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Embodied pedagogies, the arts and reflexive systems in enactive management education

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Abstract

This chapter stems from the convergence of two independent efforts to develop and research pedagogy which can prepare individuals to enact with high responsibility and creativity in complex situations. The main design questions are: How does a human being cope with complexity and uncertainty to take care, in different domains and contexts, of the human activity system for which he/she is responsible? and What transformations to the traditional business education programmes are necessary to meet this challenge? The shared long-term aim is to change the traditional curriculum by expanding the boundaries of our understanding of problem situations as a human activity in which technical matters intertwine with belief, desires and emotions.

Our findings are drawn from a primarily qualitative study of the pedagogical design and outcomes of the interdisciplinary Masters in Innovation, Creativity and Leadership (MICL) launched at City, University of London in 2010. We focus on the lived experience of the students, especially the first cohort to complete the final module, *Creativity and the Creative Industries* (CCI); and relate our analysis to the CLEHES process, a strategy of learning developed by García *et al.* (2018).

Building on the work of Beer (1994), Maturana and Varela, (1987) and Espejo (1996), García and his collaborators configure CLEHES as a nurturing technology to enhance enactive management which treats humans and organisations as activity systems with six ontological dimensions: body (*cuerpo* in Spanish), language, emotion, history, eros and silence (García and Saavedra, 2006; García and Orellana, 2008; García, 2009 ; García and Laulié, 2010; García and Saavedra, 2016; García, 2017; García, Humphreys and Saavedra, 2018). CLEHES involves three strategies of observation (García *et al.*, 2018):

- Self-observation
- Observation of interactions, conversations and dialogues
- Observation of an organisational network.

We conclude that there is considerable potential in further exploring the six ontological dimensions, O Technology and CLEHES (García *et al*., 2018) to better understand the necessary conditions for arts-based HE pedagogy in management and professional education.

1 Introduction

This paper presents findings drawn from a primarily qualitative study of the pedagogical design and outcomes of the interdisciplinary Masters in Innovation, Creativity and Leadership (MICL) launched at City, University of London in 2010. The authors review evidence for the lived experience of students in the MICL, especially the first cohort to complete the final module, *Creativity and the Creative Industries* (CCI), in 2012.

Our inquiry aimed to explore the explanatory potential of strategy of learning developed by García *et al.* (2018), the CLEHES process. Building on the work of Beer (1994), Maturana and Varela, (1987) and Espejo (1996), García and his collaborators configure CLEHES as a nurturing technology to enhance enactive management which treats humans and organisations as activity systems with six ontological dimensions: body (*cuerpo* in Spanish), language, emotion, history, eros and silence (García and Saavedra, 2006; García and Orellana, 2008; García, 2009 ; García and Laulié, 2010; García and Saavedra, 2016; García, 2017; García, Humphreys and Saavedra, 2018). CLEHES involves three strategies of observation (García *et al.*, 2018):

- Self-observation
- Observation of interactions, conversations and dialogues
- Observation of an organizational network.

Although CLEHES can be characterised as a 'technology' or a 'tool', its application by García relates to a systemic worldview. In his work with political and organisational leaders, primarily in Chile, CLEHES has typically been applied to situations of pain, rupture, breakdown or conflict. An 'O Technology', CLEHES is 'circular, interactive and dynamic' (García *et al.*, 2018, p.8). Self-observation via the six CLEHES dimensions is an essential first step. The six dimensions can be summarised as in Table 1.

