

## **Taking Stock**

# **A Summary of ESRC's Work to Evaluate the Impact of Research on Policy and Practice**

**February 2009**

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## **Introduction**

### **Background**

The ESRC has been exploring new methods for assessing the impact of the research it funds on policy makers and practitioners. This is a challenging area of work through which there is enormous potential to understand and therefore improve the practical contribution of UK Social Science. The Council's Research Evaluation Committee (REC) is excited to be at the forefront of developing impact evaluation practice, and is keen to work with others in this area. It has made significant progress in addressing the methodological challenges inherent in impact evaluation, and is planning new developments to take the work forward. The REC wishes to share the results of its work so far and to invite comments and contributions from readers

The extent and nature of research influences on policy and practice depend not only on the content of research messages, but also on the ways in which these messages are communicated and the environment into which they are delivered. The central focus of the ESRC's developing methodology is an analysis of how and in what circumstances impact is generated. An understanding of such processes and contexts not only underpins a better understanding of actual or potential impact, but will also enable the ESRC to guide its investments towards increasing the influence of their research.

It is important to stress that the ESRC has always sought to address these challenges whilst simultaneously promoting the highest possible academic standards in research. The 'double hurdle' of scholarly and practical impact is a key goal (Pettigrew, 2001). The ESRC also recognises the need to promote cultural changes in some areas of academia. It is particularly important that the Research Excellence Framework (successor to the Research Assessment Exercise) places a higher value on scholarly and practical impacts (characterised as 'final goods'), rather than just focussing on research outputs ('intermediate goods').

### **Policy context**

In parallel with the ESRC's continuing commitment to impact assessment, the Government in recent years has also placed increasing emphasis on the need to provide evidence of the economic and social returns from its investment in research. This trend was reinforced in the Worry report (Research Council Economic Impact Group, 2006) to the (then) DTI in 2006, which recommended that the Research Councils "should make strenuous efforts to demonstrate more clearly the impact they already achieve from their investments".

Following the publication of the Worry report, the ESRC developed a knowledge transfer and impact strategy for 2007, and has recently put in place its impact strategy for 2008-11. This strategy acknowledges the complexities inherent in identifying research impact (time-lag, attribution etc) and adopts a broad definition of impact to include both economic and societal impacts. Broader social impacts include effects on the environment, public health or quality of life, and impacts on government policy, the third sector and professional practice

## ESRC Impact evaluation work

The REC has a long-standing commitment to developing appropriate methodologies for assessing the non-academic impact of its investments. Its work has four main aims:

- to identify and analyse evidence of research impact on policy and practice;
- to understand how and why impact is generated, and help the ESRC to improve its performance in this area;
- to develop impact evaluation methods.
- to shape the aspirations, behaviour and capabilities of the various social science communities to achieve impact

In 1996, the ESRC commissioned a review of impact assessment approaches available at that time (Cave and Hannay, 1996) and, after a series of pilots, introduced assessment methods that helped to increase the impact focus of the Council's evaluations. However, it became clear by 2004/05 that a more systematic and rigorous approach was required both to increase the effectiveness of the REC's work and to meet the Government's challenge to provide more evidence of research impact.

The start of the ESRC's recent work in developing impact assessment methods was the International Symposium "New Approaches to Assessing the Non-Academic Impact of Social Science Research" which took place in London in May 2005<sup>1</sup>. The symposium, which involved speakers and participants from academia, business, evaluation practice and government, generated considerable discussion about the potential approaches to assessing the policy and practice impacts from social science research.

The main conclusions from this event were that:

- dissemination is not impact: impact evaluations of social science research should therefore look beyond dissemination to capture evidence of application by research users;
- impact assessment methods should seek to capture the wide diversity of social science impact, including improved economic performance and better informed public policy and decision making, and
- evaluations should examine the processes through which impact occurs within a particular setting, since impact is often contextually determined.

(Davies, Nutley et al, 2005)

Building on the conclusions from these initiatives, and in the context of the Warray report recommendations, the ESRC's Research Evaluation Committee (REC) has more recently commissioned a series of case studies, using predominantly qualitative approaches to assess the policy and practice impacts of some of its major research investments.

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<sup>1</sup> See [http://www.esrc.ac.uk/ESRCInfoCentre/Images/non-academic\\_impact\\_symposium\\_report\\_tcm6-16593.pdf](http://www.esrc.ac.uk/ESRCInfoCentre/Images/non-academic_impact_symposium_report_tcm6-16593.pdf).

