This is the 'accepted manuscript' version of a chapter subsequently published in Orr K, Nutley S, Russell S, Bain R, Hacking B and Moran C (eds) (2016) Knowledge and Practice in Business and Organisations, London: Routledge

Chapter 13: Knowledge mobilisation: creating, sharing and using knowledge

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1. Introduction

There has long been a concern that individuals, groups and organisations do not always perform as effectively as they could. There are many possible explanations including ambiguous or conflicting goals, lack of motivation and constraining contexts. Here we focus on two other related reasons: the often slow percolation of knowledge to where it can be applied; and the challenges faced in responding to new knowledge even when it is readily available (the so-called 'knowing-doing gap'). Commonly, individuals, groups and management teams may be unaware of promising developments in their field of work, and so may continue with outmoded forms of practice. This may be because such knowledge has been developed separately from the contexts in which they work and it has not been shared effectively across organisational and professional boundaries. Even when new knowledge *is* readily available, individuals and managers may know how they could improve performance but still feel unable or disinclined to change what is actually done. Such knowledge-knowing and knowing-doing gaps have already been illustrated in Chapter 10 on environmental policy and in Chapter 11 on healthcare.

Knowledge mobilisation is concerned with the processes and activities aimed at reducing these gaps. We use it as a shorthand term for a wide range of approaches aimed at encouraging the creation, sharing and application of knowledge. These approaches are often targeted at improving the connection between knowledge and practice at an individual level, but they also need to address arrangements for building and using knowledge at an organisational level. At an even wider scale, they may recognise that organisations are embedded in systems and hence there is a need to consider the broader ecology of knowledge mobilisation.

There is a lot of debate about appropriate ways of approaching the knowledge mobilisation challenge and commentators often use different terms to differentiate between alternative perspectives on this. For example, the authors of Chapters 2 and 11 have already introduced the idea of three generations of knowledge-to-action thinking (Best and Holmes, 2010). In this schema, different terms are used to capture different assumptions about the knowledge-to-action problem and how it is best addressed:

- *Knowledge transfer* – here knowledge is seen as generalizable across contexts and the task is to improve ways of packaging and pushing this knowledge across organisational and community boundaries.
- *Knowledge exchange or interaction* – here knowledge is viewed as context-linked and the process of knowing is envisaged as a social process. The task is to develop effective interpersonal and social relationships which enable people to learn from one another, recognising that knowledge will be adapted in the process of being adopted.
- *Knowledge integration or intermediation* – here knowledge is tightly woven with local priorities, structures, cultures and contexts. The task is to understand the deeply embedded nature of knowledge and work collaboratively with groups, organisations and sectors to develop effective adaptive systems.

It is important to recognise such differences in approach. As was discussed in Chapter 2, how we think about the nature of knowledge shapes our understanding of the knowledge in (or into) practice problem and the strategies we use to improve knowledge-practice connections. Much of what is written about knowledge mobilisation assumes that it is possible and productive to analyse 'knowledge' and 'practice' as somewhat separate concepts. Hence the assumptions underpinning the content of much of this chapter are not in line with a practice theory (discussed in Chapter 3) where 'doing and knowing are one and the same' (Gherardi 2006: xii). We do, however, reflect on this at various points in the chapter and these ideas that are developed further in Chapter 14 (on the co-production of knowledge and practice).

A lot of the literature exploring knowledge mobilisation is concerned with the underuse of a particular form and source of knowledge: research-based knowledge (and this is the focus of the discussions in Chapters 10 and 11 on environmental policy and healthcare respectively). However, other chapters in the book remind us that individuals and work organisations are concerned with ways of sharing insights from other ways of knowing. Chapter 7 on craft work discusses the process of developing individual expertise through learning from the self-experience and the experience of colleagues. Here the process of learning involves ongoing situated interaction with experts and materials. Chapter 8 considers how individuals and groups from arts and commercial backgrounds, who privilege different ways of knowing (aesthetic, analytic, commercial), share and use knowledge as part of the creative development process in an advertising agency.

The aims of this chapter then, are to provide an overview of different ways of viewing the knowledge mobilisation challenge, and so explore the implications for developing strategies and actions to improve 'knowledge in use'. We start by outlining the view through five conceptual lenses, lenses that themselves draw from different fields of study and synthesise across various social science disciplines. The five lenses chosen are: individual learning; organisational learning; knowledge management; diffusion of innovations; and the

literature on the mobilisation of research-based knowledge. Following the review from each of these perspectives, we discuss the implications of the issues highlighted for developing strategies and actions to improve knowledge mobilisation. Throughout we draw on insights from previous chapters to illustrate many of the points considered. We conclude with some reflections on the perspectives and principles discussed in the chapter and their implications for further work in this area.

