Collaboration and interconnectivity: Nottinghamshire Fire and Rescue Services and Higher Education Institutions in Nottingham.

Peter Murphy, Kirsten Greenhalgh and Craig Parkin

Nottingham Trent University, Nottingham University and Nottinghamshire Fire and Rescue Service

Abstract

This paper will describe the developing relationship between Nottinghamshire Fire and Rescue Services and the two Higher Education Institutions in Nottingham. It will chronicle how a very traditional relationship has been transformed, initially by a simple consultancy project, into a much closer working relationship characterised by a much richer variety of collaborative projects. It demonstrates the potential mutual benefits that greater trust and reciprocity between the institutions can bring to both academia and to practice and the impact it has already had on curriculum development, teaching and learning in Nottingham.

Key Words: Fire and Rescue Services, Integrated Risk Management Planning, Emergency Response.

Introduction

Since 2009, despite and at times because of, the public sector financial restrictions, Nottingham Business School (NBS) and more latterly Nottingham University Business School (NUBS), have taken a dynamic and pro-active role to its relationship with the local, regional and national Fire and Rescue Services. Initially NBS diversified the nature, extent and variety of its collaborative projects to include knowledge transfer partnerships, consultancy, student placements, and independent and joint research projects. More recently, NBS and NUBS have been jointly engaged in the direct provision of analytical and policy advice as part of the Integrated Risk Management Planning (IRMP) process. The universities, with the Fire and Rescue Service will be providing strategic policy and advice to the Fire Authority, and the project has already informed curriculum development, teaching and learning at undergraduate and postgraduate levels within both business schools. It provides case study material but has also helped curriculum development by focussing on future competencies and skill sets within the Fire and Rescue Service and the wider public sector.

The latest initiative, started as a short consultancy project to „quality assure the evidence base that the service intended to use for the authority s Fire Cover Review (NFRS 2011a). This was a comprehensive review of the configuration and deployment of all the authority s human and physical resources as a result of the IRMP process introduced by the Fire and Rescue Act 2004. The Fire Cover Review (FCR) scrutinized

the need for short term reconfiguration of the service on the basis of the radical new way of assessing risk to individuals and communities introduced by the Act.

As well as assisting in implementing the first stage reconfiguration, NFRS have also recently requested that NBS/NUBS contribute to the evidential base, the risk assessment and the formulation of medium and long term strategies for service reconfiguration and the deployment of resources that will result from the IRMP process. In this capacity NBS/NUBS have become an integral part of the advice that the service provides to the Fire Authority. NBS/NUBS are part of the creation of the evidence base and the development of the strategy to be recommended to the Fire and Rescue Authority. Since it is the Fire Authority that makes any decisions on the final form of the strategy, the academic independence and quality assurance of the research is maintained. All three parties wish to ensure that any knowledge, good practice or public value (Moore, 1995)that is created through the project is shared with both the local and national fire and rescue and resilience communities as recently advocated by Research Council s UK policy (2012) for projects which it funds. This has effectively created a new and innovative dimension to the relationship between the Fire Service and the two universities.

Although the Fire Service and the Universities have been jointly and severally involved in inter-agency partnerships such as the Local Strategic Partnership for some time, this is the first time that NFRS has invited such direct integrated involvement in it s strategic advice to the Fire Authority. The two key changes that have facilitated this initiative need to be acknowledged. The first was the change in the way that fire risk is assessed through the IRMP since the 2004 Fire and Rescue Services Act. The second is the changing relationship between the Fire and Rescue Services and the Fire and Rescue Authorities articulated in the 2012 Fire and Rescue National Framework for England.

Integrated Risk Management Planning

In Fire and Rescue Services prior to 2004, the services modus operandi was a reactive approach to the fire risks to local communities as FRS s sought to identify individual buildings or clusters of buildings with high levels of risk and/or potential impact (such as chemical plants or nuclear power installations) and plan for any potential incidents accordingly. Services would apply national standards based upon response times and services, buildings, appliances and activities would be designed and deployed accordingly. The 2004 Act, however, introduced a new system that sought to comprehensively assess risk to people and communities across an authorities „ area and subsequently to reconfigure services to prevent, respond to and/or mitigate risks and the consequences of incidents. Henceforth FRS s had to plan to avoid, reduce and/or mitigate these risks through Integrated Risk Management Planning and to collaborate and co-ordinate their activities in various new community wide partnerships such as the Local and National Resilience Forums.

