired approaches in pairs or small groups may be desirable, also less time-consuming, or seen as more effective in a large group setting. This is already happening such as in classes of 30, 100 or more students; enabling interaction and shared reflection in a playful way. In complement to any academic understanding this enables, individuals may also feel more open and connected to some of their peers. As this develops it may help them build and strengthen relationships which may influence their engagement and learning on a course and make their experience more personal in a large group setting.

5.3 Digital LEGO® builds

Beyond the physical LEGO® bricks that are mostly used in online sessions, there is also the digital LEGO® model maker site LEGO® builder. This digital platform can be used instead of physical bricks when the facilitator decides this would be more

appropriate or would like to try a different way to offer a LEGO®-based activity. It is worth bearing in mind that participants may need more time to familiarise themselves with this 3D LEGO® building technology before fully engaging in such an activity than with physical LEGO® bricks. Therefore, enough time for this needs to be planned in, so that the technology doesn't become a barrier to engagement.

5.4 Material: With and without LEGO®

LEGO® is a versatile play resource, toy and tool that aids our imagination to express in a very visual way through constructing models (Rasmussen, 2006). However, it is often said that LEGO® SERIOUS PLAY® is not about the bricks, but what the bricks enable (The same is often said about technology). This raises some radical questions:

What if, we don't have any LEGO® SERIOUS PLAY® kits? Could we use plain LEGO® bricks and complement with other materials? Would the LEGO® SERIOUS PLAY® method - or a variation of it – still work when complementing LEGO® with other materials?

Such questions prompt interesting reflections. We are aware, for example, of other proprietary approaches (Ketso and Playmobil) that are also using materials and objects metaphorically to conduct important conversations and could complement or extent the use of LEGO® bricks. The obvious question might be, of course, how could such an approach be called LEGO® SERIOUS PLAY® if there were no LEGO® involved?

The issue for us is not ditching LEGO® altogether, but understanding what might be lost in deviating from the original specifications of LEGO® SERIOUS PLAY® and how adaptation might enrich what we are doing with this original method.

There are good arguments for using LEGO® SERIOUS PLAY® kits or LEGO® bricks. On a practical level we have found that a big bonus of LEGO® is that it can easily be re-used and there is no wastage or very limited. LEGO® bricks can be cleaned easily and quickly. Despite the fact that the bricks are made of plastic, and some may find them too rigid and constraining for building models, we would argue that they are sustainable learning and teaching resources as they can be used again and again.

Another oft-cited factor is that everybody seems to be able to build using LEGO®. Even if somebody hasn't encountered it before, it will only take a few minutes to work out how to use the bricks even without instructions, just by playing with them. This is one of the key reasons why many argue that LEGO® works so well (Rasmussen, 2006). Could the same be said for other materials? What could other materials add? (How) would they change the process?

Facilitator training emphasises that LEGO® SERIOUS PLAY® is not about creating aesthetically pleasing models. It is not about the models, but what they represent for the builder. However, if we are truly interested in what the models represent and not their looks, what stops us from using different materials to create these? Since the

artistic side of our creations is not what matters, what makes LEGO® so different from Playdoh® or just paper for example?

Where could this take us?

Elkind (2007, 15) says that “The majority of toys are now plastic. These playthings generally lack the warmth of wood, the texture of natural fabrics such as cotton or wool, or the solidity of metal.” LEGO® is such a toy. Furthermore, the LEGO® Group started out building wooden toys, as you can see in this video and article. What if we take the philosophical skeleton of the LEGO® SERIOUS PLAY® method and test it out combined with other materials? Adaptations will emerge. We could combine the use of LEGO® with other materials to create a more sensory-rich building experience beyond a homogenous LEGO® approach. Experiments with this have already taken place in the Brickminds community at their annual conferences in Billund, although not integrated into the official LSP method. And what if we take pictures of the models created, or even create them on a digital platform and then add another layer of meaning to it via a drawing application?

Our responses to these questions may be matters of subjective preference, as much as anything. We are already aware that different materials can conjure different responses, which split people into for and against camps. Some love Playdoh® for its nostalgic smell and feel – others shy away from it as stinky and redolent of kindergarten. Some love LEGO® for its aforementioned ease of use, a few (often fine artists) feel frustrated by its physical boundaries. LSP facilitator trainers often argue that using LEGO® is more equitable than other materials as all you need to do is click the bricks together. You do not have to try and draw or make something with materials that might expose any lack of skills or confidence in the medium. Sometimes, however, there is self-doubt expressed by a small minority of participants about their capacity to build a model out of LEGO® bricks and for some, often artists, architects and designers, it is difficult at least at the start, to build anything without thinking about the design. We know that facilitators have already experimented with combining these materials and others and that the success of their endeavours has depending on all kinds of variables; among them, the nature and skill of the facilitation and the mindset of the participants.