2. The view through five conceptual lenses

The academic literature that considers the creation, sharing and use of knowledge is widely dispersed across a range of disciplines, including philosophy, psychology, sociology, information science, organisational studies and political science. There are at least five established ways of viewing this issue. Within psychology, neuroscience and educational research, attention has mostly been paid to the process by which individuals gain new knowledge and expertise: *individual learning*. Within organisational studies, the focus has been on the process of *organisational learning*, which can be broadly defined as the way organisations build and organise knowledge and routines, and use the broad skills of their workforce to improve organisational performance (Dodgson 1993). Remaining at an organisational level, a somewhat separate stream of literature, which has its roots in information science, uses the lens of *knowledge management* to capture the process of creating, sharing and using knowledge to enhance learning and performance in organisations (Scarborough et al 1999). At a wider system level, there is a body of literature concerned with the *diffusion of innovations*, which seeks to understand the spread of ideas, technologies and practices across individuals and organisations within a sector or society. Finally, there is a growing body of work on the *mobilisation of research-based knowledge*. Although this draws on the previous four bodies of literature, we discuss it below as a fifth conceptual lens or field of enquiry. None of these five fields of enquiry offers a single, united view of the process of creating, sharing and using knowledge. Each lens acts more like a broad viewfinder than a narrow focal point, and there are multiple perspectives even within each of the five fields of enquiry.

We have elsewhere sought to distil the insights offered by these five bodies of literature, particularly in terms of how they can inform the design of strategies to promote research use (Nutley et al 2002; 2004; 2007; Davies et al 2015). In addition, there are many helpful overviews and reviews of each of the fields (see suggested further reading at the end of the chapter). In this section, our aim is not to provide a general summary of the insights afforded by each field; instead, we focus on two main questions:

1. How is knowledge conceptualised in each of these fields?
2. How has the process of knowledge creation, sharing and use been modelled?

Following observations in response to these two questions for each of the five lenses, we then devote a section to discussing the implications of such variations in perspective for improving the mobilisation of knowledge.

Conceptualising knowledge across diverse fields

The literature on *individual learning* is primarily concerned with the acquisition, application and integration of knowledge and skills. Knowledge is conceptualised broadly as understanding and skills are defined as the practical ability to perform tasks. Knowledge, then, is treated both as a source of learning and as an outcome of a learning process. As a source of learning, it may be found within us (via self-reflection) or outside ourselves (by using our senses to learn from the world around us). The idea of 'knowledge from outside' leans towards the idea of knowledge as an object that can be readily detached from a knower (see Chapter 2). However, many learning theories (particularly adult learning theories – see Knowles et al 2005) recognise the limitations of viewing knowledge in this way because learning occurs in emotional, social and cultural contexts, which influence how individuals perceive the world around them and how they draw connections between new information and what they already know. Thus it is difficult always to retain a view of knowledge as something that is readily separable from the process of knowing, and even, in some instances, knowing as something separate from the process of doing (e.g. the skilled application of knowledge).

Both the *organisational learning* and *knowledge management* literatures are focused on the ways in which organisations create, share, and apply internal knowledge. This includes both explicit and tacit forms of knowledge (Polyani 1967; Chapter 2), which are generated as a result of experience (Argote 2011). The knowledge management literature tends to emphasise the leverage of knowledge as an asset (knowledge is possessed), whereas the organisational learning literature is more concerned with the social processes of knowing and their implications for action (Scarborough and Swan 2005). The organisational learning literature, in particular, recognises the embedded nature of organisational knowledge; it is not merely the sum of knowledge held by individual organisational members but it is also embedded in organisational tools, routines and social networks (Hedberg 1981; Chapter 5). Here again we begin to see, in the embeddedness of routines and culturally-engrained practices, the somewhat inseparability of knowing and doing.