The responsibilities were laid out in the Civil Contingencies Act of 2004 and the 2004 Fire and Rescue Services Act. This moved the focus and objectives of the service, both locally and nationally from individual incidents to collective community outcomes, prevention and preparedness. The duties and responsibilities of individual Fire Services and Fire Authorities were subsequently developed and articulated in three succeeding

National Frameworks for Fire and Rescue Services the most recent of which was published in June 2012 (ODPM 2004, DCLG 2008 and DCLG 2012).

The Fire Cover Review in Nottinghamshire.

The IRMP process was applied first in Nottinghamshire via a comprehensive review of all services and resource deployments, known as the Fire Cover Review (FCR). Although the FCR was conceived and initiated immediately prior to the economic downturn, which understandably impacted upon the resources available, its overall aims and objectives remained the same from its inception in 2009 through to its implementation (NFRS 2011b). NBS were initially employed as independent consultants to „quality assure and advise on the evidential base and review the preparation process up to the stage of publishing the proposed strategy. The initial research (Murphy *et al.* 2012) found that in a period of financial constraints and reduced resources, decisions on service reconfigurations were politically contested, generated considerable public interest and proved difficult to expedite, despite the urgent need for productivity improvements and efficiency savings within the UK public services. NFRS were able to use the latest analytical tools and information developed and made available by the government following the 2004 Act, and undertook a robust and comprehensive review of the short term risks across the county area. This found that the configuration of services and the deployment of resources had largely arisen from historical decisions and previous data, information standards and benchmarks which were, by 2010, clearly out-of-date. These historical factors had resulted in less-than-optimal patterns of resource deployment to meet the contemporary patterns of risk across the county (Murphy *et al* 2012).

As a result of their work on the FCR, and due to internal resource constraints , NBS and NUBS have been asked, by NFRS, to review more recent assessments of the medium and long term risks within the county and draft a strategy and recommendations for possible medium and long term service reconfigurations (NFRS 2013). The research will also compare the proposals with current IRMP proposals within other FRS s in the UK; it will look at the latest developments in the National Framework for Fire and Rescue Services recently released by the Coalition Government (DCLG 2012) and will review related developments internationally. For university researchers wishing to maintain the independence of any research this is only feasible because of the change in the relationship between fire and Rescue Services and Fire and Rescue Authorities introduced by the coalition government. The latest fire and rescue framework and the coalition government s proposals for public service reform (Cabinet Office 2011) make clear that the Fire and Rescue Service will henceforth be treated as a „commissioned service with the F&R Authority being clearly distinct in its responsibilities from the F&R Service. In health and other local services this is often referred to as the commissioner/provider split.

This role clarification between the Service and the Authority helps to highlight and illuminate the changing roles and relationships between academics and practitioners and, more generally, between the organisations in the IRMP project. It will test the benefits of reciprocity in the co-production of local policy and service delivery between policy makers, academics and practitioners. It should illuminate the mutual dependence between emergency planning and emergency response at local (and national) levels and it will investigate the limits of the governments localism agenda in high profile - high risk

networked services that characterise the operating environment of many of the emergency services.

The Third Mission and the Flipped Academic

The relationship developing between NFRS and its two local university business schools appears to fit under the umbrella of what has been identified as a University s „Third mission (the first two being teaching and research) which to some extent originates from governments desire to secure benefits from public investment in higher education to wider communities. It is the idea of engagement between universities and society where, "Universities make contributions to government and civil society as well as the private sector, assisting not only with economic performance but also helping to improve quality of life and the effectiveness of public service" (B-HERT 2006, p.3). These third stream activities encompass the generation, use, application and exploitation of knowledge and other capabilities beyond the academic boundaries (Molas-Gallart *et al.* 2002*).*

The academics involved in this „third stream relationship have previously worked within the public services, for several years, and their motivation for engaging with this relationship was their desire to have a positive impact on public service delivery. They were alerted to the concept of the „flipped academic as discussed by Alex Bruton (2012), particularly in the first two of his key characteristics or identifying points, as it appears to coincide with their values and aspirations for their work and that the flipped academic wishes to inform first and publish later. The concept of the flipped academic involves *inter alia* academics co-developing their ideas with their counterparts within industry or services, in this case the Fire and Rescue Service, sharing these ideas openly, with the national fire and rescue and resilience communities, testing and validating these ideas in practice and finally publishing when the impact of those ideas is in evidence. As Bruton (2012) observes this should help to minimize the academic-practice gap.

