

Perspectives: Policy and Practice in Higher Education



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/tpsp20

The role of 'knowledgeable others' in supporting academics' professional learning: implications for academic development

Wayne Barry

To cite this article: Wayne Barry (2022): The role of 'knowledgeable others' in supporting academics' professional learning: implications for academic development, Perspectives: Policy and Practice in Higher Education, DOI: 10.1080/13603108.2022.2131650

To link to this article: https://doi.org/10.1080/13603108.2022.2131650

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 12 Oct 2022.

_	
Γ	
L	0
-	

Submit your article to this journal 🗹

Article views: 150



View related articles

View Crossmark data 🗹

Routledge Taylor & Francis Group

OPEN ACCESS Check for updates

The role of 'knowledgeable others' in supporting academics' professional learning: implications for academic development

Wayne Barry 🕩

Learning and Teaching Enhancement, Canterbury Christ Church University, Canterbury, UK

ABSTRACT

The professional learning of academics working in UK higher education (HE) can be a complex enterprise occurring across a multitude of (in)formal learning encounters, challenging academics to negotiate and prioritise their time and the opportunities available to them. This study investigates the professional learning of academics in UK HE, focusing upon those factors which enable or encumber these activities to flourish. A mixed method case study of a single UK university involving questionnaire, interview and photovoice methods was undertaken. Twelve academics were selected from the academic staff questionnaire (n = 182) to be interviewed and photograph their professional learning experiences. Participants reported that time, space and prioritising what they learnt were encumbering factors, but an enabling agent came from the intervention of 'knowledgeable others'. The findings suggest that the role of the 'knowledgeable other' will have important implications for academic developers in developing their practice in supporting academics' professional learning.

KEYWORDS

Professional learning; academic development; professional learning networks; knowledgeable others; higher education

Introduction

This paper draws upon the findings taken from the author's Doctorate in Education (EdD) thesis (see Barry 2018) examining academic professional learning at a UK university. The findings highlight the importance of the 'knowledgeable other' in supporting the professional learning of academics. The paper begins by positioning the current UK Higher Education (HE) context in which professional learning operates. This is followed by a discussion on the meaning of 'professional learning'. Next, there is an overview of the project and the methods used. Finally, there is a discussion of one of the outcomes from the project, that of the 'knowledgeable other', which will be of interest to those professionals facilitating academic, educational or professional development, and suggests some approaches that could be introduced within professional colleagues' own institutional contexts.

The current UK HE context

In recent years, the UK HE sector has faced ongoing challenges to its authority and identity (Behari-Leak 2017) set against a milieu of inequality, complexity and uncertainty (Barnett 2012, 2016). The UK HE sector has experienced an increasing shift towards adopting a more corporate style of management, introducing a culture that can be characterised by an infusion of quantitative data, metrics and indicators used to highlight trends and patterns across a broad spectrum of HE activities (Mäkitalo 2012; Anderson 2017; Williamson, Bayne, and Shay 2020). These metrics have become influential in determining Higher Education Institutions' (HEIs) reputation and standing within a highly competitive global HE market (Daniel 2015; Gibbons, Neumayer, and Perkins 2015).

The formal withdrawal from the European Union by the UK in January 2020 (European Union Referendum Act 2015), recent HE legislation introducing a new regulator for universities (Higher Education and Research Act 2017), and a global pandemic from COVID-19 in March 2020 (WHO 2020) had become watershed moments for UK HE (Green et al. 2020). On 23 March 2020, many schools, colleges and universities in the UK were closed as the rest of the country went into lockdown. For most UK universities this was followed by an abrupt and disruptive transition from teaching face-to-face to 'emergency remote teaching' (ERT), forcibly introducing unfamiliar ways of working to many people (Hodges et al. 2020).

The role of the academic developer

Academic work has become complex and fluid (Boud and Brew 2013; Boyd, Smith, and Beyaztas 2015) requiring academics to equip themselves with a new

CONTACT Wayne Barry 🐼 wayne.barry@canterbury.ac.uk 🗈 Learning and Teaching Enhancement, Canterbury Christ Church University, North Holmes Road, Canterbury, Kent CT1 1QU, UK 🛇 @heywayne

 $[\]ensuremath{\mathbb{C}}$ 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/bync-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

and disparate set of skills and knowledge, often sitting outside of their discipline, to fulfil the necessary functions of their positions within their university (Garraway 2020; Spilker, Prinsen, and Kalz 2020).

The academic developer's role is to support academics through capacity building to enhance their teaching practice (Debowski 2014), with developers bringing theoretical knowledge and practical experience to facilitate change (Skead 2018), often focusing on diverse agendas that HEIs wish to invest and prioritise in (McGrath 2020), such as internationalisation, employability, technology, or new pedagogic approaches. Academics are expected to become knowledgeable in one or more of these agendas as well as maintain currency within their own disciplinary areas and teaching practices (Amundsen and Wilson 2012; Daniels 2017).

As academics and academic developers strive to work together within a highly competitive HE sector, tensions may arise with academics feeling their roles within learning and teaching being appropriated by non-academics (Rowland 2007), or having their independence threatened (Thomas and Cordiner 2014), and academic developers needing to defend their position as practitioners within the field (Kensington-Miller, Renc-Roe, and Morón-Garcia 2015). Bayerlein and McGrath (2018) suggest that successful collaboration is dependent upon both parties having shared complementary values, goals and opportunities.

Other professionals, such as organisational developers, learning technologists, and librarians may also have academic development responsibilities. For the purposes of this paper, any professional occupying such roles are working within the sphere of academic development.

A note about professional learning

In the last decade, the term 'professional learning' has become increasingly ubiquitous in the research literature, educational texts, legislation, and policy documents (Ambler et al. 2020; Jesacher-Roessler and Agostini 2021). There has been a fundamental shift in terminology with 'professional learning' supplanting 'professional development' as the standard nomenclature (Labone and Long 2016). This 'shift' suggests new approaches to professional thinking and innovative ways of working (Stevenson 2019). However, both terms remain highly contested and are often used interchangeably with little to distinguish between them (Webster-Wright 2010; Boud and Hager 2012). Indeed, professional learning still lacks a clear and definitive description with the concept remaining ambiguous (Jesacher-Roessler and Agostini 2021).

To get a sense of the perceived differences between professional learning and professional development, much of the literature conceives 'professional development' as relating to those activities that passively engage a professional in developing new learning and understanding around their professional practice, often mediated through workshops, lectures and conferences, with theoretical knowledge gained from articles, books, and other media (Webster-Wright 2009; Eraut 2011; Milligan and Littlejohn 2014).

