

Innovation in Governance and Public Services: Past and Present

Jean Hartley

To cite this article: Jean Hartley (2005) Innovation in Governance and Public Services: Past and Present, *Public Money and Management*, 25:1, 27-34, DOI: [10.1111/j.1467-9302.2005.00447.x](https://doi.org/10.1111/j.1467-9302.2005.00447.x)

To link to this article: <https://doi.org/10.1111/j.1467-9302.2005.00447.x>



Published online: 15 Mar 2010.



Submit your article to this journal [↗](#)



Article views: 7795



View related articles [↗](#)



Citing articles: 26 View citing articles [↗](#)

Innovation in Governance and Public Services: Past and Present

Jean Hartley

Three approaches to innovation in the public sector in the post war period are identified and analysed for their implications for policy-makers, managers and citizens. Various relationships are identified between innovation and improvement in public services. The traditional bias of the literature that innovation is necessarily functional is undermined. Important lessons for policy, practice and research include the need to develop an understanding of innovation which is not over-reliant on the private sector manufacturing literature but reflects the distinctive contexts and purposes of the public sector.

Definitions of innovation such as 'novelty in action' (Altschuler and Zegans, 1997) and 'new ideas that work' (Mulgan and Albury, 2003) emphasise that innovation is not just a new idea but a new practice. This is the difference between invention and innovation (Bessant, 2003). Some writers reserve the notion of innovation for 'radical' or 'breakthrough' novelty, while others emphasise a spectrum of innovation from large-scale dramatic, 'headline-making' innovations to small scale, incremental changes. However, the definition needs to recognize practical impact:

Those changes worth recognizing as innovation should be...new to the organization, be large enough, general enough and durable enough to appreciably affect the operations or character of the organization (Moore et al., 1997, p. 276).

How extensive, therefore, does the change have to be in order to be classed as innovation (rather than continuous improvement)? Much of the innovation theory and literature has derived from new product development, where an innovation in technology can be observed and broadly agreed, even if its full implications or its impact are not initially known. By contrast, innovations in governance and services are more ambiguous. Here innovation is usually not a physical artefact at all, but a change in the relationships between service providers and their users. In such changes judgements have to be made about processes, impacts and outcomes, as well as product. Greenhalgh *et al.* (2004) suggest that, for the National Health Service (NHS), innovations have to be 'perceived as new by a proportion of key stakeholders' (p. 40). Such a socially-constructed

perspective is a useful approach to public sector innovation across a range of services.

Innovation may include reinvention or adaption to another context, location or time period. The diffusion of innovations (sometimes called dissemination, or spread of good or promising practices) to other organizations, localities and jurisdictions is particularly important for the public sector (Rashman and Hartley, 2002). This highlights some important differences between public and private sector innovation. Innovation in the latter is driven primarily by competitive advantage—this tends to restrict the sharing of good practice to strategic partners. By contrast, the drivers in the public sector are to achieve widespread improvements in governance and service performance, including efficiencies, in order to increase public value (Moore, 1995).

Such public goals can be enhanced through collaborative arrangements to create, share, transfer, adapt and embed good practice (for example through cancer collaboratives, Beacons, peer review, pilots and demonstration projects). This is not to deny that a centralized government system, such as the UK, may create competitive pressures between public service organizations, or that decentralized systems, such as in the USA, militate against sharing good practice and actually encourage reinvention of the wheel. However, it suggests that the spreading of good practice, and the adoption and adaption of existing innovations in a different time and context is a significant element of public sector innovation.

Public services also need to consider *governance* innovations. In recent years, such innovations have included new political arrangements in local government and

Jean Hartley is Professor of Organizational Analysis, Institute of Governance and Public Management, Warwick Business School and an ESRC AIM Public Service Fellow.

devolved government for Wales and Scotland, as well as changes in the organizational form and arrangements for the planning and delivery of services (for example privatization and new collaboratives between the public and private sectors to provide services). There have also been innovations in public and user participation in service design and delivery and in the use of boards to govern particular choices and services (for example school governing bodies).