While Chrissi has been using LEGO® bricks to organise and facilitate LEGO® SERIOUS PLAY® workshops, she also often mixes and complements LEGO® bricks with different materials, including play dough, pipe cleaners, wool or string, balloons as well as paper and items from nature; such as sticks, pebbles and leaves and other resources that can be used to create physical and digital models. She feels it can be liberating to be resourceful and use our imaginations to come up with novel ideas for learning and teaching generally and what we use to build models specifically. Alison has been similarly experimental; often out of serendipity or accident rather than planning. This is often thanks to the free-range activities of participants, who either find or forgetfully ‘deposit’ items (pens, coffee stirrers) into her LEGO® collection in the course of a workshop. (Other items also find their way in mysteriously such as chickens from an old farm set, dice, little cars. She still has no idea how). In one memorable workshop in a fashion studio life size mannequins were enrolled into the skills building session and became props in introductory activities.

In this way accepted practices, such as the facilitator deciding what to use, have been reversed and gained a novelty aspect. Already, in LSP workshops there is a relative amount of choice from a variety of bricks, but for some activities the starting bricks have been selected in advance. How about the participants deciding for themselves? We emphasise choice, but how often are we the ones making all the choices for others? How and when can we turn this around? Through doing this can we empower others to make choices that help them express as individuals and learn? As our examples show – and perhaps your own experiences as well - this is not always something we decide. Quite often our participants take it upon themselves to integrate additional pieces or props into their models. This is often part of them investing themselves in the activity; not to mention a source of entertainment and illumination.

5.5 Are there any flies in the ointment?

If you have read from the opening page to hear you may have noticed that this book is resolutely positive about the use of LEGO® and LEGO® SERIOUS PLAY®. This does not mean that we are unaware of any criticisms made of the method in particular or of playful learning in general. It is rather that we have wished to present examples of interesting, illuminating and robust practices using the materials and the method. In our other publications – and in those of our fellow play proponents in higher education – you can find significant amounts of material dealing with the challenges of introducing novel or alternative pedagogic approaches and how to address these.

It is, however, worth mentioning briefly some of the objections that may be presented with regard to using this kind of playful approach. For Alison, one of the most important reasons for doing this is to tackle an accusation being made within some quarters of the academic community regarding the upsurge in publications and practices involving play. Recently she has seen observations expressed that the way these are presented in publications is *too* positive – and that this must, of itself, indicate that the writers and practitioners are uncritical. This is a swingeing generalisation that merits a metaphorical clip around the ear. As mentioned just now, we have contributed to, and are familiar with, the literature surrounding the upsides and downsides of play. However, many playful practitioners are so enthused by the impact of their playful academic experiences that they want to share them. They invariably are responding to an unsatisfactory situation or have found a way to deal with an educational challenge. What is wrong with that? Are we only allowed to be thought of as credible academics if we are miserable or deficiency-oriented?
Having got that off her chest, she and Chrissi both recognise – of course – that academic scholarship and research need to recognise all aspects of an innovation – this is why we have included the ‘outcome’ and ‘possible changes’ elements of the case studies. We have, however, deliberately adopted an appreciative inquiry ethos in inviting colleagues to contribute their positive experiences.
LEGO® SERIOUS PLAY® is sometimes viewed with suspicion in academic circles (but probably not by its significant number of users) as being a corporate and commercial method, which is sold to the community. This is, of course, true in its

baldest sense – and has been emulated by other toy companies in recent years. However, we and our contributors have given ample examples of how using, or training in, the method and cascading learning is a cost-effective means of bringing benefit to an institution. (I really hated writing that sentence but it had to be said. Alison). Not only that, but it is also obvious that you do not need to have expensive kits to be able to make the approach work remarkably well.

This leads on to a broader point about play which was made in an online event Chrissi and I both attended. A participant was concerned that play could be seen as elitist/exclusive because you need expensive materials to be able to engage in it. We were both surprised and worried by this perception, as it is perfectly possible to create playful experiences with low or no cost implications.