Gibbons *et al* (1994) writing earlier would acknowledge this to be "„mode 2[1] knowledge production that is heterogeneous, transient, transdisciplinary, socially accountable and reflexive and undertaken in a context of application" (Chatterton and Goddard, 2000, p.480).

Mutual benefits and Reciprocity

A longitudinal Case study

The project will provide NFRS with a draft strategy and recommendations for potential service reconfigurations. It will also provide both NBS and NUBS with a longitudinal case study, "the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class and the instructor" (Lawrence, 1953, p.215), for use within their postgraduate and undergraduate programmes. The benefits of case studies within the learning environment being, *inter alia,* that; they make the subject matter relevant

---

[1] Mode 1 being Knowledge creation, which is homogeneous, disciplinary and hierarchical and which characterises the autonomous and distinct academic disciplines.

and can therefore motivate students; the analysis of complex situations also promotes a deep learning approach and their use develops skills in coping with ambiguity (Prince and Felder, 2006). There are also potential additional benefits and reciprocity which will emerge from this collaboration with access to and creation of primary data sources and acknowledge independence. In effect the university and the FRS are both independent and inter-dependent in this project.

The strategy will be addressing the current and future needs of the local communities of Nottinghamshire within the budget constraints and the legislative context. It will be developed by conducting a strategic needs assessment examining, *inter alia,* current service delivery, demography, climate changes, advances in technology and resultant risk profiles. The framework based upon Ansoff s (1965) „Rational Planning Model , has been developed into the Strategic Management Framework (SMF), depicted in figure 1.

The implementation of the strategy and the resultant review and control component of the SMF will enable the authors to utilise longer-term action research, so that research informs practice and practice, in turn, informs research: Action research being an iterative process in which practitioners and researchers act together to intervene and reflectively learn (Avison *et al.* 1999).
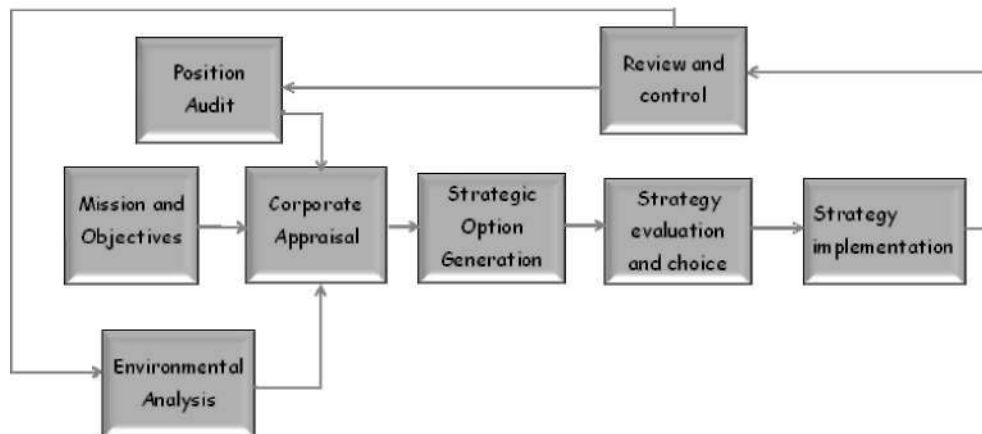

Figure 1 The Strategic Management Framework

The case study will therefore provide valuable information and teaching material that can demonstrate the implementation of the various models encompassed within the Strategic Management Framework such as stakeholder analysis; PESTEL, SWOT, performance measurement and the balanced scorecard at both undergraduate and post graduate levels. The application of these models, their currency and their appropriateness to the public sector and their impact can then be critically examined within the learning environment. The longer-term data and information from the review and control section of the SMF will also be examined in order to assess the impacts of the strategy and service reconfigurations. When combined with updated environmental analysis and position audits they will also provide the evidence base for the evaluation, scrutiny and future reiterations of the strategy. Again the justification for the changes to

the strategy and their impact can be debated and critically evaluated within the learning environment.