Some writers have attempted typologies of innovation, for example, that distinguish between technical and administrative ('organizational') innovations (Damanpour, 1993). Distinctions between product, service and process innovations have also been proposed (Wolfe, 1994). Bessant's (2003) categories include market innovation and Moore *et al.* (1997) highlight the importance of strategic innovation. Drawing on these and other writers who examine innovation in either the public or private sectors, we may distinguish the following:

- Product innovation—new products (for example new instrumentation in hospitals).
- Service innovation—new ways in which services are provided to users (for example on-line tax forms).
- Process innovation—new ways in which organizational processes are designed (for example administrative reorganization into front- and back-office processes; process mapping leading to new approaches).
- Position innovation—new contexts or users

(for example the Connexions service for young people).

- Strategic innovation—new goals or purposes of the organization (for example community policing; foundation hospitals).
- Governance innovation—new forms of citizen engagement, and democratic institutions (for example area forums; devolved government).
- Rhetorical innovation—new language and new concepts (for example the concept of congestion charging for London, or a carbon tax).

In practice, any particular change may have elements of more than one type of innovation. For example, congestion charging in London may be characterized as an innovation which includes a new strategy, service, organizational arrangements, rhetoric, and user relationship. Therefore, we should consider innovations, particular radical or complex ones, to be multidimensional, specifying the dimensions (and the size of the innovation in those dimensions) in the interests of systematic comparison.

Innovation in Public Services: An Historical Perspective

There is sometimes a sceptical view of innovation in the public sector. Yet, in the post-war period there has been substantial innovation, which becomes more evident in reflecting on how innovations arise. In the private sector, the focus is on managers and staff as sources of innovation, both working inside the

Figure 1. Competing paradigms: Changing ideological conceptions of governance and public management. (Source: Benington and Hartley, 2001.)

	<i>'Traditional'</i> <i>public</i> <i>administration</i>	<i>'New'</i> <i>Public</i> <i>Management</i>	<i>Networked</i> <i>governance</i>
<i>Context</i>	Stable	Competitive	Continuously changing
<i>Population</i>	Homogeneous	Atomized	Diverse
<i>Needs/problems</i>	Straightforward, defined by professionals	Wants, expressed through the market	Complex, volatile and prone to risk
<i>Strategy</i>	State and producer centred	Market and customer centred	Shaped by civil society
<i>Governance through actors</i>	Hierarchies Public servants	Markets Purchasers and providers Clients and contractors	Networks and partnerships Civic leadership
<i>Key concepts</i>	Public goods	Public choice	Public value

organization, and networking outside it. However, for the public sector, we also have to consider the role of policy-makers and policy advisors in the innovation process.

Benington and Hartley (2001) have characterized three competing paradigms of governance and public management which may be conducive to particular ways in which innovation is both generated and adopted. Each is a world view or a consistent pattern in that each contains particular conceptions and assumptions about the nature of the world, and the roles of politicians, managers and the population. The three paradigms are shown in figure 1. The first two may be familiar as 'traditional' public administration and 'New Public Management' (NPM), while a third paradigm is based on evidence of emerging patterns of governance and service delivery, which we call 'citizen-centred governance', or 'networked governance'.

Each paradigm may be linked to a particular ideology and historical period. However, they can also be seen as competing, in that they co-exist as layered realities for politicians and managers, with particular circumstances or contexts calling forth behaviours and decisions related to one or the other conception of governance and service delivery. This is not a normative framework, because each conception has both strengths and weaknesses for society.

The different conceptions of governance and public management outlined above have implications for the role of policy-makers, managers and the population in innovation. These are explored in figure 2.

The public administration approach, evident particularly in the post-war period and up to the early 1980s, is largely based on a legislative, bureaucratic and rule-based approach to public service provision. The population is assumed to be fairly homogeneous, and the definition of needs and problems is undertaken by professionals, who provide standardized services for the population. Power and authority lies with government, and the provision of welfare and regulatory services is assumed to emanate from the state, through elected representatives. Both national and local politicians have a central role in innovation—developing radical new policy frameworks, and building the support among citizens and their parties for the enactment of those innovations in legislation. Examples of major, radical innovations include the establishment of the NHS, the 1944 Education Act, the nationalization of major industries, and the establishment of new towns. At the local level, radical innovations initiated by politicians affect the whole locality, for example the redesign and redevelopment of Coventry city centre after the bombing, the establishment of comprehensive schools, and community development. This is the period characterized by large-scale innovation, often national and universal in scale.