Finally, both the LEGO® bricks and the LSP method have been around for a substantial amount of time and have achieved global recognition. Both of things offer evidence of their potential in educational contexts. Ultimately though, they do not achieve pedagogic legitimacy on their own – it is up to us, and how we use them, which will create value for learning.

5.6 Wrapping things up: Where to next?

As will be clear from these thoughts and from the contributions of our authors, we believe play frees our imagination (Brown, 2010) and lifts our moods. It enables us to experience learning, teaching, professional development, research and coaching in immersive and stimulating ways.

We have presented a range of examples and suggestions for using and adapting the LEGO® SERIOUS PLAY® method for practice in a range of HE contexts. We suggest that they will help create new opportunities for playful, creative and critical participation and expression. These address our knowledge, skills, understandings and academic and scholarly capabilities. They also help us make new discoveries about ourselves, others and the world around us. The explorative practices shared in this book are driven by curiosity and the desire to explore, experiment and discover stimulating ways to engage students and staff in learning and development that stretch them and also build community. By adopting some of any of the suggestions we have just made, there is the possibility that traditional LEGO® SERIOUS PLAY® may become less recognisable in a hybrid guise. What this might mean is that the original method would continue to exist, while also leading to variations or even a new method inspired by LEGO® SERIOUS PLAY®.

Some of the contributions in this book suggest ways that this is already happening – not necessarily through the adoption of different materials, but certainly through the integration of different theoretical approaches. This is something which was also addressed in the 2022 Brickminds conference, where Nadine Page, Associate Dean Research and DBA at Hult International Business School, discussed the relationship between growth mindset theories and LSP explorations.

Our case study contributors have made many indications as to the way that LEGO® based approaches can be blended and hybridised with other things. **Play-Make-**

Discover (PlayMaD) is another example of this and was developed by Chrissi and was mentioned in the first edition of this book (Nerantzi and James, 2019)**.** It has some characteristics of the LEGO® SERIOUS PLAY® method but is infused with other approaches and materials and is generally dynamic and emerging. PlayMaD creates new opportunities for flexible and creative participation and expression using a range of playful and making approaches, resources and materials that can be used depending on their availability and suitability of a specific complex or tricky learning situation. PlayMaD® builds on learning in communities with flat structures that boost participation, are empowering and develop trust.

We know that frameworks and models are useful design tools for the enhancement and transformation of practices. Another example is the basis for *Ludic Pedagogy*, set out by Lauricella and Edmunds in their forthcoming and eponymously named book (2023). They suggest that ludic learning experiences need to have four elements: fun, positivity, play and playfulness. While they are writing about all kinds of play-based learning their model naturally encompasses LEGO® based activities.

The Playground model (Nerantzi, 2015; Nerantzi 2019), developed to promote creative learning and teaching through play in an academic development setting (see Figure 1), might be useful to explore when considering integrating playful learning and particularly LEGO® SERIOUS PLAY®. The model may provide a scaffold when considering integrating LEGO® SERIOUS PLAY® activities at different stages of a workshop or course.