• Body (C): The body learns in the situated situation; learnings are installed and live within it and are triggered from it. The body gives presence and moves in a specific way in interactions. This builds an understanding of movement and the body in organisational transformation processes.
• Language (L): It is possible to open or close conversations through language, but we can also hold missing conversations (opportunities) in the drift of experience. Each human being has their learning of this kind; but every organisation also has its learning, and dances internally and externally through language.
• Emotions (E): Emotions are intertwined with language to configure conversations. Emotions inhabit the body and give direction, intention and strength to conversations. Because of this, emotions bring rhythm to human interactions. It is not the same conversation if a human being is feeling fear or joy: in this sense, emotions can open or close a learning process.
• History (H): History is of key importance as it configures identity and nano identity, which are expressed in conversations. It is informed by experiences, expertise, practices and learning. In this field human beings can recognise sources of trust and distrust, historical pains and missing conversations; but, more, identity is the consequence of the observer that constitutes their world.
• Eros (E): Listening with eros is the disposition to build and design with others. It is the potential to create new routes, (re)design interactions and conversations. It brings a certain possibility of enacting and affects situations. Opening and promoting eros in conversations surfaces new opportunities to be explored.
• Silence (S): Silence allows the discovery of missing conversations. Looking at these allows the observation of human practices and habits, but also enables the observation of how silence operates as a critical factor in the structural dynamics of the organisation and its environment.

Table 1 The six dimensions of CLEHES (adapted from García, Humphreys and Saavedra, 2018)

García's Enactive Laboratory explores these dimensions through modules called RIHPLA, Reingeniería Humana para la Acción, translated into English as 'Human Re-Engineering for Action' (García, 2009; García and Laulié, 2010). Its creative and reflective processes incorporate artistic experiences and analysis as 'episodes of the quantum observer transformation process' (García *et al.*, 2018, p.9), and include creative writing, modelling, theatre composition and acting, scene design and choreographic arrangements, body observation and dance. Since 1994, the programme has reached over 80,000 international and Chilean participants, ranging from students to the heads of major public and private-sector organisations (García and Salazar, 2013). Most often with Boards of Directors, O Technology also uses syntenaction, a pragmatic tool to enact the bodily pains of situations situated to resolve complex conflicts in human activity systems while taking care of those involved (Tejos, 2016). By enhancing 'observation of orthogonal interactions' (Espejo, 2003) and individuals' 'listening with eros', the process offers teams and organisations the capacity for 'a continuous dance through ruptures and collisions', which enables 'a set of favourable consequences such as creativity, trust, cohesion, collaborative work, cooperation and solidarity' (García, 2009, p.1336).

The aims of this paper are therefore both epistemological and ontological. We seek to contribute to current debates about arts-based inquiry and pedagogy while also acknowledging conceptual debates about both the arts as knowledge (Eisner, 2012; Young, 2001) and the challenges in organisational and management learning which seek to promote deutero learning (Bateson, 1972; Argyris, 2012). We aim to align our final discussion to the work of other scholars who have taken up the CLEHES approach, including Atkinson (2008), Figueroa (2014) and Scholte (2017). The paper concludes by asking whether the MICL offers an experience consistent with the elements of the CLEHES strategy, and therefore promotes the conditions similar to the

Enactive Laboratory as a 'ludic and creative space' (García *et al*., 2018, p.6) in which participants build the capacity to 'listen with eros', 'reflect' and 'embody the context to redesign it and refresh decision-making practice within it' (García *et al*., 2018, p.3).

2 MICL case study

This section summarises the educational experience offered by City's interdisciplinary Masters in Innovation, Creativity and Leadership (MICL) since 2010, especially the *Creativity and the Creative Industries* (CCI) module first delivered in 2012. Consistent with established methods of phenomenological and mixed research methods (Van Manen, 1997; Knight, 2001), this analysis draws on the transcripts of contemporary interviews and student coursework, including reflective reports; the thematic and metaphorical analysis of assessed individual artefacts; and associated MICL documents, including External Examiner reports. The analysis of the students' arts-based assignments and reflective writing sought codes for embodied experience and metaphors (Hatch and Yanow, 2008). Recognising the role of the researcher in the relationship between 'the referent, the symbol, and the interpretant', the process embraced the personal and emotive nature of these sources as data, seeking to '[generate] the conditions for new telling questions and for fruitful discussion' (Eisner, 2012, p.8). Comparative mixed methods data include a self-efficacy study (Bandura, 1997) with subsequent MICL cohorts, with questionnaires completed at the outset and conclusion of the taught modules. Direct quotations from the students' work are not included here for reasons of confidentiality.