The large scale of the changes, and the legislative, financial and staffing resources deployed, mean that change is evident early. In most cases, improvement is widespread and objectively evident to a range of stakeholders. However, the top-down implementation means

Figure 2. Innovation and improvement in different conceptions of governance and public management.

	<i>'Traditional'</i> <i>public</i> <i>administration</i>	<i>'New'</i> <i>Public</i> <i>Management</i>	<i>Networked</i> <i>governance</i>
<i>Innovation</i>	Some large-scale, national and universal innovations	Innovations in organizational form more than content	Innovation at both central and local levels
<i>Improvement</i>	Large step-change improvements initially, but less capability for continuous improvement	Improvements in managerial processes and systems. Customer focus produces quality improvements in some services	Aiming for both transformational and continuous improvement in front-line services
<i>Role of policy-makers</i>	Commanders	Announcers/commissioners	Leaders and interpreters
<i>Role of public managers</i>	'Clerks and martyrs'	Efficiency and market maximizers	'Explorers'
<i>Role of the population</i>	Clients	Customers	Co-producers

that the capacity for continuous improvement and adaptation is limited.

The role of policy-makers in this approach to innovation is to act as commanders—creating legislation and then support for whole-scale changes, while assuming that the detailed work of implementation will be carried out by officials. These public managers, working within the organizational form of a bureaucracy, act either as ‘clerks’ (impassive officials implementing political will) or ‘martyrs’ (holding private views about the wisdom or necessity of action but continuing to implement political decisions without comment) (Moore, 1995). As for the population, the political and professional domination of innovation leaves users of services as clients, with little say about services.

A different approach to innovation is seen in the approach now known as NPM and developed from the 1980s onwards in the UK, New Zealand and elsewhere. Underpinned by a different set of assumptions in neo-liberal economics and a particular form of management theory, the innovations arising through this approach focus particularly on organizational forms and processes such as executive agencies in central government, the purchaser–provider splits seen in health, education and local government, and a ‘customer’ focus. The innovations were politically radical at the time, and created considerable organizational restructuring but it can be argued that the innovative elements are primarily about organizational form and business processes. The extent to which they led to improvements is contested. The customer focus, for example, has led to improvements in some services where casting users as customers has been helpful, but in others has obscured the nature of more collective relationships.

What of the policy-makers, managers and citizens in this form of innovation? Of the policy-makers, the national cabinet remains as ‘commander’, but the managerial focus of NPM reduces the role of other politicians to ‘commissioners’ of services or ‘announcers’ of change (Pollitt and Bouckaert, 2004). Mandarin officials have been transmuted into public managers as efficiency maximizers, seeking innovations to improve the quasi-market and the quality of service ‘delivery’. The public increasingly take on customer roles which give them a voice, as users, in service scope and content.

As the UK moves to networked governance, the role of the state is to steer action within complex social systems rather than control solely through hierarchy or market

mechanisms. Newman’s (2001) analysis of government since 1997 shows that there has been a shift to more networked forms of governance, as an alternative to the state and the market, and some evidence of more steering and community governance, though not without tensions between centralization and decentralization, and networks and hierarchies.

Innovation under networked governance revitalizes the leadership role of policy-makers in translating new ideas into new forms of action. While the Cabinet continues to innovate through large-scale legislation (for example devolution of powers to the constituent countries and regions of the UK), others are concerned with supporting innovation through enabling legislation or providing resources for experiments and collaboration (for example action zones, pilots, and Beacons), and orchestrating the interests of different stakeholders. For their part, the role of public managers is to nurture innovation as they become:

...explorers commissioned by society to search for public value. In undertaking the search, managers are expected to use their initiative and imagination. But they are also expected to be responsive to more or less constant political guidance and feedback (Moore, 1995, p. 299).