In 2007 the ESRC organised a workshop to consider the methodological issues arising from the case studies, and to begin developing approaches to assessing the economic impact of social science research. This workshop validated and supported the ESRC's approach as leading the field in the UK (Molas-Gallart & Tang, 2007)<sup>2</sup> – a view also endorsed by comments from international experts who have received presentations of the REC's work.

## Report Structure

This report focuses primarily on the ESRC's series of Policy and Practice Impact Case Studies and the lessons learned from this work. It is structured as follows:

- Section 2 considers some critical issues for the development of impact evaluation approaches
- Section 3 summarises the aims of the case studies, along with details of participating investments.
- Section 4 outlines the evaluation approaches used in the case studies
- Section 5 provides key examples of impact highlights from the case studies
- Section 6 assesses the factors that may have influenced impact generation
- Section 7 draws out lessons from the case studies for the development of an impact evaluation framework
- Section 8 sets out plans for the next steps in the Impact Evaluation work programme, including details of the recently commissioned pilot economic impact evaluation study, and plans for future evaluation approaches
- Section 9 outlines the Committee's current conclusions.

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<sup>2</sup> See

[http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/ESRC%20Impact%20Evaluation%20Methods%20Workshop\\_tcm6-24818.pdf](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/ESRC%20Impact%20Evaluation%20Methods%20Workshop_tcm6-24818.pdf)

## Critical Issues for Impact Evaluation

In developing the ESRC's approach the Research Evaluation Committee has analysed carefully the key issues affecting impact evaluation, and these are summarised below.

It is widely accepted that determining the impact of social science research is not a straightforward task. Before we consider some of the factors affecting this area of work, we should first define what we understand by the term "impact", and discuss its particular characteristics in the social sciences. The impact of social science research can be categorised as follows:

- instrumental (for example, influencing the development of policy, practice or service provision, shaping legislation, altering behaviour)
- conceptual (for example, contributing to the understanding of these and related issues, reframing debates).
- Capacity building (for example, through technical/personal skill development)

(Nutley et al, 2007)

It must be recognised, however, that these impacts, even if they are at the instrumental end of the scale, will be very difficult to quantify. They are likely to be contributory in nature, building on the work of previous studies and the user's existing knowledge. Policy and service development are not linear processes and decisions are rarely taken simply on the basis of research evidence alone. Research outputs may influence decision-making at a range of different points in time, and such influence may or may not be visible.

Carol Weiss (Weiss, 1980) coined the term "knowledge creep" nearly 3 decades ago to refer to the complexity of impact processes. The processes through which research influences policy, practice or understanding are likely to be indirect, hard to identify and even harder to measure. Hence the problem of *attribution* – the difficulty in identifying the extent to which a particular piece of work has influenced a particular policy or practice development, or new insights and common understandings.

The *time-lag* between research completion and its potential impact is another critical factor. Impact assessments may not be able to identify impacts if research messages have not yet filtered through.

We also need to take into account the different types of initiatives that the ESRC funds. The structure and resources of Programmes, Centres and responsive mode projects will inevitably have a bearing on the nature and extent of user engagement, and therefore on impact generation. We also need to understand that impacts may vary widely across disciplines and sectors.

The extent and nature of research influences on policy and practice depend, however, not only on the research messages themselves, but also on the ways in which these messages are delivered and the *environment* into which they are delivered. Processes (user engagement, dissemination, networks, consultancies etc) and contexts (for example, policy relevance, user receptiveness, timing, financial or political issues) will all have a bearing on the uptake of research findings. We need to understand these issues if we are to appreciate

how and why the research has had any impact. All of the ESRC's impact evaluation studies undertaken so far have acknowledged the importance of understanding the processes through which impacts may be generated, and any contextual factors which may affect these impacts.

Despite the difficulties outlined above, it is possible to gain an understanding of the contribution that research makes to the development of policy and practice, as the ESRC's case studies have demonstrated (see Section 5 below). There will be some instances where research outputs have been translated directly into, for example, guidelines or new service initiatives. For the most part, however, research influences will be less direct (but not less important). However, as we discuss in the following sections of the report, by analysing the relationships between researchers and research users, and the other factors that promote impact, we can begin to assess the extent and nature of research influences. This assessment needs to be undertaken within a robust conceptual framework that recognises the non-linear nature of research impact and the complexities of the impact process.