As the name implies, the concept of an innovation rather than knowledge is central to the literature on the *diffusion of innovations*. This literature, nevertheless, offers insights into the process of mobilising knowledge (and practice) because what counts as an innovation includes ideas, practices, services and products that are perceived as new by those who adopt them. Many models of the diffusion process are suffused with the language of knowledge: tacit and explicit knowledge, pre-existing knowledge, and shared meanings (e.g. Greenhalgh et al 2004: 595)

Finally, although research-based knowledge sits at the heart of the literature concerned with *knowledge mobilisation*, there are many debates about the nature and privileging of research-based knowledge (Nutley et al 2013). There is widespread recognition that research-based knowledge needs to be integrated with other forms of knowledge and ways of knowing in the process of being used. Several authors argue that research-based knowledge should not and cannot occupy a privileged position (Yanow 2004; Orr & Bennett 2012). Instead it sits alongside and competes with other forms of existing, structured and contextualised knowledge (e.g. professional knowledge and professional judgement). The ingrained nature of knowledge is also recognised; research-based knowledge can become embedded in the tools, protocols and routines that shape the daily work of practitioners and organisations, and it may be these tools and practices that are the focus of mobilisation activities.

Modelling knowledge creation, flow and application: individual learning

People have been trying to understand and model individual learning for over 2000 years. The result is much debate, some common themes but a lot of disagreement, and many theories and models of the process. Within psychology, behavioural learning theorists have argued that reinforcing desired behaviour is an effective way of developing skills (skills, of course, being a complex amalgam of knowing *about* and knowing *how*). However, cognitive learning theorist have argued that many tasks require complex thought processes and the ability to perform these task is not developed without paying attention to how people perceive, process and make sense of what they are experiencing. Another stream of learning theory emphasises that all learning occurs in a cultural context and involves social interactions. This is captured in the idea of socially-situated learning, which sees learning as knowledge obtained from and applied to everyday situations. It not only emphasises the importance of learning from experience but also views learning as a sociocultural phenomenon, rather than as an isolated activity (Barab and Duffy 2000).

The ideas of tailoring learning processes to an individual's characteristics, as well as their social and cultural situations, is taken forward in models which seek to identify and categorise the different ways in which people learn (e.g. Kolb 1984). There are also theories which emphasise that how individuals think and feel about their own learning shapes the learning process (Crossan et al 1999). Adult learning theorists have emphasised that adults learn best through doing and when the focus of that learning is of immediate use in solving a problem (Knowles et al 2005).

Some of the above insights into individual learning are illustrated in Box 1, which draws on the Chapter 7 account of one individual's learning and development journey.

[Box 1 about here]

Modelling knowledge creation, flow and application: organisational learning

In contrast to individual learning theories and models, the study of organisational learning is a much more recent phenomenon, which captured researchers' attention during the second half of the 20th century. Organisational learning has been studied as both a process and a product (the how and what of organisational learning), although the emphasis tends to be on the former. It is typically viewed as a multi-level process, which needs to be analysed within and across individual, group and organisational levels (Rashman et al 2011). One influential framework for analysing organisational learning states that these three levels of organisational learning are linked by four social and psychological processes: intuiting, interpreting, integrating and institutionalising (the 4Is framework - Crossan et al 1999; 2011). Intuiting (the recognition of patterns in past experience that are potentially useful in the present) occurs at an individual level; interpreting (verbalising and sharing insights and ideas) is an individual and group level process; integrating (the collective development of shared understandings of new ideas and how to put them into action) happens at both group and organisational levels; and institutionalisation (embedding learning into the systems, structures and routines of the organisation) is an organisational level process. Organisational learning resides within and across these levels. The movement may not always be from individual to collective learning because the 4Is are connected in complex and non-linear ways (Crossan et al 2011). Context is important in understanding these connections and researchers have identified a range of factors that influence organisational learning processes, including cognitive, emotional, relational, cultural and political factors.

Turning to the study of organisation learning as a product, a distinction is commonly made between different types and qualities of learning. An example is the well-cited distinction between adaptive (single-loop) and generative (double-loop) learning (Argyris and Schon 1996). This distinction taps into a tension in organisational learning between 'assimilating new learning (exploration) and using what has been learned (exploitation)' (Crossan et al 2011: 448).

Modelling knowledge creation, flow and application: knowledge management

The literature on knowledge management covers similar ground to organisational learning, but its different disciplinary origins mean that it developed largely in parallel (see Vera et al 2011 for an overview of both knowledge management and organisational learning, including their areas of overlap and distinction). The knowledge management literature initially focused on the process of capturing knowledge and extracting it from its context. The associated knowledge management strategies tended to be based around carefully codifying knowledge so that it could be stored in computerised databases that would be accessible to staff and used by them. More recently, there has been a shift towards modelling the process of accessing and applying expertise (tacit knowledge). Resulting strategies seek to develop opportunities for people to share knowledge, and the role of information and communication systems is to help people communicate knowledge, not to store it (Hansen et al 1999).