Conversely, 'professional learning' is conceived as an active continuous, lifelong and life-wide process that grows and flourishes throughout a professional's career, which fosters the emergence of collaboration, reflexivity and criticality, coupled with contextually situated changes in practice (Groundwater-Smith and Mockler 2009; Wood and Su 2014; James and Tunison 2020). It has been argued that professional learning places greater emphasis on informal learning activities, which often go unrecognised (Eraut 2011; Zukas and Malcolm 2017).

More recently, practice theory and sociomaterial perspectives reconceptualise professional learning as being constructed and becoming entangled in situated relations between people, social practices, and material objects within everyday activities whilst navigating different spaces (Fenwick and Edwards 2011; Fenwick and Nerland 2014; Barry 2018). In other words, academic work and professional learning cannot be regarded as separate entities operating within isolated contexts (Malcolm and Zukas 2014; Barry 2018), but rather learning and work are intricately entangled (Mulcahy 2011). Thus, knowledge is conceived as immanently distributed within relations and practices rather than being firmly situated within individuals or objects (Boylan 2021).

Questions about professional learning

For academics working in a competitive and fluid HE environment, professional learning can be an intricate and difficult undertaking involving a multitude of formal and informal work-related learning experiences happening at any time, situated in any space, facilitated by different people and objects, all of which are often entangled in other areas of academic professional life (Fenwick 2010; Fenwick and Nerland 2014). Professional learning can be a precarious endeavour as academics negotiate and prioritise conflicting demands upon their workloads and time whilst ensuring the organisational requirements of their institution are met (Blackmore 2009; Quinn 2012; Daniels 2017). These issues invite some pertinent questions: How do academics negotiate and manage their time for professional learning? What kinds of spaces do academics occupy? How are these spaces configured in facilitating their professional learning? How supported are academics in their professional learning? What factors facilitate or impede the work-based professional learning of academics? How and when do

academics prioritise one type of professional knowledge above another?

Project overview

These questions concerning academic professional learning form the basis of the author's EdD thesis (Barry 2018), based upon his experiences as a digital academic developer in supporting technology-enhanced learning (TEL) within a learning and teaching department with an enhancement remit at a UK university.

Methodology

For this study, a sociomaterial approach was adopted to explore how those experiences, spaces, tools, and discussions come about in enabling or encumbering an academic's professional learning. Sociomateriality seeks to explore how the social and cultural aspects of everyday life are inextricably entangled with the material world. It is primarily concerned with following the various dependencies and relationships that come to exist between human and non-human connections, in which some event emerges (Orlikowski 2007; Orlikowski and Scott 2008; Davies and Riach 2018). Davies and Riach (2018) note that mixed methods are common in capturing sociomaterial data, and case study approaches can significantly enhance the reporting of the findings, particularly where many strands of data collection have been used to track different aspects of the research.

Once ethical approval had been granted, a qualitative-led mixed methods study was undertaken comprising of three work strands, which collectively generated a rich data set of professional learning discourses, ideas, texts, spaces, places, objects, technologies, and activities. The output of each strand informed the following strand, and the resultant data from all three work strands formed the basis of a single-site case study concerning academic professional learning at a UK university.

Strand 1: online survey

The first online survey was piloted with some academic staff, who commented on the questions being posed (a mixture of Likert-type ratings and open comments) and on the survey's layout and style (Edwards 2010; Cohen, Manion, and Morrison 2017). Based on their collective feedback, a revised version of the survey was constructed and deployed. The revised online survey was open to respondents for two calendar weeks and was sent out to 535 academic staff working at the university. The survey returned a sample of 182 responses, signifying a completion rate of 34%. The online survey served two purposes;

firstly to collect information on academics' professional learning practices (e.g. barriers, time spent); and secondly to identify potential participants for Strands 2 and 3 of the project. Thematic analysis of the data was conducted allowing for key themes to emerge followed by multinomial logistic regression analysis to consider whether these themes varied according to role, gender, age, HE teaching experience, or subject discipline (Tight 2012).

The potential next stage participants were further refined to create a sample based upon their role (i.e. Module Leader); having a permanent contract that afforded better availability and accessibility than those on temporary or sessional contracts; being located at one of the four main university sites enabling ease of access; and having between 1 and 20 years teaching experience in HE. The next stages featured 12 participants from across a variety of Faculties and Schools at the university, who came with different HE teaching experiences, ranging from 2 to 24 years, occupying multiple roles, adopting many identities, and offering different perspectives at different intervals within Strands 2 and 3.

Strand 2: semi-structured interviews

The interview questions were informed on the data collected from the online survey. The participants, drawn from the refined sample, were invited to discuss, in some depth, the processes and practices around their professional learning activities (Rowley 2012; Norton 2019). Each interview lasted one hour with the principle aims to investigate levels of academic engagement with professional learning; explore those conditions or situations that could either enable or encumber academic professional learning; and tease out those decision-making processes involved in prioritising one knowledge domain (e.g. discipline area) over another (e.g. organisational agenda).

Strand 3: photovoice slideshow

Photovoice is a qualitative and visual method used in participatory action research (PAR) (Sutton-Brown 2014; Wang 2022). It places ownership of cameras on the participants, enabling them to record, reflect, and communicate on those critical contexts, situations, or issues that concern them, whilst instigating some form of grassroots social action. Underpinning the efficacy of photovoice are three conceptual models: Feminist Theory, Documentary Photography, and Freire's (1970) Theory of Critical Consciousness (Sutton-Brown 2014).

Informed from the discussions that took place during the Strand 2 interviews, the participants were invited to take photographs of those places (e.g. office, library, home) and objects (e.g. journals, e-mail, institutional policies) in their learning and working environments that held significance to them in terms of facilitating or thwarting their professional learning. The participants became co-researchers on the project giving them control and enabling them to curate, collate and present their chosen photographs as a photovoice slideshow using Microsoft PowerPoint (see Barry and Beighton 2021). Each photovoice slideshow, the responses that the participants gave in Strands 1 and 2 of the project were referenced and clarified to help 'close the loop'.

Both the photovoice presentations and the interviews were professionally transcribed and read numerous times by the author to ensure an accurate record of the data collected.