2.2 MICL student journey

City's Masters in Innovation, Creativity and Leadership (the MICL), based in the Bayes Business School (formerly Cass), is an interdisciplinary programme, which includes subject specialisms drawn from across the University's Schools as defined in 2008 (see also Jones *et al.*, 2017). The core taught modules have remained unchanged since the programme was launched: *Creative Writing* (School of Arts), *Creative Problem Solving* and *Leadership and Delivering Innovation – Turning Ideas into Action* (Business School), *The Psychology of Creativity and Innovation* (School of Social Sciences), *Leading Creative Design* and *Technologies, Creativity and Innovation* (School of Informatics), *The Law, Creativity and Innovation* (School of Law), and *Creativity and the Creative Industries* (School of Arts).

The programme embeds values which act as a shared language to discuss and manage behavioural expectations of the MICL community as a whole, including the teaching staff and alumni: Open-mindedness, Encouraging diversity, Co-operation, Risk-taking, Leading and following, Grit ('Ability to keep moving forward when the going gets tough'), Stretching ('Getting comfortable with paradox, metaphor and apparent chaos') and Active involvement ('Showing up, taking part and engaging in constructive dialogue with colleagues') (Masters in Innovation, Creativity and Leadership, 2010).

The individual modules build distinct and shared vocabularies. Formal examples include the descriptors used in psychometric measures, the results of an individual creative leadership profile (Perspectiv, 2021), and a range of concepts including creative problem solving, climate and culture (Isaksen *et al.*, 2011), Janusian thinking, single and double-loop learning (Argyris, 2012), and design thinking processes (eg Lockwood, 2010). Less formal phrases also become a shared student vocabulary, including VUCA, comfort zones, wicked problems, Hippos (for blockers of organisational innovation), and start-up concepts (eg 'iterate to innovate').

2.2 Student cohorts

To be eligible to join the programme, candidates are expected to have at least five years of professional experience. Since 2010, the cohorts have ranged in size from 15 to 30. As outlined in more detail in Jones *et al.* (2017), their prior qualifications, professional ambitions and subsequent achievements have been widely varied. Most chose the MICL having first considered an MBA or other more career-focused programmes. The programme was launched as a part-time two-year programme, with a largely UK and European cohort in 2010–2012. The cohorts' destinations for the years 2012 to 2019 showed a predominance of senior, entrepreneurial, innovation and design roles, with the most frequent job descriptions including the words 'Manager', 'Director', 'Head', 'Consultant', 'Innovation', 'Founder' or 'Co-Founder', 'Lead', 'Service', 'Product', 'Strategic', 'Learning' or 'Board' (Masters in Innovation, Creativity and Leadership, 2020). The programme's satisfaction ratings and average earnings after graduation are among the most successful of the Bayes MSc cohorts.

2.3 Reflection and embodiment in learning design

In addition to interdisciplinarity, reflection is a consistent assessment element in each MICL module. Reflective processes are introduced during the induction period, including a personal visioning of their MICL goals; a mutual introduction session, in which the students present one another's background and aims; and a non-assessed group 'dérive' which calls for 'learning by walking about in a group, observing, noticing and conversing' (Masters in Innovation, Creativity and Leadership, 2012, derived from Debord, 1958; Kernan *et al.*, 2021). The students are introduced to reflective models, sources and processes, and the reflective assessments take a variety of formats including journals, sketchbooks, portfolios and reports (Kernan *et al.*, 2021). The Creative Writing module calls for daily individual writing practice. Arts-based reflection processes are further reinforced at the start of the capstone CCI module in Term 2 as an invitation to the students to develop a daily practice of as artful journalling to promote intuitive thinking (Holtham and Dove, 2018; Kernan *et al.*, 2021) and support their arts-based assessments.

Embodied learning was also a design principle of the MICL. During the programme, the students write, read aloud, make, explore, design, collaborate, analyse, perform, and make and display an artefact. In the CCI module, the students participate in body percussion and rhythm exercises led by professional musicians, complete physical acting exercises involving characterisation, the voice, the breath and movement, visit the Science Museum's Wonder Lab to experience excellence in interactive design, and share a choreographed dance experience in a London Park linked to a musical and poetic commentary.