The case study will, it is hoped, be used to provide postgraduate students with an example of action research highlighting how this type of research can be used to bridge the theory/practice divide.

The previous consultancy project has already been used successfully within the learning environment at both undergraduate and post graduate levels. In a series of seminars the students were introduced to the Fire Cover Review and were asked to identify the potential stakeholders within the project, in accordance with Mendelow s (1991) matrix, and to anticipate the responses of these stakeholders to the review and possible service reconfigurations. Students were asked to predict which of the stakeholders would be the most interested in the project and which would have the most power to influence the decisions made by the service. The actual results of this analysis (Murphy *et al* 2012) were then disclosed to the students and compared with their predictions. There was general agreement between the predicted and actual, understandably, self-interested responses of the public. However the students had not anticipated the added dimension of „political will and how this contrasted with the utilitarian principle of the „greatest good necessarily adopted by the FRS. This revelation prompted and encouraged the students to probe the complex models of governance arrangements within the public sector and compare them to those of the private sector and to deliberate on the power/interest relationship that exists between the public the politicians and the service.

Refreshing and Reconfiguring the Master's Programme

Both academic authors have taught on/delivered modules within a master s programme for Public Services Management where each module within the programme required a „work based assignment to be completed that fit the assessment brief and the module learning outcomes. The intention behind these „work-based assignments was twofold. Firstly the students on the course are able to critically evaluate the theories and models taught within a familiar environment, enabling deep learning to take place. Secondly the public service organisations have a current issue considered in the light of appropriate theories and models with recommendations presented which are reviewed by the module team who provide feedback on the analysis and evaluation conducted. This feedback explores the suitability, feasibility and acceptability (Johnson *et al.* 2008*)* of the recommendations to the organisation. Generations of students and employers have, within their feedback on the programme, recognised the value of these „work-based assignments in bringing tangible improvements to the organisation. Whilst there is general recognition of the value of these assignments, there have been occasions where the student has been unable to identify a suitable subject matter for review within a particular module. This review therefore has the potential to provide students employed by NFRS with a number of specific „work-based issues that will ensure contemporary topic areas for evaluation.

Joyce and Coxhead (2012, p.43) recently noted that the current environment of deficit reduction makes it, "difficult for those directing government services (local as well as national) to have regard for longer term matters of developing the professionalism of those working in public services including public services leaders and managers."

This concentration on deficit reduction has impacted upon the aforementioned master s programme recruitment over recent years. Whilst a number of potential students have contacted the business school, from various organisations within the public services, to discuss the programme and their interest in it, the conversion of enquiries to applications has significantly reduced. This was an expected consequence of the deficit reduction plans and the business school is using this hiatus as an opportunity to reconfigure its master s programme, with the involvement of its employing organisations similar to the project discussed in Joyce and Coxhead (2012).

This reconfiguration will involve interrogating the programme and module learning outcomes to ensure their currency and saliency and potentially the inclusion of new ones to meet the changing needs of our public services organisations. The involvement of the academics within the current IRMP review will help facilitate this reconfiguration, not least as it is engendering greater trust and a good working relationship with one of the employer organisations, since it will enable the academics to understand the changing skills and understanding required in this new era within the public services.

Conclusions

The relationship developing between NFRS, NBS and NUBS has been precipitated and triggered by a number of factors both at the national and system levels. There has been a significant loss of organisational support and infrastructure to locally delivered public services from the national level. The abolition of the Audit Commission has resulted in the loss of the largest operational research facility for public services in the UK. In addition the government has withdrawn funding for the dissemination of good practice capacity building and support for improvement that was provided by the Improvement and Development Agency (IDeA) (now Local Government Improvement and Development); the Quality Assurance Standards and Inspections formerly provided by the Fire Inspectorate and benchmarking and comparative data and reporting provided by the Audit Commission has also gone. Furthermore there has been a loss of policy capacity within both the DCLG and the LGA as they have reduced their budgets.