At the same time the public is seen to have a larger role as co-producers of service and innovation.

This brief historical review indicates that innovation is not serially associated with each period. Rather, each paradigm, with its particular set of assumptions about governance and management, engenders and supports particular emphases in innovation.

Innovation With or Without Improvement?

As other articles in this issue of *Public Money & Management* show, there is an important difference in innovation between private and public sectors. In the private sector, successful innovation is often seen to be a virtue in itself, as a means to ensure competitiveness in new markets or to revive flagging markets. In public services, however, innovation is justifiable only where it increases public value in the quality, efficiency or fitness for purpose of governance or services. Moreover, in the public sector at least, innovation and improvement need to be seen as conceptually distinct and not blurred into one policy phrase. Unfortunately, this is not always the case in UK practice where public organizations feel almost obliged to provide

evidence and arguments that they are ‘modernizing’ and ‘improving’. The Innovation Forum, for example, is a group of ‘excellent’ (high-performing) local authorities working with central government departments on new ways of working to deliver better services to local communities. The ODPM website notes that ‘Membership of the Forum is open for at least a year to councils whose category slips to “good”’. This implies that high performance and the ability of the organization to innovate belong together. However, this runs counter to the private sector literature, which suggests that innovations (especially radical ones) are often identified and implemented by those firms which are *not* market leaders (for example Utterback, 1996). In addition, the world is littered with examples of innovations that led either to few, if any, improvements, or which had unintended consequences (for example high-rise housing and out-of-town supermarkets).

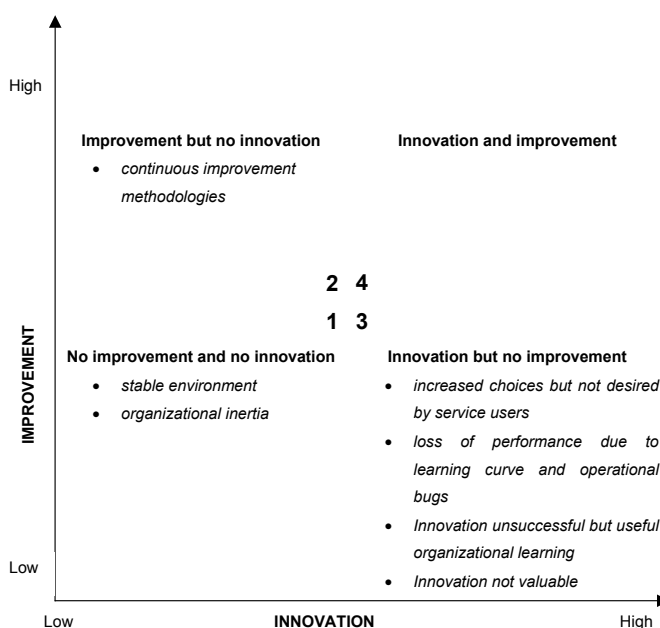
It is therefore useful to consider a number of possible relationships between innovation and improvement. These are shown in figure 3. The analysis is based on organizations, but it is equally possible to apply this to service areas, business units, or partnerships.

In box 1, an organization has neither improvement nor innovation. This may occur in a highly stable environment, where innovation is not needed because there is a close fit between that environment and the organizational processes, systems and stakeholder needs. Alternatively, the organization may be in inertia, either not recognizing the need to innovate or improve to meet new needs/changing circumstances, or else paralysed from taking action to meet the new circumstances.

In box 2, improvement occurs but without innovation. This is an organization which focuses on small, incremental changes in order to achieve improvement (for example continuous improvement methodology, total quality management), but where the changes do not individually constitute innovation in that they are not sufficiently large, general or durable as new improvements. Of course, cumulatively, continuous improvement can lead to substantial changes over the long term.