Bringing the strands together

The data obtained from the participants' interviews and photovoice slideshows and their responses drawn from the survey were presented through a form of employment, facilitating the tracing of a multitude of people, spaces, objects, processes, connections and interactions that enabled, encumbered, entered or exited the participant's engagement with professional learning, thus developing an account of the intricate sociomaterial practices of the professional learning experiences and activities that were taking place (Czarniawska 2010; Holley and Colyar 2012).

Results

There was an expectation to see evidence of distinct disciplinary patterns and behaviours, as reported in the research literature, relating to academic professional learning (Trowler, Saunders, and Bamber 2012; Zukas and Malcolm 2017). Whilst there were some cursory accounts concerning particular locations (i.e. a laboratory) and specific tools (i.e. a spectrometer), this was not the participants' focus of attention. Instead, the data highlighted experiences and activities that were entangled and transdisciplinary in nature, where time and space were barriers to the participants' professional learning, a need to strategically prioritise what was learnt, and significantly, the utilisation of a *knowledgeable other* to support their professional learning as a way of 'saving time'.

Time and space: barriers to professional learning

As one participant noted 'time is the most valuable resource ... use it wisely', it comes as no surprise that time is the most significant barrier to the participants' professional learning with the Strand 1 survey (*n* = 182) reporting the inability for respondents to make time for professional learning (69%), being unable to follow-up on areas of interest (59%), and not be given time to attend a learning event (38%), which were highlighted in findings from similar studies on academic development (King 2004; Donelan 2016; MacDonald et al. 2021). Interestingly, this is coupled with academics gaining access to a suitable space conducive to their professional learning away from any interruptions or distractions brought on by unscheduled visitors to the work office, emails, phone calls, text messages, fire alarms, or having to share an office with other colleagues, as one participant explained:

I was sharing with ..., I think it was six people in an office that really should've only had about three. And I really struggled. I would do things like get in early and stay late just so that I could get my work done on my own. My heart would sink if everybody turned up.

Another participant commented upon the need to find 'a little hidey hole away just [to] get things done'. The survey (n = 182) also highlighted that most respondents would seek out spaces away from their work offices, such as a dedicated home office (91%), a quiet corner in the University library (48%), online (47%), whilst travelling (31%), or outside (21%), to fully engage with their professional learning, which ran contrary of their line managers' expectation of them being permanently sat at their office desk to receive students.

Prioritising what to learn

For all participants, finding a time and a place to learn proved challenging, meaning that the participants had to be strategic in what they learnt. Most participants expressed a preference for prioritising their professional learning towards their discipline rather than developing knowledge or skills in other areas, such as teaching as noted by this participant: 'I'm more interested in focusing on the subject than learning and teaching'. This sentiment was borne out of the Strand 1 survey (n = 182), which reported respondents giving precedence towards their research/subject area (51%) rather than to learning and teaching (28%), echoing early research findings (Allan, Blackwell, and Gibbs 2003; Chen 2015), and reinforced by another participant:

You develop yourself professionally as an academic by doing and conducting research ... in terms of my professional development ... [it] is to push myself to do the most creative types of research possible.

However, most UK HEIs now require academics to have formal professional teaching qualifications or work towards achieving one (Norton et al. 2010; Fahnert 2015; Advance HE 2022), with academics expected to become acquainted with other professional knowledge domains, such as employability, internationalisation and sustainability, in order to maintain currency and to perform certain functions associated with their position within the university. Nevertheless, when it came to other forms of professional knowledge, the participants sought out a 'knowledgeable other' in reconciling those gaps within their academic and professional repertoire.

The knowledgeable other

Depending upon the roles and responsibilities of an academic, these factors can influence the amount of information they are expected to synthesise to competently fulfil their roles. This becomes problematic with escalating workloads, insufficient resources, and/or organisational change brought about by internal and/or external factors, such as new HE legislation, aggressive economic forces, new technologies, or a global pandemic. Here, academics are forced to rapidly absorb considerable amounts of information, which can be ambiguous, overwhelming, open to different interpretations, contradictory to other sources of information, or just plain difficult to find.

Much of this information is typically located on or beyond the periphery of an academic's discipline, though it does not preclude the disciplinary area itself. For most participants, rather than locate and read these non-disciplinary forms of information (e.g. institutional policy documents), they actively sought out a trusted source to enable them to quickly absorb the essence of that information within a limited time frame, so to save time, as this participant notes:

Subject knowledge I think of as my own responsibility. For the other sort of knowledge, there is a good support network ..., a lot of this stuff is new to me, some of the administrative stuff is new to me. I'm learning it all the time, but there are people that know more than me about these things, and I lean on them quite a bit.

This trusted source of information is referred to as a *knowledgeable other*, which can either be a person, such as a valued colleague (within their School or in an entirely different department within the University, e.g. a librarian), or a non-human entity, such as a reputable journal, website or mobile app as noted by this participant: 'There's some quite influential people out on Twitter that I've started to engage with'. The participants rely upon the 'knowledgeable other' to facilitate the fast-tracking and reconciling of those gaps in their professional knowledge. The knowledge, in this sense, does not exist in any individual's head or in the technology, but it is entangled within the social and

material context in which the knowledge is obtained (Hilaricus 2011). Instead, the individual constructs a 'mental map' of the route in locating the knowledge they seek. Each 'knowledgeable other' is a connection point to a much wider network of trusted 'knowledgeable others'.

The concept behind the 'knowledgeable other' is drawn from the work on Actor-Network Theory (Latour 2005) and Connectivism (Downes 2012), though these concepts are not without their critics (see Kipnis 2015; Kop 2011; Michael 2017, for critiques). The 'knowledgeable other' may help 'fast track' this information to the academic in a clear and succinct way enabling the academic to bridge those professional knowledge gaps.

Discussion and recommendations

The traditional academic role of research, teaching and service (Whitchurch 2012; Miller 2019) has become complex and nuanced incorporating a multitude of roles and responsibilities (Boud and Brew 2013; Boyd, Smith, and Beyaztas 2015). To ensure that academics are able to do their job alongside maintaining currency and authenticity, they are expected to be well informed in areas that are often located outside of their discipline.

Most participants adopted a 'need-to-know' or a 'just-in-time' strategy for professional learning, often involving the support of a 'knowledgeable other' in quickly reconciling those gaps within their professional knowledge. Depending on the type of professional knowledge being consumed would depend on the participant knowing the route or creating a route in locating the assistance of a 'knowledgeable other', such as asking a colleague, a librarian, or posting a message on Twitter or an online forum. The 'knowledgeable other' becomes an information source connected to other information-rich sources, which may be human and/or non-human (e.g. websites, databases, mobile apps, libraries, books). However, some 'routes' to a 'knowledgeable other' are harder to navigate than others, such as a poorly designed website or an ineffective search engine, or the knowledge is timesensitive, such as announcing future funding opportunities.