## Policy and Practice Impact Case Studies

### Case study aims

The 2005 Symposium referred to in Section 2 above identified few examples of research impact evaluation in the social sciences. The ESRC therefore decided to begin developing a programme of such work. Starting in 2006, the Research Evaluation Committee has commissioned a series of Policy and Practice Impact Case Studies with a range of its research investments in order to:

- identify specific impacts arising from ESRC funded research on policy makers, professional practitioners and other groups outside academia.
- analyse the determinants of impact (i.e. why and how impact has been generated)
- contribute to the development of suitable approaches to impact assessment in the social sciences.

### Case studies (2006-8)

The investments participating in the case studies completed to date are listed below.

#### *Future of Work Programme*

The Future of Work Programme supported 27 projects between 1998 and 2004, and was directed by Professor Peter Nolan of Leeds University Business School. The primary aim was to enhance public understanding of the developments likely to impact on people's future working lives. The research addressed issues relating to the nature of future employment opportunities, how this will affect the lives and well-being of future generations and how the relationship between paid and unpaid work is likely to change.

#### *Centre for Business Research*

The Centre for Business Research (CBR) was funded by the ESRC from 1994-2004 under the direction of Professor Alan Hughes at the University of Cambridge. The Centre's main scientific objective during this period was to achieve greater understanding of the links between business organisation, business performance and economic policy in an international context. It sought to conduct interdisciplinary work of a high academic standard in collaboration with the wider business and policymaking community. An important aspect of the Centre's work was the wide dissemination of its findings through a series of working papers and the promotion of a broad and informed debate about policy.

#### *Psychology Research Grants and Political Science/International Studies Research Grants*

These two case studies, conducted in 2007, aimed to trace the impact of a group of responsive-mode ESRC research projects and fellowships within Psychology and Political Science/International Studies which ended at intervals within the previous eight years.

#### *Innovation Centres*

The three Centres outlined below were funded by the ESRC for a period of ten years from 1996-2006. The Centres shared a common focus on innovation issues and each had important links with the business and policy-making communities.

- The Centre for Organisation and Innovation, based at the Institute for Work Psychology at the University of Sheffield under the direction of Professor Toby Wall. The Centre's main scientific objective during this its period of ESRC core funding was to develop a research programme on the economic and social aspects of effectiveness and innovation at work.
- The Centre for Research on Innovation and Competition, based at the University of Manchester, directed by Professor Jeremy Howells. The Centre's central research theme during its ESRC core funding focussed on how innovation drives competition and competition drives innovation.
- The Complex Product Systems Innovation Centre, based at the Universities of Brighton and Sussex. The aim of the Centre was to contribute to our understanding and management of innovation in complex high value, capital goods, industrial products, systems, constructs and networks, and to harness this knowledge for UK competitive advantage.

The Committee's work continues, and in 2008/09 it is conducting two further studies:

*"People @ the Centre of Communication and Information Technologies" (PACCIT)*

The PACCIT Research Programme ran from 1996 – 2006, under the direction of Professor Anne Anderson at Glasgow University. The Programme supported 30 projects and was jointly funded by the ESRC, the EPSRC and the (then) DTI through its LINK3 scheme. PACCIT's overall aim was to explore the interactions between people, computers and organisations, and how information and communication technologies could be designed to support these more effectively.

*Centre for Social and Economic Research on the Global Environment (CSERGE)*

CSERGE is dedicated to original research on the causes, consequences and policy implications of global environmental change. It focuses on policy issues, using interdisciplinary research which bridges the natural and social sciences. The Centre devotes itself to several broad areas of research from the standpoint of risks and benefits, and the theory and practice of policy options. These include global warming, global biological diversity and institutional adaptation to global environmental change. Additional themes are the economics of waste management and sustainable development.

Full reports on the completed case studies are available from the ESRC's web site at:

<http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Support/Evaluation/publications/index.aspx>

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<sup>3</sup> The DTI's LINK Programme provided funding for collaborations between universities and industry



## Evaluation Approaches Used in the Case Studies

The REC has encouraged the trial of different approaches by different evaluation teams – while emphasising the importance of framing reviews within robust conceptual frameworks that recognise the non-linear nature of research impact. The overall strategy for the initial case studies was to experiment with a variety of methodologies within the range of the ESRC’s funding structures. The methods used in the five case studies completed to date are summarised below, followed by some key findings from the studies (Sections 5 and 6). The report then draws on the experiences of the case studies to discuss possible approaches for future evaluations.