In box 3 the organization engages in innovation but there is no resulting improvement. Indeed, there may even be a deterioration of performance. Several situations fit this pattern. First, innovations do not always lead to success. Some of the public sector rhetoric about innovation appears to be

Figure 3. Innovation and improvement.



predicated on the assumption that improvement follows. Yet, ‘Studies of product innovation consistently point to a high level of failure to progress from original idea to successful product in the market-place...Actual figures range from 30% to as high as 95%; an accepted average is 38%’ (Tidd *et al.*, 2001, p. 16). There may be reasons for being even more pessimistic about public sector failure: the caution of politicians in supporting innovation (since they carry responsibility for failure), media interest which can exaggerate failure in public services, traditional public administration theory which separates policy-making from implementation, and the difficulties of achieving unambiguous success.

Second, there is the situation where innovation occurs and is based on a proliferation of choices but with no improvement in service content as needed by service users or other stakeholders. In the private sector, innovations based on increasing choice is valuable in its own right as this may give market advantage (for example producing 50 variants of trainer footwear to meet fashion demands). Yet, in public services if the extra choices are not wanted or needed, or only give wider but not better services, then innovation has not led to improvement.

There are situations, however, where there may initially be no improvement and yet the

innovation is worth pursuing. This can happen where the innovation leads to a temporary performance decrease, for example, as operational processes or bugs are ironed out as staff get used to new ways of working. This feature, well recognized in the operations management literature, reflects innovation as a journey which is not linear and rational but which leads to dead-ends, mistakes, adaptations and obstacles to be overcome. Innovation without improvement may also occur where organizational learning takes place which does not benefit the immediate innovation but contributes to the innovative capacity of the organization, aiding later attempts to innovate.

Deciding when to abandon an innovation as no longer showing promise is an important judgement. Kimberley (1976) argued for paying attention to 'exnovation', i.e. making the decision to cut losses on an innovation and kill it. This is a significant issue for public services, where innovations are not so much formally ended as overlaid with new initiatives.

Finally, box 4 indicates that desirable category, an organization engaging in both innovation and improvement with noticeable improvements in outputs and outcomes. There are challenges here to move beyond improvement as meeting a set of performance indicators, to ensuring that the improvements are sustained.

What We Still Need to Know

The analysis so far suggests that public sector innovation needs to be linked to considerations of improvement, but should not be shackled to it. It may be instructive to learn about and understand innovations which fail, as well as those which succeed. The failures may help us to understand the innovation process, and the barriers and facilitators of innovation, rather than assuming that innovation leads inexorably to improvement. Moreover, while there is a lot to learn from product and service development in the private sector, policy-makers, managers and researchers in the public sector need to recognize their own contexts more explicitly.

Innovation Processes

The classic public service model of innovation as designed by policy-makers and implemented by public managers is a case in point. It is no longer the sole or even necessarily the optimal strategy. If we start from the assumption that most if not all organizations need to innovate because the wider world is dynamic, then we need to understand more about how innovation is fostered, supported, sustained and

implemented. Increasingly, innovation is as much a 'bottom-up' and 'sideways-in' process as a 'top-down' process. Recent research from Borins (2002) suggests that, in the USA, half of all innovations (51%) come from either middle managers or front-line staff. The figures are higher for developed Commonwealth countries (for example the UK and Australia) where 82% come from organizational staff (75% from middle managers). Borins notes that:

bottom-up innovations occur more frequently in the public sector than received wisdom would have us believe. The individuals who initiate and drive these innovations are acting as informal leaders... Politicians and senior public servants create organizational climates that will either support or stifle innovations from below (p. 475).

In addition, innovation through networks of professionals and managers is also a potent form of innovation, especially the diffusion of innovation, which often requires local adaptation, not simply adoption. What are the relative advantages and disadvantages of top down, bottom up and lateral innovation for particular types of innovation, and about the 'innovation journey' through setbacks and barriers.

Given that a high proportion of innovations in the private sector fail, we need to understand more about the failure or the extinguishing process or 'exnovation' (Kimberley, 1976). What are the similarities to and differences from the private sector? What is, or could be, the role of both politicians and managers in preventing unsuccessful innovations from proceeding beyond a certain point of development?