The professional learning of academics presents interesting opportunities and challenges for those professionals working in the field of academic development. The participants struggled to find time or space that could enable them to engage in some professional learning, with many participants perceiving professional learning as a luxury or a 'guilty pleasure'. Nevertheless, academics value a continuous and contextually situated approach to their professional learning (Knight, Tait, and Yorke 2006; Grenier and Kehrhahn 2008; Westerman and Barry 2009). The following sub-sections offer some ideas that academic developers may wish to explore within their own institutional contexts.

Professional learning networks

Academic developers could encourage academics, especially those who are new to HE, to develop a professional learning network (PLN) enabling academics to identify 'knowledgeable others' (Trust, Krutka, and Carpenter 2016; 2017; Jesacher-Roessler and Agostini 2021). A PLN is conceived as 'a system of interactions made up of people, spaces and tools that support learning and professional growth' (Krutka, Carpernter, and Trust 2017, 247). A PLN can draw in a variety of people offering opportunities for collaboration, ideas, feedback, and emotional support. Different spaces can be occupied to facilitate professional learning, ranging from the physical spaces of café meetings and conferences to the digital spaces of Microsoft Teams meetings and FutureLearn online courses. Moreover, an array of cognitive and technological tools can be adopted to promote and sustain an academic's professional learning (Trust, Carpenter, and Krutka 2017; Charteris, Berman, and Page 2021).

Professional learning opportunities can be fluid and precarious; an academic is able to draw upon these experiences in promoting and constructing different PLNs to support different knowledge domains or special areas of interest. The PLN is multimodal facilitating learning opportunities that can serendipitously occur at any time and any place enabling academics in developing the prerequisite expertise, skills and knowledge (Trust, Krutka, and Carpenter 2016). The prevalence of social media provides ample opportunities for academics to broaden their PLNs beyond the boundaries of the institution, space, and time (Trust, Carpenter, and Krutka 2017). Indeed, recent research suggests PLNs can support and nurture professional growth in one or more areas: cognitive, affective, identity and social (Trust, Krutka, and Carpenter 2016).

However, academics may need to develop new strategies for handling an overabundance of information, such as better control over their information environment utilising critical thinking skills, management of time, management of information, filtering techniques, using smart dashboards, and personalising information (Eppler and Mengis 2004; Bawden and Robinson 2009).

Nevertheless, PLNs can offer academics an invaluable toolkit enabling them to discover and disseminate professional knowledge, which goes beyond traditional face-to-face networks, gaining more agency over their professional learning journey, receiving emotional support, and searching for and connecting with human and/or non-human 'knowledgeable others' (Trust, Krutka, and Carpenter 2016; Trust, Carpenter, and Krutka 2017).

Microlearning and micro-credentials

An area of professional learning gaining some traction in the UK HE sector is the adoption of the microlearning model offering a personalised learning experience (Wasiuk et al. 2017; Filipe et al. 2020; Leong et al. 2021). This model enables HEIs to develop in-house or buy in 'bite size' content that can be accessed on any device, at any time, from any place as a means of providing 'just-in-time' content for academics and professional staff. This method is particularly useful for synthesising large amounts of non-subject discipline information/ knowledge, such as policies, practices and institutional strategies, into digestible nuggets that provide headline information, thus these nuggets of information become a 'knowledgeable other'.

The microlearning model could be linked to microcredentials to facilitate skill development, highlight relevant content, encourage motivation and flexibility, and measure mastery (Copenhaver and Pritchard 2017; Hunt et al. 2020). For academics, these micro-credentials could be aligned with the *Professional Standards Framework* (PSF) as they work towards their *Advance HE Fellowships* (Advance HE 2022).

Schools and faculties as co-partners

Professionals facilitating academic development should work closely with Schools and Faculties in coconstructing and co-creating academic colleagues' professional learning around topics and issues that are relevant, contextually situated and timely. Consideration should go into the adoption of a diverse range of professional learning practices, approaches and opportunities that recognise complexity and change inside and outside of the institution, and every effort should be made to eschew a one-sizefits-all strategy (Sim, Timmermans, and Zou 2020).

Pockets of space and time need to be created and protected to allow professional learning to take place and flourish. These 'pockets' of professional learning could fit inside such structures as departmental meetings or away days. Build in opportunities for academic colleagues to share good practice, offer advice and guidance to new colleagues in the form of a 'learning surgery', and discuss topics of mutual interest (Fullwood, Rowley, and McLean 2019; Al-Kurdi, El-Haddadeh, and Eldabi 2020). This can take the form of a Self Organised Learning Environment (SOLE) where academics organised themselves into small groups to explore and research a topic or theme in more detail, with little intervention from a facilitator, and present their findings to the other teams (Mitra 2006). These small groups can exist in a physical space or a virtual

space using *Microsoft Teams*, *Zoom* or similar systems (Kubrická 2020; Charteris, Berman, and Page 2021). Give academics something practical that they value and can take away from these events to either reflect upon, apply within their own contexts and practices, or something tangible that they can complete in their own time (e.g. writing a lesson plan, designing a module, writing a research bid).

Other approaches to professional learning could include running an *unconference* where academics decide during the event on the topics of interest they would like to explore, such as how to run a hybrid class where students have the option of attending sessions in the classroom, participating online, or doing both (Boule 2011; Carpenter and Linton 2018). Another option could be developing a digital escape room to facilitate active and problem-based learning around such themes as academic integrity, employability or assessment practices, enabling academics to explore and consider such themes in a deep and meaningful way (Rouse 2017; Adams et al. 2018; Pearcy, Guise, and Heller 2019; Gómez 2020).

Conclusion

In a complex and shifting UK HE sector where academics have taken on a multitude of challenging roles and responsibilities, professional colleagues allied to the field of academic development are required to be agile, flexible and responsive as they too navigate their way through the fluid HE environment in supporting and facilitating professional learning opportunities for our academic colleagues (Sharif et al. 2019; Stanton and Young 2022). The academic developer, whether they be librarians, learning technologists, professional developers, or organisational developers, is a 'knowledgeable other' that is able to guide and connect the academic, as well as themselves, to a constellation of knowledgeable others.