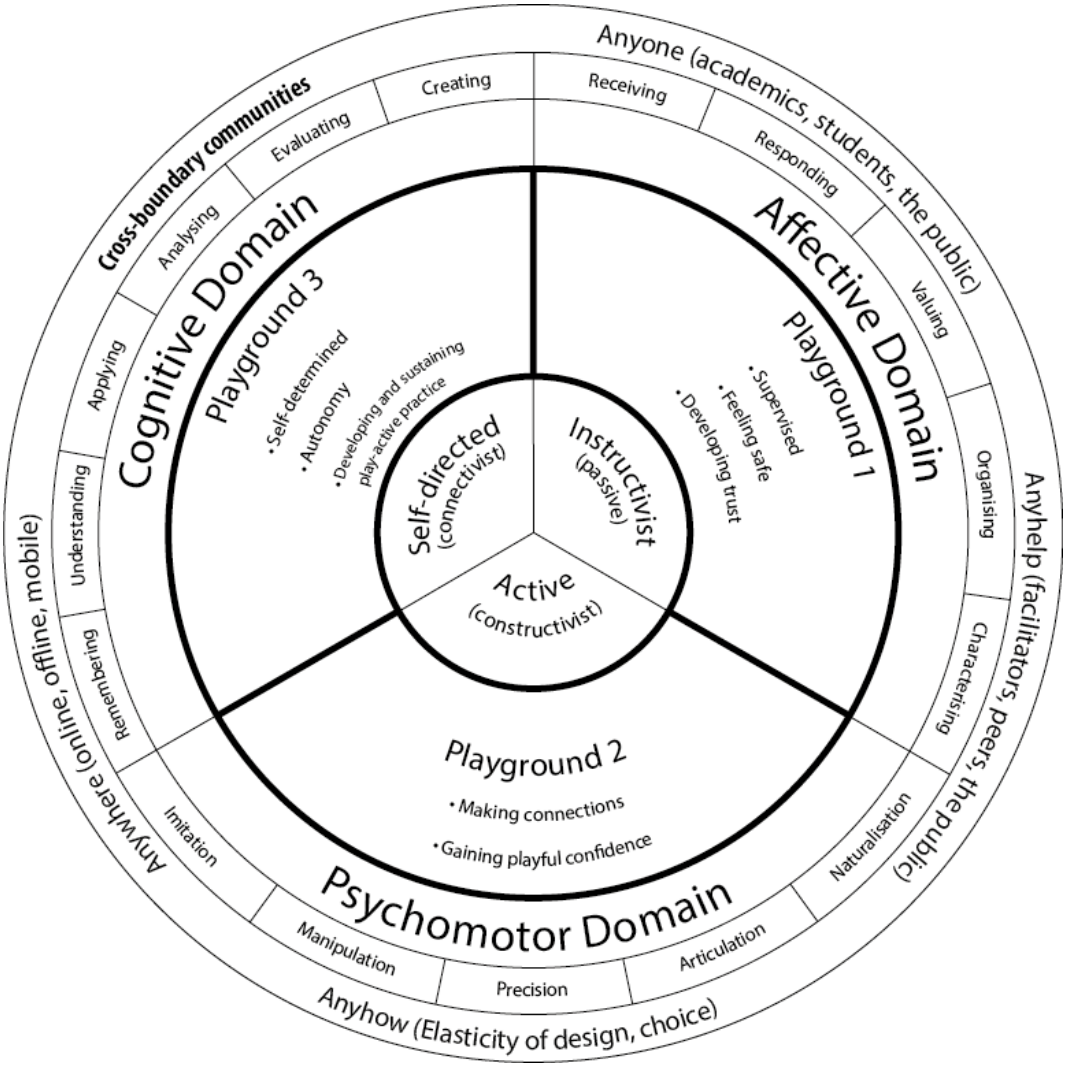

Figure 1. The Playground model positioned in a wider theoretical framework (Nerantzi, 2015; Nerantzi 2019)

Workshops with LEGO® SERIOUS PLAY® begin with the building of individual models which give a representation of the builder's conception. The use of LEGO® bricks shifts the language of expression of the learner. New language leads to new thinking and as such the learner is less likely to reproduce learned or expected responses. Instead their responses are more visceral. The LEGO® SERIOUS PLAY® method allows these individual models to be combined or integrated into a new shared model which represents the shared understanding of the group. It is through this process that deep conceptions and misconceptions can be brought to the table and through exposition, conflict and resolution, familiar concepts to storytellers, new knowledge and understanding is co-constructed within that community.

The ideas shared in this section evidence that variations on the LEGO® SERIOUS PLAY® method can be made and are made in practice in response to a specific situation and based on an informed rationale. Furthermore, there are opportunities to extend the philosophy behind the LEGO® SERIOUS PLAY® method to construct

new models and frameworks, such as PlayMaD, the one presented briefly here. Further research is needed to test it in practice and evaluate it.

PART 6: Conclusions and further conversations

By this point we hope you have a clear understanding of the benefits of using LEGO®-based techniques in many different forms. The richness of practices since the COVID-19 pandemic driven by a need to find more creative ways for learning and teaching at a distance and during extremely challenging times for all, has brought further diversification of LSP and LEGO®-based applications. These evidence the desire, will, and commitment to be more explorative and experimental and daring to try still more unusual techniques.

You will be familiar, if you were not before, with the principles of LEGO® SERIOUS PLAY®, know where to find more information on LSP, and appreciate the high regard we and contributors to this book have for the method.