Although organisational learning and knowledge management models and frameworks are firmly focused on intra-organisational learning and knowledge, there has been some interest in inter-organisational learning and knowledge flows (Haunschild and Chandler 2008; Rashman et al 2011). One review of the literature identifies two inter-organisational learning processes: identification of the need and opportunity to learn from other organisations; and interaction of individuals and groups across organisational boundaries (Rashman et al 2011).

Some of the above insights on organisational learning and knowledge management are illustrated in Box 2 by applying them to the Chapter 8 account of creative development practices in an advertising agency.

[Box 2 about here]

Modelling knowledge creation, flow and application: diffusion of innovations

The literature on the diffusion of innovations focuses on modelling the inter-organisational and population level processes involved in the spread and adoption of ideas and practices. Early studies focused on the factors that explain adoption decisions: the attributes of innovations, the characteristics and behaviour of adopters, communication processes (interpersonal and mass media), and the role of intermediaries (Rogers 1995). Many of these studies focused on the adoption of innovations by individuals and this was one of the limitations of this early work (Greenhalgh et al 2004). Later studies considered organisations as adopters (e.g. Van de Ven et al 1999) and these studies have emphasised the influence of organisational context (both internal and external) on adopter behaviour and decisions. A key internal factor is said to be an organisation's 'absorptive capacity' i.e. the ability to recognise, assimilate and apply new knowledge to organisational ends (Nonaka and Takeuchi 1995). Studies have also drawn on institutional theory to explain organisational choices about whether to adopt or not. These choices are influenced by institutional pressures around emerging norms, as well as the temptation to follow certain fads and fashions as part of seeking legitimacy within a field (Westphal et al 1997; O'Neill et al 1998).

Rogers (2003) argues that there are five main stages in the innovation-decision process: knowledge about the innovation; persuasion as to its benefits or problems; acceptance or rejection of the innovation; implementation, if the innovation is accepted; and confirmation that this was the right course of action or subsequent abandonment of the innovation. Critics argued that the process of innovation diffusion is far messier that this rational-linear model would imply (Van de Ven et al 1999). The complexity of the diffusion process and the range of factors involved is illustrated by Greenhalgh et al's (2004: 595) conceptual model of diffusion in service organisations which comprises seven main components (the innovation, adoption by individuals, assimilation by the system, diffusion and dissemination, system readiness for innovation, the outer context, implementation and routinisation), which are linked in a dynamic and iterative manner. Adopters, be they individuals or organisations, are

not usually passive recipients of an innovation, and the process of adopting an innovation can involve significant adaptation, akin to a process of reinvention. Intermediaries or boundary spanners are considered to play an important role in convincing others to adopt an innovation. They tend to have significant social ties both within and outside the organisation.

Some of the insights offered by the diffusion of innovation literature are illustrated in Box 3 by applying them to the Chapter 10 account of the role of boundary organisations in environmental policy.

[Box 3 about here]

Modelling knowledge creation, flow and application: research-based knowledge mobilisation

Similar to the diffusion of innovations literature, the literature on research-based knowledge mobilisation also seeks to understand and model how ideas and practices that are informed by research are (or could be) shared across inter-organisational boundaries and amongst individuals working in a particular field or sector. Such literature, which has grown enormously over the past twenty years (Davies et al 2015b), adds another bewildering variety of models, theories and frameworks. As noted in the introduction to this chapter, Best and Holmes (2010) have argued that one way of mapping these models and frameworks is to place them on a continuum of three generations of thinking about knowledge to action processes: linear approaches, relationship approaches and systems approaches.

There has been much criticism of linear models and the idea that research knowledge can be straight-forwardly disseminated or pushed across organisational and community boundaries (Davies et al 2008). Relationship models, which emphasise the importance of building social links and encouraging knowledge exchange, have gained a lot of traction, but there are criticisms that they fail to fully acknowledge the implications of conflict over what constitutes knowledge (important, given the complexity revealed throughout this book), and that they also pay insufficient attention to issues of power (Greenhalgh 2010; Greenhalgh & Wieringa 2011). There is increasing support for a systems approach in principle, particularly in terms of recognising the importance of system structure, culture and context, but there is still a lack of detailed guidance about what this would mean in practice and *for* practice. There are also differing views about the extent to which and how contextual factors can be managed or even influenced.