### Future of Work Programme

The first case study focussed on the potential impacts arising from one of the ESRC’s major strategic research investments. The evaluation of the Future of Work Programme was undertaken by RAND Europe and Brunel University’s Health Economics Research Group using the “Payback” method<sup>4</sup>. This method had been used previously in impact assessment studies, predominantly in health science research. The aims of the evaluation were to examine the wider impacts of the Programme and to test the applicability of the Payback Framework in the social sciences.

The Payback Framework consisted of a logic model representing the research and dissemination process, and a series of categories for the ‘paybacks’ of the research. The logic model, whilst recognising the non-linear nature of the impact process, provided a linear description of this process as a means of assessing ‘paybacks’ at different stages in the research. The Payback categories were knowledge production, impacts on future research, policy impacts, practice impacts (on individual behaviour), and wider social and economic impacts. The categories and model then informed the development and application of data collection techniques used for impact assessment (surveys, interviews with key informants, documentary analysis, case studies).

### Centre for Business Research

Having addressed impact issues within a Programme setting, the REC wished to investigate the nature and extent of research influence in the context of the other main ESRC investment structure – the Research Centre – this time trialling a different methodology. The Science and Technology Policy Research Unit at the University of Sussex were commissioned to undertake an impact evaluation of the Centre for Business Research. The

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<sup>4</sup> See

[http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case\\_Study\\_of\\_the\\_Future\\_of\\_Work\\_Programme\\_Volume\\_1\\_tcm6-19393.pdf](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case_Study_of_the_Future_of_Work_Programme_Volume_1_tcm6-19393.pdf) and

[http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case\\_Study\\_of\\_the\\_Future\\_of\\_Work\\_Programme\\_Volume\\_2\\_tcm6-19394.pdf](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case_Study_of_the_Future_of_Work_Programme_Volume_2_tcm6-19394.pdf)

approach for this Case Study was essentially "tracking forward" from research outputs to the way in which these have been incorporated into practice in the public and private sectors<sup>5</sup>. Building on a previous impact assessment study which they had conducted for the ESRC (Molas-Gallart, Tang et al 1999; Molas-Gallart & Tang 2000), the evaluators developed a conceptual framework that recognised the complexities of impact generation, and distinguished between issues of content, process and context. The approach adopted a broad view of potential research outputs, including conceptual information and theories, new methodologies and tools/instruments as well as new skills and tacit knowledge.

The methodology for this Case Study was largely qualitative. The consultants undertook a survey and a series of interviews with researchers at the Centre and with the "users" that had been recommended by the researchers. The study focused on the activities of the CBR as a whole during the period in which it received core funding from the ESRC. The framework distinguished:

- the different research outputs that constituted the content of the transfers between academic researchers and non-academic research users and beneficiaries
- the different forms of diffusion and transfer processes, and the forms in which research outputs were used outside academia
- the context in which the relationship was established, both in terms of the characteristics of the research agents, and of recipient communities.

The questionnaire instruments and reporting structure followed the structure of the conceptual framework.

## **Psychology Grants**

The REC now turned its attention from major ESRC investments to look at groups of individual research projects, in an attempt to discover whether impact could be identified at this level, and which were the best approaches for doing so. It commissioned the Technology Development Group and Information Browser Ltd to identify and analyse non-academic impacts from a set of 134 responsive mode awards in the area of Psychology, and to provide a critical reflection on the methods used in this evaluation. The conceptual framework underpinning the study drew on previous work in the area, including reports commissioned by the ESRC (Davies et al 2005; Molas-Gallart et al 2000). It highlighted the importance of network interaction and multiple flows of knowledge, focussing on the relationships between researchers, knowledge brokers and intermediaries, and users and beneficiaries.