It is hoped that the insights gleaned from this project and the above suggestions for professional learning approaches will enable academic development professionals to explore new and engaging opportunities to support academic colleagues in their own professional growth by creating and protecting time and space for such growth to thrive and flourish.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Wayne Barry has over 25 years experience of working in UK Higher Education within areas allied to Information Technology, Learning & Teaching, and Researcher Development. He

has worked on a number of local, national, international and award-winning projects involving technology, learning spaces and education. His professional interests include educational technology, learning spaces, and professional learning and development. He is currently a Digital Academic Developer at a UK university. He is a Senior Fellow with Advance HE (formerly The Higher Education Academy), and a Chartered IT Professional with the British Computer Society. He holds a Doctorate in Education (EdD).

ORCID

Wayne Barry () http://orcid.org/0000-0002-3867-9480

References

- Adams, Vickie, Stephanie Burger, Kaile Crawford, and Robyn Setter. 2018. "Can You Escape? Creating an Escape Room to Facilitate Active Learning." *Journal for Nurses in Professional Development* 34 (2): E1–E5. doi:10.1097/NND. 000000000000433.
- Advance HE. 2022. "UK Professional Standards Framework (PSF)." Accessed January 15, 2022. https://www.advancehe.ac.uk/guidance/teaching-and-learning/ukpsf.
- Al-Kurdi, Osama F., Ramzi El-Haddadeh, and Tillal Eldabi. 2020. "The Role of Organisational Climate in Managing Knowledge Sharing among Academics in Higher Education." International Journal of Information Management 50: 217–227. doi:10.1016/j.ijinfomgt.2019. 05.018.
- Allan, Cliff, Richard Blackwell, and Graham Gibbs. 2003. "Developing the Subject Dimension to Staff Development." In *Towards Strategic Staff Development in Higher Education*, edited by Richard Blackwell and Paul Blackmore, 66–78. Maidenhead: Open University Press.
- Ambler, Trudy, Ian Solomonides, Andrew Smallridge, Trish McCluskey, and Lyn Hannah. 2020. "Professional Learning for Academics Teaching First-Year Undergraduate Students." *Professional Development in Education* 46 (5): 845–857. doi:10.1080/19415257.2019. 1647272.
- Amundsen, Cheryl, and Mary Wilson. 2012. "Are We Asking the Right Questions?: A Conceptual Review of the Educational Development Literature in Higher Education." *Review of Educational Research* 82 (1): 90– 126. doi:10.3102/0034654312438409.
- Anderson, Gary. 2017. "Participatory Action Research (PAR) as Democratic Disruption: New Public Management and Educational Research in Schools and Universities." International Journal of Qualitative Studies in Education 30 (5): 432–499. doi:10.1080/09518398.2017.1303211.
- Barnett, Ronald. 2012. "Learning for an Unknown Future." Higher Education Research & Development 31 (1): 65–77. doi:10.1080/07294360.2012.642841.
- Barnett, Ronald. 2016. Understanding the University: Institution, Idea, Possibilities. London: Routledge.
- Barry, Wayne. 2018. "The Professional Learning of Academics in Higher Education: A Sociomaterial Perspective." EdD thesis, Canterbury Christ Church University. https:// repository.canterbury.ac.uk/item/88ww2/theprofessional-learning-of-academics-in-higher-educationa-sociomaterial-perspective.
- Barry, Wayne, and Christian Beighton. 2021. Using Photovoice in Participatory Educational Research. SAGE Research Methods Cases. London: Sage. doi:10.4135/ 9781529758337.

- Bawden, David, and Lyn Robinson. 2009. "The Dark Side of Information: Overload, Anxiety and Other Paradoxes and Pathologies." *Journal of Information Science* 35 (2): 180– 191. doi:10.1177/0165551508095781.
- Bayerlein, Leopold, and Naomi McGrath. 2018. "Collaborating for Success: An Analysis of the Working Relationship Between Academics and Educational Development Professionals." *Studies in Higher Education* 43 (6): 1089– 1106. doi:10.1080/03075079.2016.1215417.
- Behari-Leak, Kasturi. 2017. "New Academics, New Higher Education Contexts: A Critical Perspective on Professional Development." *Teaching in Higher Education* 22 (5): 485–500. doi:10.1080/13562517.2016.1273215.
- Blackmore, Paul. 2009. "Conceptions of Development in Higher Education Institutions." *Studies in Higher Education* 34 (6): 663–676. doi:10.1080/ 03075070902785598.
- Boud, David, and Angela Brew. 2013. "Reconceptualising Academic Work as Professional Practice: Implications for Academic Development." International Journal for Academic Development 18 (3): 208–221. doi:10.1080/ 1360144X.2012.671771.
- Boud, David, and Paul Hager. 2012. "Re-thinking Continuing Professional Development Through Changing Metaphors and Location in Professional Practices." *Studies in Continuing Education* 34 (1): 17–30. doi:10.1080/ 0158037X.2011.608656.
- Boule, Michelle. 2011. *Mob Rule Learning: Camps, Unconferences, and Trashing the Talking Head*. New York: Information Today/CyberAge Books.
- Boyd, Peter, Caroline Smith, and Dilek Ilhan Beyaztas. 2015. "Evaluating Academic Workplaces: The Hyper-Expansive Environment Experienced by University Lecturers in Professional Fields." *International Journal for Academic Development* 20 (1): 18–32. doi:10.1080/1360144X.2014. 948255.
- Boylan, Mark. 2021. "Entanglement, Evaluation and Practice in a Professional Learning Innovation." *Professional Development in Education* 47 (2-3): 478–492. doi:10.1080/ 19415257.2021.1879233.
- Carpenter, Jeffrey Paul, and Jayme Nixon Linton. 2018. "Educators' Perspectives on the Impact of Edcamp Unconference Professional Learning." *Teaching and Teacher Education* 73: 56–69. doi:10.1016/j.tate.2018.03. 014.
- Charteris, Jennifer, Jeanette Berman, and Angela Page. 2021. "Virtual Team Professional Learning and Development for Practitioners in Education." *Professional Development in Education* 47: 1–14. doi:10.1080/19415257.2021.1879215.
- Chen, Chi Yusn. 2015. "A Study Showing Research has Been Valued over Teaching in Higher Education." *Journal of the Scholarship of Teaching and Learning* 15 (3): 15–32. doi:10.14434/josotl.v15i3.13319.
- Cohen, Louis, Lawrence Manion, and Keith Morrison. 2017. *Research Methods in Education*. 8th ed. Oxford: Routledge.
- Copenhaver, Kimberly, and Liz Pritchard. 2017. "Digital Badges for Staff Training: Motivate Employees to Learn with Micro-Credentials." *Journal of Electronic Resources Librarianship* 29 (4): 245–254. doi:10.1080/1941126X. 2017.1378543.
- Czarniawska, Barbara. 2010. "The Uses of Narratology in Social and Policy Studies." *Critical Policy Studies* 4 (1): 58–76. doi:10.1080/19460171003715002.
- Daniel, Ben. 2015. "Big Data and Analytics in Higher Education: Opportunities and Challenges." *British Journal of Educational Technology* 46 (5): 904–920. doi:10.1111/ bjet.12230.