Early models of research-based knowledge mobilisation were built on a 'two communities' view of the challenge: that is, the requirements for 'bridging the gap' between research producers and research users. Although it is still common to distinguish between these two broad groups or communities, it is acknowledged that there are other important actors and

agencies to consider, including research funders and research intermediaries (Nutley et al. 2007). Similar to the diffusion of innovation literature, there has been a focus on the roles of intermediaries, who facilitate access to research knowledge and develop and broker networks and other connections between research producers and potential users (see Chapters 10 and 11). Conceptual uncertainty remains around who should perform this brokering role and what activities should be encompassed by the role (Knight and Lyall 2013). In general, the activities associated with research mobilisation tend to be specified at a fairly general level (Davies et al 2015a). For example, one framework highlights five key underlying mechanisms for research mobilisation: dissemination; interaction; social influence, facilitation; and incentives and reinforcements (Walter et al 2003).

The ultimate goal of research mobilisation efforts is often to influence the choices and actions of individuals and organisations. Our introduction, framed the ultimate goal of knowledge mobilisation as improving individual and organisational performance, but this is only one possible goal of research application: it is often described as the direct or instrumental use of research to solve problems and shape decisions. Alternatively, the aim may be to change understanding or attitudes, which has been variously described as the conceptual, indirect or enlightenment use of research (ref). Another way of framing the purpose of mobilisation efforts is to contrast a consensual stance (where the aim is to fine-tune practices within an existing paradigm) with a more contentious stance (where the aim is to ensure that the hidden and sometimes dysfunctional consequences of current practices are revealed). There can also be a paradigm-challenging stance (where the aim is to problematise established ways of thinking and acting, and propose and gain support for new principles of actions) (Rein 1976; Weiss 1995). Thus the potential role of research goes much wider than merely improving practice.

Some of the insights offered by the literature on the mobilisation of research-based knowledge are illustrated in Box 4 by applying them to the Chapter 11 account of an initiative that sought to connect academic knowledge and practice in healthcare.

[Box 4 about here]

3. Developing strategies and actions to improve knowledge mobilisation

Having teased out some key insights into the process of knowledge mobilisation from five bodies of literature summarised in the previous section, we now focus on the implications of these insights for developing strategies and actions to improve knowledge mobilisation. Many of the models and frameworks discussed in the previous section are descriptive and analytical. That is, they describe and analyse the processes of knowledge creation, sharing and use, but they tend not be explicit about the configurations, actions or resources needed to improve knowledge mobilisation (Davies et al 2015a). There are some exceptions, but

these more prescriptive models do not necessarily provide a reliable guide for action as most have been subject to only limited empirical testing, and such testing, in any case, often underplays the role of context and other contingent factors.

The varied goals of knowledge mobilisation efforts, the differing types of knowledge which may be at centre of attention, and the dynamic and complex settings within which knowledge mobilisation occurs, mean that it is unrealistic to expect a ready set of prescriptions or a menu of 'proven' knowledge mobilisation approaches. Instead, a sound conceptual understanding of the various issues at play – and their dynamic interaction – needs to be central to the design of knowledge mobilisation strategies. There are, however, five emerging principles that might be used to underpin the development of strategies and actions to improve knowledge mobilisation (see Box 5).

[Box 5 about here]

The first principle stresses the limitations of viewing knowledge as an object which is readily separable from knowers and the settings within which they work: knowledge is embodied in individuals (personally and collectively) and embedded in work practices, structures and cultures. This suggests that strategies and actions to improve knowledge mobilisation also need to be embodied (e.g. though face-to-face dialogue and experiential learning) and embedded (e.g. through facilitating the review and development of work practices). Taken to its logical conclusion, this first principle would suggest that we should think in terms of mobilising knowledge *and* practice, and not just knowledge.

The second principle points to the need for an active approach to knowledge mobilisation. All work involves knowledge (Chapter 5) and learning from experience and those around us is a naturally occurring phenomenon, so it might be tempting to adopt a passive approach to knowledge mobilisation – just leaving it to occur naturally. However, the introduction to this chapter comments on the limitations of a passive approach because the process of creating, sharing and use of knowledge within and across organisations is not always as effective as it could be. The consequences of this can be detrimental for organisations (e.g. inefficiency) and devastating for individuals (e.g. premature loss of life due sub-standard healthcare interventions).