The study employed a mixed methods approach. Individual cases of impact were identified, and case studies captured good practice lessons in knowledge transfer and impact generation. The methods used to analyse examples and forms of impact included:

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<sup>5</sup> See [http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case\\_Study\\_of\\_%20CBR\\_tcm6-19395.pdf](http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/Images/Case_Study_of_%20CBR_tcm6-19395.pdf)

- 1) content analysis of end-of-award reports and rapporteurs' reviews
- 2) a survey of award holders
- 3) a survey of heads of psychology departments
- 4) a focus group among members of the Association of Heads of Psychology Departments
- 5) interview based case studies and
- 6) interviews with the "users" of the research and other "stakeholders"

The content analysis and questionnaires were used to identify those projects showing indications of connectivity with users. A selection of these projects were then analysed through case studies.

### **Politics and International Studies Grants**

In the second case study of individual research grants, the REC decided to investigate how a web-based approach might be integrated into an impact evaluation. To this end, the Public Policy Group at the London School of Economics conducted an assessment of 39 responsive mode grants in politics and international studies. The evaluation aimed to investigate policy and practice impacts associated with this set of awards, and contribute to the development of evaluation practice in this area.

The evaluation approach involved an analysis of end of award reports in order to assess the potential of the projects for impact, followed by an analysis based on "unobtrusive" or "non-reactive" measures involving web-based searches, and databases of publications. The next stage was a questionnaire of award holders (in which researchers were provided with the results of the Google search), to elicit more information about the impacts and outputs from the projects. These were followed up with telephone interviews with principal investigators. Potential users and beneficiaries, identified through Google and the telephone interviews, were also contacted.

### **Innovation Centres**

In a further development of its impact evaluation work, the REC returned to the ESRC's Strategic Research portfolio, this time focussing on a cognate group of large investments which shared some user interest. This Case Study included three Research Centres working in the area of innovation (listed in Section 3.2 above), and was conducted by Price Waterhouse Coopers. The objectives of the evaluation were to trace the pathways through which each of the Centres had influenced policy and practice, and to analyse the resulting impacts. As with the evaluations described above, a critical reflection on methods used in the evaluation was also included.

The conceptual framework used by the consultants built on previous impact evaluations at the ESRC. A logic chain, mapping resource inputs to shorter term research outputs and to longer term outcomes was developed. This defined the potential pathways through which the Centres might be expected to generate impacts, and highlighted some of the possible determinants of impact. The data gathering approach involved a literature review, in-depth interviews with researchers, and a telephone survey and a small number of in-depth interviews with research users.

## Evidence of Impact

Before discussing the methodological lessons from the completed case studies, it will be useful to have in mind some of the impacts that were identified during the course of these studies, along with some reflections on how those impacts were achieved (Section 6).

These impacts can be categorised as:

- instrumental (for example, influencing the development of policy, practice or service provision, shaping legislation, altering behaviour)
- conceptual (for example, contributing to the understanding of these and related issues, reframing debates),
- capacity building (for example, through technical/personal skill development)

(Nutley et al, 2007)

Such impacts need to be understood within a conceptual framework that recognises the non-linear nature of research impact and the complexities of impact processes discussed in Section 2 above. By analysing the relationships between researchers and research users, and the other factors that promote impact, we can begin to assess the extent and nature of research influences.

## Future of Work Programme

The Future of Work impact evaluation categorised the impacts of the programme as “stimulating debate, fine-tuning policy, dispelling myths and providing confirmatory support, rather than causing major changes in policy”. Key impacts included:

- Secondment of one Principal Investigator to the position of Research and Strategy Advisor in the Women and Equality Unit at the DTI. Here the researcher was able to influence strategy and policy on issues such as paid parental leave, reducing the gender pay gap, changes in child care policy and changes in education policy. The findings from the ESRC project also contributed to the development of policy documents such as the Government White Paper on Work and Families (2003) which introduced new legislation on maternity and paternity leave.
- Principal Investigator of one of the ESRC projects appointed to chair the TUC Partnership Institute, which facilitated the transfer of knowledge from research into practice.
- Contribution of research findings to the DTI's guidance notes for employers and unions on complying with employment legislation, and contributions to the consultation initiated by the DTI on the Employment Relations Act 1999. Findings from the programme were also cited in a House of Lords' appeal judgement on the Johnson vs Unisys case on unfair dismissal, pay and conditions and the role of trade unions
- Contributions to the work of the Low Pay Commission and the DTI Employment Relations Directorate. As a result of its involvement with the research project, one of the case study organisations was the focus of a follow-up study by the Low Pay Commission which served to increase the Commission's understanding of how firms implement legislative requirements.