Innovations in Governance

What little research there has been on innovation in the public sector has tended to focus on service delivery. There is relatively little about innovations in governance. There is a lot written about new forms of governance, but these issues are not generally discussed from an innovations perspective (i.e. in what ways is the shift an innovation, how does the innovation emerge and how is it sustained?). This is an area which is ripe for investigation and would be informative about democracy and society, and public sector innovations.

Diffusion of Innovation

As we have seen, diffusion of innovation is particularly important for public services. Some organizations prefer the language of dissemination as implying more active processes

than diffusion (which relies on a chemistry metaphor). Whatever the language, there is still a lot to be learned about how diffusion takes place, and how and why innovations are adapted to different contexts and cultures. For example, how can organizations or groups which have successfully created an innovation recognize and describe to others its distinctive features? Successful innovators are not always aware of how distinctive their own practices are and are not automatically good communicators about how to develop the innovation in another context. In addition, what communication channels and learning exchanges facilitate what sorts of innovation? And what features of the 'receiving' organization enable it to recognize and use innovations from elsewhere and to embed them locally?

Innovative Capacity in Organizations

Taking a step beyond individual innovations, why do some organizations appear to be more receptive to innovation than others? Some evidence suggests that organizations which implement major innovations successfully are more open to, and have the structures and cultures to support, further innovation (for example Newman *et al.*, 2000; Downe *et al.*, 2004). Is it that an innovative organization is better at surfacing and sustaining innovative ideas and practices—or is it better at killing off ideas and practices which do not fulfil early promise?

Innovation and Improvement

There is a wealth of performance data (of variable quality) about public service organizations and a real opportunity to explore the diverse relationships between innovation and improvement. There are considerable opportunities to examine changes over time, taking into account the impact of early performance losses, learning curves, improvements or further decline. Better understanding could help in providing realistic promises to citizens and users of services, and contribute to building trust in public service organizations. We also need to know if improvements are a 'flash in the pan', or whether they are sustained over time.

Leadership and Innovation

The idea of the creative individual engaging in innovation single-handedly is very limited. There is certainly a role for individuals but also important are groups, teams and a critical mass of support. We need to be able to step beyond the traditional hierarchical models of innovation

leadership to understand how innovation climates are nurtured, how policy-makers and managers can work together in related but distinctive roles in innovation, and how far innovation leadership is distributed within and across organizations.

Conclusions

Innovation is an issue of considerable significance for both public and private sector organizations. Although the sceptical view of the public sector is that it is resistant to significant innovation, there have been numerous and significant examples. This article has used three different conceptions, or paradigms, of governance and public management in order to examine the ways in which innovation is pursued by policy-makers, managers and citizens. This suggests that there are several mechanisms for the development of innovation.

The literature about innovation in the public sector is still sparse, and so there has been, until recently, an over-reliance on literature derived from the private sector. There are some similarities in innovation processes and outcomes (from which it is important to learn), but also distinctive and important differences between innovation in *private firms* and in *public service organizations*. The private sector literature still focuses mainly on technological innovation, especially new product development, but there are limitations in applying concepts about *product* innovation to *service* and *organizational* innovation. Overall, these features suggest that the transfer of theory and empirical findings from private firms to public services is far from straightforward. Accordingly, there is a need for robust theory and evidence derived directly from the public sector.

Increasingly, there is recognition that context has an impact, both directly on innovation determinants, processes and outcomes and indirectly through organizational features such as the amount of organizational resources and organizational strategy. Tidd (2001) argues that the complexity of the innovation and uncertainty of the environment substantially shape innovation. These are key dimensions for public service organizations. We also need to understand much more about the organizational processes of innovation development through 'top-down' policy development, through 'bottom-up' innovation emerging from the activities of managers and staff in organizations, and through 'lateral' innovation from good practice adoption and adaptation.