The third principle emphasises the importance of viewing knowledge mobilisation as a multi-level phenomenon involving individuals, groups, organisations and wider systems at sector or society levels. Knowledge mobilisation strategies and actions need to be directed at all of these levels. Reviews of the organisational learning literature (e.g. Crossan et al 2011) and the research mobilisation literature (e.g. Davies et al 2015a) have commented that most attention to date has been paid to 'within level' strategies, particularly those aimed at individuals and groups. Strategies also need to consider broader organisational arrangements and how all parts of the systems interact with one another.

The fourth principle builds on the third and highlights the benefits of thinking in terms of a knowledge mobilisation ecology. This might involve mapping the activities of key individuals, groups and organisations involved in knowledge mobilisation (at organisational or sector level) in order to identify how they interact with one another and their environment. The aim would be to identify activity gaps and the extent to which existing interactions are characterised by cooperation or competition (together with the implications of this). Strategies could then be aimed at addressing activity gaps and enhancing existing capacities and interactions.

The fifth and final principle draws attention to the importance or spanning boundaries, both within and across organisations, when seeking to enhance knowledge mobilisation. Strategies should consider how to develop the roles and capacities of individuals and agencies who act as intermediaries (boundary spanners; see Chapters 10 and 11) and the features of things/objects that enable individuals and groups to have meaningful dialogue around issues of concern (boundary objects).

All five principles are necessarily tentative and expressed in general terms. They need to be discussed, interpreted and operationalised in specific contexts and adapted and reworked in the light of experience in those contexts. They are not a blue print for action and they should not be accepted without critical reflection. A possible basis for such reflections is the subject of the final section of this chapter.

4. Some final reflections

We noted in the second section of this chapter that none of the five conceptual lenses summarised in that section offers a single, united view of the process of creating, sharing and using knowledge. Instead there are multiple perspectives and different underpinning paradigms to be found within each of the five fields of enquiry. This inevitably leads to questions about the extent to which it is possible to synthesise ideas and findings from across these different perspectives, especially where they are based on different ontological and epistemological assumptions. Are they complementary or incommensurable? The same question can be asked about the relationship between the different perspectives offered by the authors of various chapters in this edited collection. The concluding chapter (Chapter 16) provides a fuller and more general discussion of this issue.

Here we offer some initial reflections, drawing partly on the ideas in Crossan et al's (2011) overview of the organisational learning literature, where the authors argue that lack of agreement on ontological and epistemological issues need not impede the development of a framework for understanding organisational learning. They argue that the 4I framework spans the four paradigms of social enquiry articulated by Burrell and Morgan (1979) and insights from all four paradigms add to our understanding of organisational learning

processes. Similarly, we argue that drawing together insights from different paradigms of enquiry provides us with some different ways of conceptualising knowledge creation, sharing and use. It is not necessary, and probably not possible, to reconcile these different views within one agreed, overarching framework or theory. Instead, the aim should be to negotiate (but not dissolve) the tensions between them. This is likely to involve the use of differing insights depending on the questions that we pose and the challenges we face.

For all the insights available from the diverse literatures traversed in this chapter, two areas remain relatively neglected with potentially important consequences. First, much of the literature that underpins this chapter has been accused of paying insufficient attention to power, politics and conflict in organisations and society (Ferlie et al 2012; Chapter 4). Indeed, the same accusation might also be levelled at the content of this chapter. Second, neither the literature on the five conceptual lenses (summarised in this chapter) nor the context-specific examples of knowledge and practice (provided in Part C of this book) pay much attention to the involvement or role of clients, customers, service user and/or members of the public in creating, sharing and using knowledge. This seems a second important area of neglect. Each of these deficiencies is now explored a little further in turn.

The concept of power needs to play a more central role in our understanding of knowledge mobilisation processes and challenges, and it also needs to inform mobilisation efforts within and across organisations. The optimistic tone of many (including us) when discussing the strategies and actions for improving knowledge mobilisation, needs to be tempered with some harsher observations on organisational life: where knowledge and workers may be viewed as assets to be exploited, where workers may seek to protect rather than willingly share their expertise, and where occupational hierarchies may restrict knowledge mobilisation by privilege codified and embrained knowledge over social and tacit knowledge (see Chapter 5). There are many reasons why individuals, groups and even management teams may feel unable or disinclined to change what they do, even though they may think that this would improve performance (Pfeffer and Sutton 2000).