## Centre for Business Research

The impact evaluation identified several instances of substantial impact (for instance on the definition and assessment of UK labour policies). The study revealed diverse forms of user engagement, and showed how successful cases of application of research results outside academia combined different forms of user engagement over long periods of time. The study also emphasised the importance of contextual factors when explaining examples of successful policy and practice application. The main impacts identified were as follows:

- CBR's work on Employment and Labour Relations – CBR Researcher has made a significant contribution to the development of UK labour policy. For example the Low Pay Commission actively commissioned work from the Centre on the impact of the minimum wage on SMEs to contribute to its evidence base for developing policy.
- The Centre also carried out research into the effects of legislative measures that increased Trades Unions rights. The research served to allay fears that the introduction of such legislation would have a detrimental effect on economic competitiveness.
- The data contributed to the formation of policy. For the DTI it provided valuable information on how SMEs access finance and financial advice, and confirmed that SMEs require support for management training in preference to financial assistance. The survey data has also been used directly by a UK bank to cross check their own data on SMEs and subsequently shape policies on credit and financial support.
- The Centre's national Small and Medium Sized Business Survey is a longitudinal dataset involving some 2500 firms. The survey contains questions on issues such as workforce and training, Research and Development and other innovation expenditure and factors affecting expansion and efficiency including business advice. This was the main data source used by the Centre for its contract research, although it could be easily accessed by researchers and others outside the Centre.

## Psychology Grants

Examples of Impact from this case study included:

- Collaborations with the European air traffic control policy body and contributions to a long-standing relationship with QinetiQ (formerly DERA) on effects of sound on the flight deck (for which the researcher received an OBE for Services to Military Science)
- Work on children with Specific Language Impairment which is cited frequently by children's charities, support groups, expert witnesses and practitioners' periodicals and has led to a conceptual change among speech and language therapists
- Research on children's perceptions of inter-parent conflict is cited in the Home Office National Domestic Violence Policy Framework and underpins the Welsh-Assembly-funded development of a risk assessment toolkit, putting research directly into the hands of court officials and welfare professionals
- Findings on children's behaviour whilst being interviewed – subsequent research has established "gaze aversion behaviour" as a recognised phenomenon (indicating that children are reflecting on a question – rather than it being a negative behaviour) – this has implications for teaching practice and for interviewing children

- Work on risk and resilience in childhood and early adolescence which has underpinned the YWCA's advocacy of a better informed policy initiative for young mothers
- The testing of a particular instrument frequently used by police to detect deception (the Criteria-Based Content Analysis – CBCA) instrument used to test written statements for veracity which has demonstrated its limits (specifically that it doesn't take into account non-verbal behaviours and social skills) and this will lead to revised protocols for interviewing that will be accessible to police and facilitate more effective interview analysis.

## **Politics and International Studies Grants**

### Key impacts included

- Contributions to the initiation of citizenship ceremonies, the development of the Health and Social Reform Bill, 2001, the introduction of the Commission for Public and Patient Involvement in Health 2003, and the implementation of EU regulations for environmental sustainability.
- Influence on parallel consent regulations in the Northern Ireland Assembly and contributions to induction training for new MPs in Westminster.
- Stimulus to the World Health Organisation's development of a research centre on globalization, trade and human rights, and has influenced research and strategy on military transformation.
- Input to UK television broadcasting company guidelines on covering elections in ways that minimise effects on voter behaviour.

## **Innovation Centres**

### Examples of impact include:

- Input to an academic panel set up to review the research that was coming out of the 2003 Innovation Review and the subsequent DTI Economics Paper
- Provision of research evidence to DTI on a number of different topics, including innovation in services.
- Work with UNIDO (an organisation with a mandate to reduce poverty in developing and transition economies). The Centres' work has provided a rich evidence base to inform innovation policy in the developing world
- Work at the Centre for Organisation and Innovation has contributed to the development of research themes for the Advanced Institute for Management (AIM) and outputs for the DTI on innovation research, networks and management practice
- Researchers at the Complex Products Systems Centre were commissioned by NESTA to write a report on "The Innovation Gap." This report helped to establish NESTA as an important and influential organisation on issues around innovation, and has made a very recent important contribution to the current DIUS review of UK Innovation Strategy.