One element of the context of complexity for public service organizations is that they are embedded in society, producing not only benefits (and obligations) for individuals but also providing public goods and services, establishing collective efficiency, and creating collective rules and purposes. So analysis of innovation needs to consider not just the immediate improvements in service quality and fitness for purpose, but wider issues of public value. The varied relationships between innovation and improvement need to be mapped, so that there is a better understanding of the barriers and facilitators. Research is needed to illuminate and explain the processes which support or which undermine innovation in public service organizations, viewing innovation as a journey rather than a linear process. ■

Acknowledgement

The author acknowledges the support of the ESRC/EPSRC Advanced Institute of Management Research, grant number RES-331-25-0008.

References

- Altschuler, A. and Zegans, M. (1997), Innovation and public management: Notes from the state house and city hall. In Altchuler, A. and Behn, R. (Eds), *Innovation in American Government* (Brookings Institution, Washington, D.C.).
- Benington, J. and Hartley, J. (2001), Pilots, paradigms and paradoxes: Changes in public sector governance and management in the UK. *International Research Symposium on Public Sector Management* (Barcelona).
- Bessant, J. (2003), *High-Involvement Management: Building and Sustaining Competitive Advantage Through Continuous Change* (Wiley, Chichester).
- Borins, S. (2001), *The Challenge of Innovating in Government* (PricewaterhouseCoopers Endowment for the Business of Government, Arlington, VA).
- Damanpour, F. (1993), Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34, pp. 555–590.
- Downe, J., Hartley, J. and Rashman, L. (2004), Evaluating the extent of inter-organizational learning and change through the Beacon Council Scheme. *Public Management Review*, 6, 4, pp. 531–553.
- Greenhalgh, T., Robert, G., Bate, P., Kyriakidou, O., MacFarlane, F. and Peacock, R. (2004), *How to Spread Good Ideas*. Report for the National Coordinating Centre for NHS Service Delivery and Organization (London).
- Hartley, J. and Allison, M. (2002), Good, better, best? Inter-organizational learning in a network of local authorities, *Public Management Review*, 4, pp. 101–118.
- Kimberley, J. (1976), Issues in the design of longitudinal organizational research. *Sociological Methods and Research*, 4, pp. 321–347.
- Moore, M. H. (1995), *Creating Public Value: Strategic Management in Government* (Harvard University Press, Cambridge).
- Moore, M. H., Sparrow, M. and Spelman, W. (1997), Innovation in policing: From production line to jobs shops. In Altchuler, A. and Behn, R. (Eds), *Innovation in American Government* (Brookings Institution, Washington, D.C.).
- Mulgan, G. and Albury, D. (2003), *Innovations in the Public Sector* (Cabinet Office, London).
- Newman, J. (2001), *Modernizing Governance: New Labour, Policy and Society* (Sage, London).
- Newman, J., Raine, J. and Skelcher, C. (2000), *Innovation in Local Government: A Good Practice Guide* (DETR, London).
- Pollitt, C. and Bouckaert, G. (2000), *Public Management Reform: A Comparative Analysis* (Oxford University Press, Oxford).
- Rashman, L. and Hartley, J. (2002), Leading and learning? Knowledge transfer in the Beacon Council Scheme. *Public Administration*, 80, pp. 523–542.
- Tidd, J. (2001), Innovation management in context: Environment, organization and performance. *International Journal of Management Reviews*, 3, pp. 169–183.
- Tidd, J., Bessant, J. and Pavitt, K. (2001), *Managing Innovation: Integrating Technological, Market and Organizational Change*, 2nd edn (Wiley, Chichester).
- Utterback, J. (1996), *Mastering the Dynamics of Innovation* (Harvard Business School Press, Boston, MA).
- Walker, R., Jeanes, E. and Rowlands, R. (2002), Measuring innovation: Applying the literature-based innovation output indicator to public services. *Public Administration*, 80, pp. 201–214.
- Walters, J. (2002), Understanding innovation: What inspires it? What makes it successful? In Abramson, M. and Littman, I. (Eds), *Innovation* (Rowman and Littlefield, Lanham, MA).
- Wolfe, R. (1994), Organizational innovation: Review, critique, and suggested research directions. *Journal of Management Studies*, 31, 3, pp. 405–431.