As discussed in Chapter 4, the concept of power (and its corollary, resistance) is often associated with negative connotations: power as coercive and repressive, and power (and resistance) as sources of conflict. However, power can also be viewed as a productive phenomenon, such as the capacity to achieve outcomes (Giddens 1984) or more neutrally as ‘one person’s actions structuring other people’s possible actions’ (Schatzki 2005, p 478). Chapter 4 outlines a triangular relationship between power, knowledge and practice, where there is a recursive relationship between each of these concepts (for example, knowledge facilitates the exercise of power, and power legitimises knowledge). Future work needs to build on such frameworks and draw out their implications for knowledge mobilisation.

Our final reflection concerns the relative neglect of clients, customers, service users and the like when considering when and how knowledge is created, shared and applied. The research mobilisation literature tends to cast such groups as research subjects or (perhaps)

as one potential audience for research findings. The diffusion of innovation literature treats them as potential adopters, and in this guise considers their needs, motivations, values, skills, learning styles and social networks, but essentially as responders rather than initiators. In individual learning, organisational learning and knowledge management such groups are rarely considered at all. Across each of the lenses covered here then, clients, service users and other 'lay' actors – if they figure at all – are cast more as passive recipients than active protagonists in the knowledge mobilisation dynamic. For example, in the context-specific instances of knowledge and practice provided in this book, the authors mention that clients are involved in some of the everyday practices of the advertising agency (see Box 2 and Chapter 8), but their involvement is not explored in any detail. This seems to be another area that is worthy of more attention in future research and practice development. If the public are considered to be the main beneficiary of the products and services provided by organisations, there is a rationale for ensuring that they have a stronger voice in the creation, sharing and use of knowledge (Davies et al 2015a). This is an issue is picked up in the next chapter, which explains how coproduction can be used as lens through which knowledge and practice relationships can be viewed.

In conclusion then, we can say that much can be learnt from the diverse lenses used to explore the 'knowledge-knowing' and the 'knowing-doing gaps'. Of course, these literatures do not provide fully consistent accounts: indeed, some accounts are essentially critiques of prevailing models or normative views. Moreover, there remain some weaknesses and deficiencies in the accounts (notably the treatment of power, and the side-lining of important stakeholders). Nonetheless, taken together, the diversity of views and their varied underpinnings provide many insights and point the way to new principles and actions in mobilising knowledge for improved practice.

Suggestions for further reading

Selected review papers for each of the five conceptual lenses have already been highlighted in this chapter. Nutley et al (2007) provides a broad overview of each of these lenses and the issues covered in this chapter.

Davies et al (2015a) provide a recent review of the literature on and practice of knowledge mobilisation in health care, education and social care.

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Box 1: An individual learning journey

Chapter 7 provides a vivid account of one of the author's journey to becoming a professional maker of pottery. The development of knowledge and skills is described and analysed as a deeply embodied and emergent process where knowing and doing are inherently entangled. Although the authors talk about 'knowing from the inside', it is clear that knowing emerges by the maker using all of her senses to experience and learn from the social and material work of the pottery studio. In this example, learning cannot be readily analysed as a purely cognitive process, what is known is often felt rather than thought. It is much more in line with those adult learning theories that stress the importance of learning from experience, especially when the subject of that learning is of immediate use in solving a problem.

The account of the learning journey contains many examples of how progress in becoming a maker is shaped by how one feels about the process. It also exemplifies the importance of the social and cultural context of the learning environment, including opportunities to observe and get advice from other pottery makers. It goes beyond many of the existing theories and models of individual learning by emphasising the importance of the material as well as the social world. Learning occurs through interactions with materials and tools and this involves the whole body and all the senses and not just the mind.

Box 2: Organisational knowledge and learning in an advertising agency

The account of everyday practices in an advertising agency (Chapter 8) is not ostensibly concerned with organisational learning or knowledge management. Nevertheless, the description of five everyday practices associated with the development of advertisements sheds some light on organisational knowledge and learning. We see in this account the importance of a multi-level analysis – individual, group and organisation – and there are also echoes of the 4Is framework for explaining how learning occurs within and across these levels.

Within the agency, individuals with different roles, experiences and skills work individually and in teams to define and solve clients advertising problems. They gather, analyse and interpret a wide range of qualitative and quantitative information in the process of developing an advert. This involves intuitive and analytical thinking. Information, ideas and proposals are interpreted and judged by individuals working in project teams. They draw on the experiences they have accumulated over time in both their current organisation and in previous advertising roles. These include aesthetic understandings as well as more functional knowledge of advertising processes and products. Through multiple discussions – involving staff working in creative, strategy and producer roles and often clients too – shared understandings are developed about new ideas and promising solutions, and how to put these into action. Over time, shared understandings about the development of advertisements have become institutionalised or routinized in the five everyday practice described in Chapter 8 (kicking off the creative process, developing strategies, generating ideas, realising concepts, and evaluating effects).