2.4 Arts-based assessments

The students frequently cite the power of one of the first modules, *Creative Writing*, in establishing trust and coherence across the group. In this module, the students draft, share and give feedback to one another on short examples of narrative prose and film scripts, which frequently draw on their own life experience. Over the ten weeks of the module, the tutors draw on their experience as published writers and teachers to comments on the students' evolving writing skills.

In the Term 2 *Creativity and the Creative Industries* (CCI) module, the students build on this experience to develop, plan and deliver an assessed group performance, 8–10 minutes in length, to the class and the MICL teaching team. The other, equally challenging assessment is to design and display a personal artefact to reflect their MICL journey and to complete and submit an associated summative reflective journal. The module supports the students to succeed in these assignments through a series of arts-based workshops, which offer embodied encounters with art, music, acting, dance, improvised comedy and biofeedback.

It is clear from their feedback that almost every MICL student experiences both personal resistance and fear of failure in the *Creative Writing* and CCI modules and considerable gains in confidence through their experience of these modules. This pattern is evident in the students' responses to a self-efficacy questionnaire completed between 2014 and 2019 at the start and end of the taught MICL modules. The full-time students were asked to rate their confidence in 'Applying ideas in my work informed by how dancers, artists, comedians, actors and musicians work' (Kernan, 2019). Their 2017–18 students' pre- and post-assessment average responses (out of 10) were Pre 4.33, Post 7.75; and the 2018–19 students' were Pre 3.4, Post 8.4. The questionnaire's free text questions elicited contrasting, often emotive descriptions related to their prior expectations (Pre) and experience (Post) of the CCI workshops and assessments:

> 'What might each of these experiences be a bit like, and/or how does the idea make you feel?'
>
> '3. Joining in a music workshop with a string quartet': Student 1: Pre 'Beyond anxious'; Post 'Notion of working together, in synch – teamwork!'
>
> '8. Developing and presenting an artistic artefact': Student 2: Pre 'No good'; Post 'A great experience, difficult to know where to stop' (Kernan, 2019)

Their willingness nonetheless to embrace the programme values and engage with these processes has generated some exceptional work, both individually and in groups, in many cases at a level consistent with Masters students who specialise in the creative arts as Masters students.

Analysis of the metaphors evoked by the 2012 CCI artefacts showed recurring themes including connection, growth, the book and knowledge, and boxes to be opened and explored. Others explored aligned metaphors, including unlocking, thresholds and doors; illumination, insight and 'light at the end of the tunnel'; play and puzzles; magic, fairies and mystery; perception and a Janus head; and values, time and balance. Further analysis showed that the 2012 artefacts also evoked a range of physical senses, including touch, smell, sound and taste as well as vision; and invited the viewers' embodied and emotional responses, including, in order of frequency, touch, curiosity, perception and empathy, including in response to an oil painting which

incorporated the central figure from Munch's *The Scream.* That these responses were intended by the students is confirmed in several of their journal entries, including explicit exploration of the roles of metaphor in perception and of family, education and work in shaping personal identity.

2.5 Student experience

The thematic analysis of the 2012 students' summative reports on their MICL experiences indicates both emotional impacts and career shifts. The main recurring descriptors used included these positive terms, in order of frequency: 'collaborate', 'trust', 'climate', 'leader', 'acting', 'craft', 'learn', 'try', 'group' and 'confidence'. Descriptors that were used less frequently, most often related to the start of the MICL, indicate stretching or unsettling experiences: 'unsettled', 'vulnerable', 'stretching', 'forced' and 'nerves'.

The students' written accounts confirm that the MICL's teaching and assessments encouraged these students to share their ambitions and values and engage in 'stretching' learning which moved beyond their previous learning and behaviours. Comfort zones, journeys, career shifts, the arts, flow and reflection were common themes, including setting goals to continue with both artistic and reflective practice.

3 Discussion

This summary table reviews to what extent the learning experience offered by the MICL might map onto the 'six ontological dimensions' as configured by García and Saavedra (2016).