This edition includes 24 case studies by 32 contributors, from the UK, also Ireland and The Netherlands. Not only did the number of case studies and contributors grow since the first edition in 2019 in which we curated 15 case studies, we also noticed that the case studies we received for the second edition seem to be illustrating a more collaborative approach in conducting and reporting practice which is refreshing and could provide an indication that LSP and LEGO® related practice is spreading now quicker than before and is more cooperative and collaborative in nature. Many case studies have been co-authored by colleagues in the same institution. We also received case studies where there is evidence that collaboration stretches beyond institutional or organisational boundaries.

The case studies illustrate that LSP and LEGO® inspired practices, variations and applications have spread beyond academic development and reflection and are also recognised as valuable across a range of disciplines and professional contexts. Since the pandemic started, we all needed to re-think quickly and be resourceful and inventive to create stimulating learning, teaching and research experiences in online, blended and hybrid environments beyond face-to-face applications. Workshop participants were invited to use their own LEGO® bricks and often LEGO® kits travelled to participants too. Facilitators found ways to overcome the lack of opportunities to come together in the same geographical location with determination and resourcefulness.

A lot has changed since 2019 and the way we used LSP and further LEGO®-related approaches. The case studies included illustrate with richness the diversity of applications during the pandemic and how higher education practitioners have used with inventiveness LSP and LEGO® related approaches with staff, undergraduate, postgraduate and doctoral students, senior leaders. They used it for making sense of experiences, connecting with others and building community, engage in collaborative problem-solving and boosting creativity, deepen reflection and discuss identity, but also stimulate cross-cultural learning and use in coaching and research to gain deeper insights about self, others, processes and experiences and also bring fun, joy and hope and release stress. Educators are using LSP and LEGO® bricks on their own or combined with other materials, resources and platforms including craft materials, digital tools such as mobiles for capturing models, as well as Padlet and Mentimeter and to diversify research methods and combine with other visual methods, approaches and frameworks.

We, as authors and editors of this book as well as academic practitioners and researchers, are both committed to creative, playful and alternative approaches to teaching and learning. We advocate that these are just as relevant and important for complex tertiary learning as they are in schools. We have demonstrated our interest in integrating the use of LEGO® and principles inspired by LEGO® SERIOUS PLAY® with different teaching media, and with other approaches in a wide range of settings. The case study contributions also evidence wider experimentation in the higher education sector using LSP and LEGO® related approaches. We have advocated inquiry-based approaches also; to evaluate the use of LEGO® SERIOUS PLAY® in HE and to discover new insights which can further enrich the evidence-base and our collective understanding in this area.

And now, over to you. What have we missed?

Epilogue by Professor Sally Brown: Playing to learn, learning to play

The COVID19 pandemic has caused many in Higher Education to rethink approaches to learning and especially the value of joyous interaction with others while learning, which learning through play can foster. I spend a lot of my life playing, both for pedagogic purposes in Higher Education (and also as a volunteer in a Primary School) and just for fun with my grandchildren and am firmly convinced of the power of the ludic principle. Learning through serious play can offer a semi-structured environment to aid reflection (especially for the reluctant or those unconvinced of the power of self-review) by enabling symbolic representation of complex ideas in a neutral context. We engage most productively when we are 'Learning by Doing' as Race (2020) argues, since theoretical abstractions become more real through concrete experimentation, for example, using LEGO® SERIOUS PLAY®, as this book demonstrates. This is illustrated though the diverse and thoughtful range of case studies in Part 2 and through the Activity prompts in Part 3 as well as throughout the book, which is how the authors bring their ideas to life and show how these can be used in practice.

Approaches vary substantially, from highly-structured and expertly-facilitated formats, to more free-form approaches, requiring participants to be creative in their usage of random bricks: there is in my view, no single correct way, but many brilliant and productive ones to find productive pleasure in learning.

While independent practice is productive and thought-provoking, for me the greatest value of the approach is in fostering democratic co-construction, whereby sometimes ill-formulated ideas or conflicting can be collaboratively articulated, shared and developed, simultaneously building communications and acting as a fertile tool for forward planning. Working with others using LEGO® SERIOUS PLAY® encourages and facilitates the essential capabilities of collaboration and co-production and there are ample prompts to encourage this in this book.

Watching adults play purposefully is much like watching small children do the same: I like the way that approximations of concepts can become metaphorically translated into active paradigms which can help to create meaning. I like the way play requires non-literal and left-field approaches, moving us out of formulaic responses. And I like the way play makes people laugh, making learning, such a central human process, a pleasure rather than drudgery. That's what this publication is all about.

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