- Daniels, Jeannie. 2017. "Professional Learning in Higher Education: Making Good Practice Relevant." *International Journal for Academic Development* 22 (2): 170–181. doi:10.1080/1360144X.2016.1261352.
- Davies, Olivia, and Kathleen Riach. 2018. "Sociomateriality and Qualitative Research: Method, Matter and Meaning." In The SAGE Handbook of Qualitative Business and Management Research Methods, edited by Catherine Cassell, Ann L. Cunliffe, and Gina Grandy, 133–149. London: Sage. doi:10.4135/9781526430236.
- Debowski, Shelda. 2014. "From Agents of Change to Partners in Arms: The Emerging Academic Developer Role." International Journal for Academic Development 19 (1): 50–56. doi:10.1080/1360144X.2013.862621.
- Donelan, Helen. 2016. "Social Media for Professional Development and Networking Opportunities in Academia." *Journal of Further and Higher Education* 20 (5): 706–729. doi:10.1080/0309877X.2015.1014321.
- Downes, Stephen. 2012. Connectivism and Connective Knowledge: Essays on Meaning and Learning Networks. Ottawa: National Research Council Canada. https://www. oerknowledgecloud.org/record705.
- Edwards, Phil. 2010. "Questionnaires in Clinical Trials: Guidelines for Optimal Design and Administration." *Trials* 11 (2): 1–8. doi:10.1186/1745-6215-11-2.
- Eppler, Martin J., and Jeanne Mengis. 2004. "The Concept of Information Overload: A Review of Literature from Organization Science, Accounting, Marketing, MIS, and Related Disciplines." *The Information Society* 20 (5): 325– 344. doi:10.1080/01972240490507974.
- Eraut, Michael. 2011. "Informal Learning in the Workplace: Evidence on the Real Value of Work-Based Learning (WBL)." *Development and Learning in Organizations* 25 (5): 8–12. doi:10.1108/14777281111159375.
- European Union Referendum Act. 2015. "c. 36." https://www. legislation.gov.uk/ukpga/2015/36/contents/enacted.
- Fahnert, Beatrix. 2015. "Teaching Matters Academic Professional Development in the Early 21st Century." *FEMS Microbiology Letters* 362 (20): 1–6. doi:10.1093/ femsle/fnv156.
- Fenwick, Tara. 2010. "Workplace 'Learning' and Adult Education: Messy Objects, Blurry Maps and Making Difference." European Journal for Research on the Education and Learning of Adults 1 (1-2): 79–95. doi:10. 3384/rela.2000-7426.rela0006.
- Fenwick, Tara, and Richard Edwards. 2011. "Considering Materiality in Educational Policy: Messy Objects and Multiple Reals." *Educational Theory* 61 (6): 709–726. doi:10.1111/j.1741-5446.2011.00429.x.
- Fenwick, Tara, and Monika Nerland. 2014. *Reconceptualising Professional Learning: Sociomaterial Knowledges, Practices and Responsibilities*. Oxford: Routledge.
- Filipe, Helena Prior, Morag Paton, Jane Tipping, Suzan Schneeweiss, and Heather G. Mack. 2020. "Microlearning to Improve CPD Learning Objectives." *The Clinical Teacher* 17 (6): 695–699. doi:10.1111/tct.13208.
- Freire, Paulo. 1970. *Pedagogy of the Oppressed*. London: Penguin Books.
- Fullwood, Roger, Jennifer Rowley, and Jacqueline McLean. 2019. "Exploring the Factors That Influence Knowledge Sharing Between Academics." *Journal of Further and Higher Education* 43 (8): 1051–1063. doi:10.1080/ 0309877X.2018.1448928.
- Garraway, James. 2020. "Academics' Learning in Times of Change: A Change Laboratory Approach." *Studies in Continuing Education* 43: 1–22. doi:10.1080/0158037X. 2020.1792436.