Box 3: The role of boundary organisations in diffusion ideas and practice in environment policy

If we are to have hopes of 'saving the planet' a wide range of individuals, groups and organisations need to develop effective ways of improving the generation, spread and adoption of promising environmental ideas and practices. In line with this, the authors of Chapter 10 outline some of the ways in which two intermediary or boundary organisations facilitate the sharing of useful environmental knowledge and promising practices. For example, the policy updates, technical advice, tools and support that Zero Waste Scotland provides for Scottish businesses. Although the authors do not use a diffusion of innovations lens to analyse the activities of Zero Waste Scotland (ZWO) and the Centre for Research and Expertise on Water (CREW), these activities nevertheless illustrate and provide insights into some aspects of the diffusion process.

The account illustrates the complexity and messiness of the diffusion process in environmental policy. The two boundary organisations sit between science, policy and industry. This is a challenging space due to the contested nature of knowledge around environmental policy, the differing interests of the actors and organisations involved, and the shifting roles and expectations of the boundary organisations themselves. In order to mediate and negotiate connections between science, policy and industry, the boundary organisations (and those working within and through them) have needed to invest time and energy in building stakeholder and subject-specific networks. They have sought to develop credibility and relationships based on trust as far as possible.

The extent of system readiness for innovation has shaped diffusion processes and activities. For example, the historical neglect of waste management meant that ZWS initially focused on educating groups about the relative advantages of viewing waste as a resource. System incentives have also been an important factor: the varied incentive systems, diverse needs and values present within the broad arena of environmental policy have at time inhibited the generation, spread and adoption of ideas and practices.

The environmental innovations (ideas or practices), which were the focus of the activities of ZWS and CREW, developed and changed during the diffusion process. The authors use the language of coproduction to capture this process and this perspective on the activities of the boundary organisations is discussed further in Chapter 14.

Box 4: Mobilising research-based knowledge in healthcare

The Collaborations for Leadership in Applied Health Research and Care (the CLAHRCs discussed in Chapter 11) are an initiative aimed at enhancing the creation, flow and application of research-based knowledge in healthcare. Despite being established under the rubric of collaboration, the authors of Chapter 11 found that the actual operation of the CLAHRCs they studied was underpinned as much by linear, knowledge transfer models as by collaborative, relationship based models.

The CLAHRCs were intended to act as a bridge between academic research and healthcare practice by providing an intermediary space where these 'two communities' could work together to create knowledge and apply it. However, the authors comment on how the background to the establishment of some CLAHRCs, and their early ways of working, meant that they were often perceived to be more aligned with academia than with practice. One cause (and consequence) of this was that these CLAHRCs tended to prioritise evidence production over its implementation. CLAHRCs appeared to work best as collaborative ventures when they were built upon pre-existing good working relationships between academics and practitioners.

Although it can be helpful to think of the CLAHRCs as bridging between two (academic and practice) communities, the account in Chapter 11 demonstrates that there were actually multiple boundaries to be spanned (organisational, epistemic, semantic, professional and geographic boundaries). Some individuals within each of the CLAHRCs were given formal boundary spanning roles and there were other individuals who acted informally in this capacity. These were challenging roles and the knowledge, skills and abilities needed only developed over time – there were no quick fixes. Even then, it proved difficult for individuals with no background in healthcare practice to develop credibility as an effective boundary spanner.

Dissemination, interaction, social influence and facilitation were all evident to varying extents as underlying mechanisms for research mobilisation. However, motivation and reinforcement was an issue of concern; both academics and practitioners sometimes struggled to see what was in it for them.

Box 5: Five emerging principles to underpin the development of knowledge mobilisation strategies and practice

1. Knowledge cannot be readily separated from knowers and the settings in which they work.
2. Knowledge creation, sharing and use are naturally occurring phenomena, but a 'just let it happen' approach to knowledge mobilisation is not enough.
3. Knowledge mobilisation needs to be viewed and treated as a multi-level phenomenon involving individuals, groups, organisations and wider systems at sector or society levels.
4. It is beneficial to think in terms of building a knowledge mobilisation ecology where individuals, groups and organisations interact productively with one another and their environment.
5. Boundary spanning people and objects play a key role in enhancing productive interactions within a knowledge mobilisation ecology.