Body	Consistent with the García *et al.* framework (2018), the arts-based workshops in the CCI module allow the students to actively explore their physical responses to physical and artistic art practices, including facilitated activities related to their own physical experience and performance.
Language	The programme modules consistently refer to the MICL values, which act as a shared language to discuss and manage behavioural expectations of the MICL community as a whole. The individual modules also build both formal and informal vocabularies which the students have often employed to enunciate their learning and present these insights to others, including in their performances and artefacts.
Emotions	The students' written accounts as well as the MICL self-efficacy study confirm the emotional journey they experience in the MICL, especially in the arts-based modules.
History	The learning processes of the core MICL modules establish both trust and openness within each cohort. Students frequently cite the power of one of the first modules, *Creative Writing* – a module rarely found in leadership degree programmes – in establishing trust and coherence across the group. They express their identity as part of the MICL in their shared language for the organisational and behavioural climate required for innovation and in their analysis of their experience on the programme.
Eros	Underpinned by the environment of 'listening with eros' (García, 2009, p.1336) established during the *Creative* Writing module, the MICL's combination of narrative, visualisation and goal-setting consistently supports the students to develop both personal and interpersonal insights and to explore different routes in their careers. They also report ambitions to continue to explore their artful capabilities, which were in almost all cases not previously encountered as an adult, and to encourage others to share similar insights at work and at home.
Silence	The MICL promotes silent practice through embodied individual and group activities, arts-based learning and making, and reflection.

Table 2 Indicators for the students' experiences on the Masters in Innovation, Creativity and Leadership with reference to the six dimensions of CLEHES (García et al., 2018)

We conclude from this that the MICL can be said to share elements of the 'Enactive laboratory' as defined by García *et al.* (2018, p.3). The MICL also equips its students to explore their capacity to be 'enactors' through direct experience of 'embodied effective way[s] of knowing' and 'choreographed performance' (2018, p.3). Although still rare within the business school curriculum, the emphasis on the body in CLEHES is consistent with a growing literature and practice which analyses the role of arts-based methods in identifying innovative and creative approaches to complex human and social conditions as well as in organisational and

management learning and leadership development (eg Adler and Delbecq, 2018; Anderson, 2008; Ludevig, 2016; Turnbull James, 2011), in addition to others analysed in the journal *Organizational Aesthetics*. Also echoing the CLEHES model, other commentators have emphasised the overriding role of ackowledging and responding to grief and other emotional experiences through organisational and leadership conversations, especially in the context of the Covid pandemic (Petriglieri and Maitlis, 2019; De Smet, 2020). We see considerable potential in further exploring the six ontological dimensions, O Technology and CLEHES (García *et al*., 2018) to better understand the necessary conditions for arts-based HE pedagogy in management and professional education.

The findings of this paper also touch upon how best to define and explore questions of human of learning and development, including in our own future cross-cultural research collaborations. The authors acknowledge our own tensions related to the distinct learning environments in which we teach, and the potential through future collaborative and comparative projects to better understand organisational development and Business Schools as activity systems. The traditional business school curriculum is more and more subject to criticism in North America and Europe, especially in the context of the shifting demand for online provision (Chowfla, 2022; Moldoveanu and Narayandas, 2019), while at the same time the rise in business school applications overall since 2020 and the growth of the MBA in China evidence the continuing perceived value of business-school qualifications (Friedman, 2021). More extended and comparative studies would be needed to explore the broader questions of what we understand by 'education', 'learning' and 'knowledge', and what these are for; and how best to balance a bottom-up approach, self-management and self-government within organisations, including universities.

The paradigmatic title of this article is an invitation to search for new ontological views and epistemologies in order to develop ourselves and others as learners and teachers and to explore multiple, quantum educational spaces (Turner, 2021).

4 References

Adler, N.J. and Delbecq, A.L. (2018). Twenty-First Century Leadership: A Return to Beauty, *Journal of Management Inquiry, 27*(2), 119–137. DOI 10.1177/105649261771075.

Argyris, C. (2012). *Organizational Traps: Leadership, Culture, Organizational Design.* NY and Oxford: Oxford University Press.

Atkinson, D. (2008). Dancing "the management": on social presence, rhythm and finding common purpose, *Management Decision*, *46*(7), 1081–1095.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* NY: Worth Publishers.