- Gibbons, Stephen, Eric Neumayer, and Richard Perkins. 2015. "Student Satisfaction, League Tables and University Applications: Evidence from Britain." *Economics of Education Review* 48: 148–164. doi:10.1016/j.econedurev. 2015.07.002.
- Gómez, Miguel. 2020. "A COVID-19 Intervention: Using Digital Escape Rooms to Provide Professional Development to Alternative Certification Educators." Journal of Technology and Teacher Education 28 (2): 425– 432. http://www.learntechlib.org/p/216251/.
- Green, Wendy, Vivienne Anderson, Kathleen Tait, and Ly Thi Tran. 2020. "Precarity, Fear and Hope: Reflecting and Imagining in Higher Education During a Global Pandemic." *Higher Education Research & Development* 39 (7): 1309–1312. doi:10.1080/07294360.2020.1826029.
- Grenier, Robin S., and Marijke Kehrhahn. 2008. "Toward an Integrated Model of Expertise and Its Implications for HRD." *Human Resource Development Review* 7 (2): 198– 217. doi:10.1177/1534484308316653.
- Groundwater-Smith, Susan, and Nicole Mockler. 2009. *Teacher Professional Learning in an Age of Compliance: Mind the Gap.* Dordrecht: Springer. doi:10.1007/978-1-4020-9417-0.
- Higher Education and Research Act. 2017. "c. 29." https:// www.legislation.gov.uk/ukpga/2017/29/contents/ enacted.
- Hilaricus, Janis R. 2011. "Toward a Sociomaterial Approach to Knowledge Transfer." Paper presented at the International Conference for Organization Learning, Knowledge and Capabilities (OLKC), University of Hull, Hull, April 12–14.
- Hodges, Charles, Stephanie Moore, Barb Lockee, Torrey Trust, and Aaron Bond. 2020. "The Difference Between Emergency Remote Teaching and Online Learning." *Educause Review*. https://er.educause.edu/articles/2020/3/ the-difference-between-emergency-remote-teachingand-online-learning.
- Holley, Karri, and Julia Colyar. 2012. "Under Construction: How Narrative Elements Shape Qualitative Research." *Theory into Practice* 51 (2): 114–121. doi:10.1080/ 00405841.2012.662866.
- Hunt, Tiffany, Richard Carter, Ling Zhang, and Sohyun Yang. 2020. "Micro-credentials: The Potential of Personalized Professional Development." *Development and Learning in Organizations* 34 (2): 33–35. doi:10.1108/DLO-09-2019-0215.
- James, Wendy, and Scott Tunison. 2020. "Beyond Unexamined Professional Learning: Understanding the Opportunities in the Self-Assessment Processes of K-12 Professional Developers." *Professional Development in Education*. doi:10.1080/19415257.2020.1853592.
- Jesacher-Roessler, Livia A.J, and Evi Agostini. 2021. "Responsive Leadership Within Professional Learning Networks for Sustainable Professional Learning." *Professional Development in Education* 48: 364–378. doi:10.1080/19415257.2021.1950812.
- Kensington-Miller, Barbara, Joanna Renc-Roe, and Susan Morón-Garcia. 2015. "The Chameleon on a Tartan Rug: Adaptations of Three Academic Developers' Professional Identities." International Journal for Academic Development 20 (3): 279–290. doi:10.1080/1360144X. 2015.1047373.
- King, Helen. 2004. "Continuing Professional Development in Higher Education: What Do Academics Do?" *Planet* 13 (1): 26–29. doi:10.11120/plan.2004.00130026.
- Kipnis, Andrew B. 2015. "Agency Between Humanism and Posthumanism: Latour and His Opponents." *HAU: Journal* of Ethnographic Theory 5 (2): 43–58. doi:10.14318/hau5.2. 004.

- Knight, Peter, Jo Tait, and Mantz Yorke. 2006. "The Professional Learning of Teachers in Higher Education." *Studies in Higher Education* 31 (3): 319–339. doi:10.1080/ 03075070600680786.
- Kop, Rita. 2011. "The Challenges to Connectivist Learning on Open Online Networks: Learning Experiences During a Massive Open Online Course." International Review of Research in Open and Distance Learning 12 (3): 19–38. doi:10.19173/irrodl.v12i3.882.
- Krutka, Daniel G., Jeffrey Paul Carpernter, and Torrey Trust. 2017. "Enriching Professional Learning Networks: A Framework for Identification, Reflection, and Intention." *Tech Trends* 61 (3): 246–252. doi:10.1007/s11528-016-0141-5.
- Kubrická, Jana. 2020. "Academic Self-Organised Learning Environment – The Lessons to be Learned and Taught." CASALC Review 10 (2): 83–89. https://journals.muni.cz/ casalc-review/article/view/13628.
- Labone, Elizabeth, and Janette Long. 2016. "Features of Effective Professional Learning: A Case Study of the Implementation of a System-Based Professional Learning Model." *Professional Development in Education* 42 (1): 54– 77. doi:10.1080/19415257.2014.948689.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Leong, Kelvin, Anna Sung, David Au, and Claire Blanchard. 2021. "A Review of the Trend of Microlearning." *Journal of Work-Applied Management* 13 (1): 88–102. doi:10. 1108/JWAM-10-2020-0044.
- MacDonald, Katrina, Fleur Diamond, Jane Wilkinson, Nicola Sum, Fiona Longmuir, and Mervi Kaukko. 2021. "Creating Spaces of Learning in Academia: Fostering Niches for Professional Learning Practice." *Studies in Continuing Education* 44: 266–283. doi:10.1080/0158037X.2021.1956890.
- Mäkitalo, Åsa. 2012. "Professional Learning and the Materiality of Social Practice." *Journal of Education and Work* 25 (1): 9–78. doi:10.1080/13639080.2012.644905.
- Malcolm, Janice, and Miriam Zukas. 2014. *Discipline and Workplace Learning in Practice: An Exploratory Study of Academic Work*. London: Society for Research into Higher Education (SRHE). https://kar.kent.ac.uk/46160/.
- McGrath, Cormac. 2020. "Academic Developers as Brokers of Change: Insights from a Research Project on Change Practice and Agency." International Journal for Academic Development 25 (2): 94–106. doi:10.1080/1360144X.2019. 1665524.
- Michael, Mike. 2017. Actor-Network Theory: Trials, Trails and Translations. London: Sage.
- Miller, Julia. 2019. "Where Does the Time Go? An Academic Workload Case Study at an Australian University." *Journal of Higher Education Policy and Management* 41 (6): 633–645. doi:10.1080/1360080X.2019.1635328.
- Milligan, Colin, and Allison Littlejohn. 2014. "Supporting Professional Learning in a Massive Open Online Course." *The International Review of Research in Open and Distributed Learning* 15 (5). doi:10.19173/irrodl.v15i5.1855.
- Mitra, Sugata. 2006. *The Hole in the Wall: Self-Organising Systems in Education*. New Delhi: Tata-McGraw-Hill.
- Mulcahy, Dianne. 2011. "Between Work and Learning: On Pedagogic Practice and Interstitial Space." *Studies in Continuing Education* 33 (3): 203–217. doi:10.1080/ 0158037X.2011.611495.
- Norton, Lin. 2019. Action Research in Teaching & Learning: A Practical Guide to Conducting Pedagogical Research in Universities. 2nd ed. New York: Routledge.
- Norton, Lin, Olaojo Aiyegbayo, Katherine Harrington, James Elander, and Peter Reddy. 2010. "New Lecturers' Beliefs

About Learning, Teaching and Assessment in Higher Education: The Role of the PGCLTHE Programme." *Innovations in Education and Teaching International* 47 (4): 345–356. doi:10.1080/14703297.2010.518426.