These changes have created or increased the opportunities for inter-agency co-operation between NFRS and both local business schools. It was fortuitous but quite incidental that the individuals within this collaboration and partnership had worked closely together in the past to deliver the FCR and had built a good working relationship based on high levels of trust, mutual respect and shared objectives, values and aspirations for the public services.

As a result of this earlier collaboration NFRS has increased confidence and knowledge of what its local business schools could deliver and its key stakeholders have derived increased confidence in the robustness of the Fire Cover Review and the IRMP process as a result of the business schools involvement (Murphy *et al* 2012). The development of teaching and learning within the two business schools has clearly benefitted in terms of curriculum development and the creation of new teaching materials. However, this is an area of opportunity for all Higher Education Institutes. The dismantling of the support and improvement infrastructure that was very effective in driving improvement of the public services in the early part of this century will not be quickly (if ever) re-assembled in the current era of austerity. It does however provide an opportunity for HEIs and local

and national public service providers to form new and mutually rewarding collaborations to the benefit of our local communities.

References

B-HERT (2006), *Universities' Third Mission: Communities Engagement,* Business/Higher Education Round Table, Victoria, Australia

Bruton, A., (2012), The Flipped Academic, http://theinnographer.com/flipped-academic/

Cabinet Office (2011) *Open Public Services White Paper* Cm 8145 HMSO London

Chatterton, P., & Goddard, J. (2000), The response of Higher Education Institutions to Regional Needs, *European Journal of Education, Vol.35, N0.4*

Department of Communities and Local Government (2008), *Fire and rescue national framework for England 2008-2011* HMSO London ISBN978-1-4098-0012-5

Department of Communities and Local Government (2012), *Fire and rescue national framework for England* HMSO London ISBN: 978-1-4098-3569-1

Johnson, G., Scholes, K., and Whittington, R. (2008), *Exploring Corporate Strategy (8th ed.). Harlow:* FT Prentice Hall

Joyce, P., and Coxhead, F.,(2012) Ideas and Issues in University Education for Public Service Leaders Teaching Public Administration 30 (1) 42-53.

Lawrence, P., (1953), The Preparation of Case Study Material in K.R. Andrews ed., *The Case Method of Teaching Human Relations and Administration*, Harvard University Press: Cambridge Mass.

Moore, M (1995) Creating Public Value: Strategic Management in Government. Cambridge, MA: Harvard University Press.

Mendelow, A. (1991) *Proceedings of the* Second international Conference on Information Systems, Cambridge, MA.

Molas-Gallart, J., Slater, A., Pari, P., Scott, A., Duran, X., (2002). *Measuring Third Stream Activities: Final Report to the Russell Group of Universities, SPRU, University of Sussex*

Murphy, P., Greenhalgh, K., and Parkin, C., (2012) Fire and rescue service reconfiguration: a case study in Nottinghamshire, *International Journal of Emergency Services, Vol. 1 Issue 1, pp.86 - 94*

NFRS (2011a) *Independent Appraisal of the Data Collection, Systems and Modelling for the Fire Cover Review Options Report.* Nottingham Business School June 2011.

NFRS (2011b), *Options for addressing the outcomes of the fire cover review report of the chief fire officer*, Nottinghamshire Fire and Rescue Service 24 June 2011 available at , http://www.notts-fire.gov.uk/Documents/FCR_options_and_full_report.pdf accessed 29 August 2012

NFRS (2013) – Project Specification Nottinghamshire Fire & Rescue Service (NFRS)/Strategic Needs Assessment (SNA).

Office of the Deputy Prime Minister (2004) *Fire and Rescue Service National Framework 2004/05*. HMSO London.

Prince, M.J, and Felder, R.M. (2006) Inductive Teaching and Learning Methods: Definitions, Comparisons and Research Bases *Journal of Engineering Educations 95(2), 123–138 (2006).*

Research Council UK (2012) Policy on Open Access
http://www.rcuk.ac.uk/documents/documents/RCUK%20_Policy_on_Access_to_Research_Outputs.pdf

Authors

Peter Murphy (Corresponding Author), Nottingham Business School, Nottingham Trent University Peter.murphy@ntu.ac.uk Tel +115 848 8092

Kirsten Greenhalgh, Nottingham University Business School Nottingham University

Craig Parkin, Area Manager, Nottinghamshire Fire and Rescue Service