Bateson, G. (1972). *Steps to an Ecology of Mind: Collected essays in anthropology, psychiatry, evolution, and epistemology.* London: Ballantine Books.

Beer, S. (1994). *Beyond Dispute: The Invention of Team Syntegrity*. Chichester: John Wiley.

Chowfla, S. (2022). Did COVID change Graduate Management Education? *AACSB* (8 February). Available online: https://www.aacsb.edu/insights/articles/2022/02/did-covid-change-graduate-management-education [22 February 2022].

Espejo, R. (1996). Requirements for Effective Participation in Self-Constructed Organizations, *European Management Journal*, *14*(4), 414-422.

Espejo, R. (2003). Social systems and the embodiment of organizational learning, in Mitleton-Kelly, E. (ed), *Complex Systems and Evolutionary Perspectives on Organizations – the Application of Complexity Theory to Organizations*. Oxford: Pergamon-Elsevier Science, pp. 53-70.

De Smet, Aaron (2020). Your organization is grieving-here's how you can help, *McKinsey Quarterly, 4*, 1–4.Debord, G. (1958). Théorie de la dérive, *Internationale Situationniste* #2 (Paris, December) (Ken Knabb, translator), translated as Theory of the Dérive, *Situationist International Online* (no date) [Online]. Available: https://www.cddc.vt.edu/sionline/si/theory.html [29 August 2021].

Eisner, E. (2012). Art and knowledge, in J.G. Knowles and A.L. Cole (eds) *Handbook of the Arts in Qualitative Research: Perspectives, methodologies, examples, and issues*. Thousand Oaks, CA and London: SAGE Publications, pp.3–13.

Figueroa, C. (2014). *El arte de facilitar y articular organizaciones en red* (*The art of facilitating and articulating network organizations*). Barcelona: Libro tejeRedes.

Friedman, J. (2021). 6 MBA Admissions trends during the pandemic, *Fortune Education* (24 April). Available online: https://fortune.com/education/business/articles/2021/04/24/6-mba-admissions-trends-during-the-pandemic/ [22 February 2022].

Holtham, C. and Dove, A. (2018). Genre and regenring for educating managers in reflective practice, *Journal of Writing in Creative Practice*, *11*(1), 139–150, DOI 10.1386/jwcp.11.1.139_1.

García De la Cerda, O. (2009). Human re-engineering for action: An enactive educational management program, *Kybernetes*, *38*(7/8), 1332–1343. DOI 10.1108/03684920910977005.

García De la Cerda, O. (2017). *O Technology*. Working paper. Universidad de Santiago de Chile.

García De la Cerda, O. and Laulié Cerda, L. (2010). The CLEHES-MOOD: An enactive technology towards effective and collaborative action, *Systems Research and Behavioral Science*, *27*, 319–335. DOI 10.1002/sres.1009.

García De la Cerda, O. and Orellana Muermann, R. (2008). Metasystemic reengineering: an organizational intervention, in F. Adam and P. Humphreys (eds) *Encyclopedia of Decision Making and Decision Support Technologies*, Vol. 2. Hershey, NY: Information Science Reference, pp.612–617.

García De la Cerda, O. and Saavedra Ulloa, M.S.(2006). Self management: An innovative tool for enactive human design, in F. Adam, P. Brezillon, S. Carlsson and P. Humphreys (eds) *Creativity and innovation in decision making and decision support*. London: Decision Support Press, pp.195–214.

García De la Cerda, O. and Saavedra Ulloa, M.S. (2016). An ontological and enactive tool for education in the management of coexistence, *Orientación y Sociedad*, *16*, 67–72. Facultad de Psicología, Universidad Nacional de La Plata.

García De la Cerda, O. and Salazar, A. (2013). A Soft Technology for Effective Enactive Management, in Mukhopadhyay, C., Akhilesh, K.B., Srinivasan, R., Gurtoo, A., Ramachandran, P., PIyer, P., Mathirajan, M. and Bala Subrahmanya, M.H. (eds) *Driving the Economy through Innovation and Entrepreneurship: Emerging Agenda for Technology Management*. Bangalore: Springer India, pp. 593–603.