- Orlikowski, Wanda J. 2007. "Sociomaterial Practices: Exploring Technology at Work." *Organization Studies* 28 (9): 1435–1448. doi:10.1177/0170840607081138.
- Orlikowski, Wanda J., and Susan V. Scott. 2008. "Sociomateriality: Challenging the Separation of Technology, Work and Organization." *The Academy of Management Annals* 2 (1): 433–474. doi:10.1080/ 19416520802211644.
- Pearcy, Mark, Eric Guise, and Dana Heller. 2019. "Escape the Room' – A Strategy for Problem-Based Learning and Student Inquiry." *Social Studies Research & Practice* 14 (3): 306–320. doi:10.1108/SSRP-09-2018-0036.
- Quinn, Lynn. 2012. "Understanding Resistance: An Analysis of Discourses in Academic Staff Development." *Studies in Higher Education* 37 (1): 69–83. doi:10.1080/03075079. 2010.497837.
- Rouse, Wendy. 2017. "Lessons Learned While Escaping from a Zombie: Designing a Breakout EDU Game." *History Teacher* 50 (4): 553–564. https://www.jstor.org/stable/44507278.
- Rowland, Stephen. 2007. "Academic Development: A Site of Creative Doubt and Contestation." *International Journal of Academic Development* 12 (1): 9–14. doi:10.1080/ 13601440701217238.
- Rowley, Jennifer. 2012. "Conducting Research Interviews." *Management Research Review* 35 (3/4): 260–271. doi:10. 1108/01409171211210154.
- Sharif, Afsaneh, Ashley Welsh, Jason Myers, Brian Wilson, Judy Chan, Sunah Cho, and Jeff Miller. 2019. "Faculty Liaisons: An Embedded Approach for Enriching Teaching and Learning in Higher Education." *International Journal for Academic Development* 24 (3): 260–271. doi:10.1080/ 1360144X.2019.1584898.
- Sim, Kwong Nui, Julie A. Timmermans, and Tracy X.P. Zou. 2020. "Diversity Matters: Academic Development in Times of Uncertainty and Beyond." *International Journal for Academic Development* 25 (3): 201–204. doi:10.1080/ 1360144X.2020.1797950.
- Skead, Melanie. 2018. "What's Next? Experiences of a Formal Course for Academic Developers." *Higher Education Research & Development* 37 (2): 390–403. doi:10.1080/ 07294360.2017.1359500.
- Spilker, Maria, Fleur Prinsen, and Marco Kalz. 2020. "Valuing Technology-Enhanced Academic Conferences for Continuing Professional Development. A Systematic Literature Review." *Professional Development in Education* 46 (3): 482–499. doi:10.1080/19415257.2019.1629614.
- Stanton, Katherine, and Suzanne Young. 2022. "Academic Developers as Flexible Generalists: Responding to COVID-19." International Journal for Academic Development 27: 212–215. doi:10.1080/1360144X.2022.2084741.
- Stevenson, Howard. 2019. "Editorial: Professional Learning What is the Point?" *Professional Development in Education* 45 (1): 1–2. doi:10.1080/19415257.2019. 1549306.
- Sutton-Brown, Camille A. 2014. "Photovoice: A Methodological Guide." *Photography and Culture* 7 (2): 169–185. doi:10.2752/175145214X13999922103165.
- Thomas, Sharon, and Moira Cordiner. 2014. "The 'Messy' Business of Academic Developers Leading Other Academic Developers: Critical Reflection on a Curriculum

Realignment Exercise." *International Journal for Academic Development* 19 (4): 293–304. doi:10.1080/1360144X. 2014.895732.

- Tight, Malcolm. 2012. *Researching Higher Education*. 2nd ed. New York: McGraw Hill.
- Trowler, Paul, Murray Saunders, and Veronica Bamber. 2012. Tribes and Territories in the 21st Century: Rethinking the Significance of Disciplines in Higher Education. London: Routledge.
- Trust, Torrey, Jeffrey Paul Carpenter, and Daniel G. Krutka. 2017. "Moving Beyond Silos: Professional Learning Networks in Higher Education." *The Internet and Higher Education* 35: 1–11. doi:10.1016/j.iheduc.2017.06.001.
- Trust, Torrey, Daniel G. Krutka, and Jeffrey Paul Carpenter. 2016. "'Together We Are Better': Professional Learning Networks for Teachers." *Computers & Education* 102: 15– 34. doi:10.1016/j.compedu.2016.06.007.
- Wang, Caroline C. 2022. "The Tai Qi of Photovoice." *Health Promotion Practice* 23 (2): 205–210. doi:10.1177/ 15248399211069905.
- Wasiuk, Catherine, Kate Soper, Colin McAllister-Gibson, and Chris Meadows. 2017. "'IminuteCPD': Connecting Digital Presence and Professionalism Through Experiments in Micro-Learning." *Spark: UAL Creative Teaching and Learning Journal* 2 (2): 160–166. https://sparkjournal.arts. ac.uk/index.php/spark/article/view/58.
- Webster-Wright, Ann. 2009. "Reframing Professional Development Through Understanding Authentic Professional Learning." *Review of Educational Research* 79 (2): 702–739. doi:10.3102/0034654308330970.
- Webster-Wright, Ann. 2010. Authentic Professional Learning: Making a Difference Through Learning at Work. Dordrecht: Springer.
- Westerman, Susan, and Wayne Barry. 2009. "Mind the Gap: Staff Empowerment Through Digital Literacy." In *Transforming Higher Education Through Technology-Enhanced Learning*, edited by Terry Mayes, Derek Morrison, Harvey Mellar, Peter Bullen, and Martin Oliver, 122–134. York: Higher Education Academy (HEA). https:// www.advance-he.ac.uk/knowledge-hub/transforminghigher-education-through-technology-enhancedlearning.
- Whitchurch, Celia. 2012. "Expanding the Parameters of Academia." *Higher Education* 64 (1): 99–117. doi:10.1007/s10734-011-9483-2.
- Williamson, Ben, Sian Bayne, and Suellen Shay. 2020. "The Datafication of Teaching in Higher Education: Critical Issues and Perspectives." *Teaching in Higher Education* 25 (4): 351–365. doi:10.1080/13562517.2020.1748811.
- Wood, Margaret, and Feng Su. 2014. "A Mission Possible: Towards a Shared Dialogic Space for Professional Learning in UK Higher Education." *European Journal of Higher Education* 4 (4): 363–372. doi:10.1080/21568235. 2014.912949.
- World Health Organization (WHO). 2020. "WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020." https://www.who.int/ director-general/speeches/detail/who-director-general-sopening-remarks-at-the-media-briefing-on-covid-19—11march-2020.
- Zukas, Miriam, and Janice Malcolm. 2017. "Learning Academic Work Practices in Discipline, Department and University." *Journal of Workplace Learning* 29 (7/8): 512– 523. doi:10.1108/JWL-04-2016-0025.