García De la Cerda, O., Humphreys, P. and Saavedra Ulloa, M.S. (2018). Enactive management: A nurturing technology enabling fresh decision making to cope with conflict situations, *Futures*, *103*, 84–93. DOI 10.1016/j.futures.2018.03.014.

Hatch, M.J. and Yanow, D. (2008). Methodology by Metaphor: Ways of seeing in painting and research, *Organization Studies*, *29*(1): 23–44. DOI :10.1177/0170840607086635.

Isaksen, S.G., Stead-Dorval, K.B. and Treffinger, D.J. (2011). *Creative Approaches to Problem Solving: A framework for innovation and change* (3rd edition). Los Angeles, CA: SAGE Publications.

Jones, S., Kernan, M.A. and Holtham, C. (2017). Taking the MICL: An Interdisciplinary Masters Programme in Innovation, Creativity and Leadership, Impact and Interdisciplinarity in Management Education and Research, EFMD Higher Education Conference 2017, Leuven (23–24 October).

Kernan, M.A. (2019). The impact of arts-based management education: Reconciling knowledge frameworks in a questionnaire study, Arts of Management Symposium, Lugano (21 May).

Kernan, M.A., Holtham, C. and Jones, S. (2021)**.** Accelerating movement across the intentional arc: developing the strategic sensographer, in J. Adams and A. Owens (eds) *Beyond Text: Arts-based research*. Intellect Books, Bristol, pp.52–67.

Knight, P.T. (2001). *Small-Scale Research: Pragmatic inquiry in social science and the caring professions*. London and Thousand Oaks, CA: SAGE Publications.

Lockwood, T. (ed.) (2010). *Design Thinking: Integrating innovation, customer experience, and brand value*. Allworth Press, NY.

Ludevig, D. (2016). Using Embodied Knowledge to Unlock Innovation, Creativity, and Intelligence in Businesses, *Organizational Aesthetics*, *5*(1), 150–166.

Masters in Innovation, Creativity and Leadership (2010). Programme materials (personal communication). London: City, University of London.

Masters in Innovation, Creativity and Leadership (2012). Induction materials (personal communication). London: City, University of London.

Masters in Innovation, Creativity and Leadership (2020). Analysis of 2012–2019 Graduates' Job Titles (personal communication). London: City, University of London.

Maturana, H.R. and Varela, F.J. (1987). *The Tree of Knowledge: The Biological Roots of Human Understanding*. New Science Library/Shambhala Publications, Boston, MA.

Moldoveanu, M. and Narayandas, D. (2019). The Future of Leadership Development, *Harvard Business Review*, March–April, 40–48.

Perspectiv (2021). Understanding your style with 'VIEW', *Perspectiv* [Online]. Available: https://www.perspectiv.co.uk/insights/understanding-your-thinking-style-with-view?rq=VIEW [29 August 2021].

Petriglieri, G. and Maitlis, S. (2019). When a colleague is grieving, *Harvard Business Review 97*(4): 116–123.Scholte, T. (2017). Rehearsing the revolution: theatre as a reflective social practice, *Kybernetes*, *46*(9), 1499–1507.

Tejos, C. (2016). *Sintenacción: Sinergia y Enacción en situaciones de tensión organizacional* (*Syntenaction: Synergy and enaction in situations of organisational tension*). MSc Thesis in Industrial Engineering, University of Santiago, Chile.

Turnbull James, K. (2011). *Leadership in context Lessons from new leadership theory and current leadership development practice*. Kings Fund Leadership Commission. Available online: https://www.kingsfund.org.uk/sites/default/files/Leadership-in-context-leadership-theory-current-leadership-development-practice-Kim-Turnbull-James-The-Kings-Fund-May-2011.pdf [14 February 2022].Van Manen, M. (1997). *Researching Lived Experience: Human science for an action sensitive pedagogy* (2nd edition). London and NY: Routledge.

Turner, K. (2021). Big ideas in education: Quantum mechanics and education paradigms, *Educational Philosophy and Theory*, *53*:6, 578-587. DOI: 10.1080/00131857.2020.1798757.

Young, J.O. (2001). *Art and Knowledge*. London and NY: Routledge.