## Determinants of Impact Identified in the Case Studies

The ESRC's impact evaluation work to date indicates that there are certain key factors that are vital for impact generation. These include:

- Established relationships and networks with user communities
- Involving users at all stages of the research
- Well-planned user-engagement and knowledge exchange strategies
- Portfolios of research activity that build reputations with research users
- Good infrastructure and management support
- Where appropriate, the involvement of intermediaries and knowledge brokers as translators, amplifiers, network providers

These factors relate predominantly to the process of generating impact, the context in which research messages are delivered, and the content of the research. They are discussed in more detail below.

### *Process issues*

In all the impact case studies, the most important factor contributing to the generation of impact was the pre-existence of networks and relationships with research users. Sustained contacts with users, based on personal relationships and built up over the long term were the most important channels for policy and practice applications. Evaluators commented that the ideal connectivity with users was a two way process, where research findings were fed into policy and practice arenas, whilst pertinent policy and practice issues could inform the development of new research ideas. Early and continuous engagement with users at various stages of the research (from design through to dissemination) could help to increase the relevance and accessibility of research findings and increases the probability of impact.

Such relationships sometimes led to high impact opportunities, such as research assignments conducted on behalf of user organisations, the provision of formal advice directly to policy makers and practitioners, and the production of briefing papers or guidance for the implementation of legislation. Some of these opportunities were also facilitated by the reputation of an individual academic or a Research Centre, reputations which clearly had developed over time and through positive experience of the previous research outputs.

Clearly the existence of a well-planned dissemination and exploitation strategy, with appropriate levels of resources and infrastructure had a large part to play in encouraging impact generation. Ensuring that research findings are accessible (both practically and in the language used) to policy makers and practitioners is also a key determinant of impact generation. These issues can be problematic for individual researchers working in isolation with pressures to maintain their academic profiles.

In some cases, research intermediaries were able to provide relevant support. Research intermediaries such as professional associations, knowledge brokers and funding organisations (including the ESRC) can and do facilitate impact on behalf of individual researchers who would not otherwise have access to the necessary resources and infrastructure. Intermediaries can also contribute to the impact process in larger investments. In the Future of Work Programme, an ESRC Media Fellow helped to ensure

that dissemination timescales were appropriate to policy makers (although this did not always fit with the research activity). Intermediaries can communicate and amplify messages through their networks. These networks can also help to identify new areas of work

The value placed on impact generation by senior research staff affected the priority given to this area of work. The CBR impact case study noted that there was a dedication at the highest level within the Centre to the application of their research results. Impact generation was greatly enhanced by a pro-active Centre Director and an Advisory Board made up of very influential and energetic non-academic members.

### ***Contextual issues***

The context in which research messages are communicated clearly has a bearing on their possible impact. A study may have met all the pre-conditions for generating impact, but if its findings happen to emerge at a time when policy makers and practitioners are not open to such ideas, the scope for influence is greatly reduced. (Policy challenges nevertheless do have an important role to play). This can work in the other direction too, of course. The Politics Grants case study identified serendipity as a determinant of impact, that is, simple good luck that research findings happened to coincide with policy initiatives. In the Future of Work programme, most of the projects were carried out in the context of changes in employment legislation, providing enhanced opportunities to influence policy. Social science researchers clearly need to maintain on-going communication and engagement with research users, and develop an awareness of current (and likely future) policy and practice debates and initiatives, in order to time their work most effectively.

### ***Research Content***

The extent to which research content 'fits' the context in which it is disseminated will have a bearing on its capacity to generate impact. Research studies that are based on a sound understanding of policy and practice agendas have enhanced prospects of influencing those agendas. Research content that is relevant to the prevailing policy and practice environment (including those that challenge current thinking) is more likely to have greater impact. On-going relationships between researchers and research users are the key to ensuring that research is relevant and timely.

### ***Co-Production of Knowledge***

At the time of writing, one of the impact case studies is looking at the experiences within the PACCIT Programme, where researchers collaborated with potential users on projects, facilitated by funding from the LINK Programme. This evaluation will provide a useful example of the effects of very direct user engagement. The 'co-production of knowledge' (ie the engagement with users at all stages of research from initial scoping of research through to the delivery of research results: see Knight and Pettigrew, 2007) has clear potential to enhance impact. It will be important for future impact evaluations to test this 'co-production' model further, to establish the links between such collaborative initiatives and the generation of higher impact.



## Impact Evaluation Frameworks: Lessons from the Case Studies

The case studies all provided clear examples of impacts, along with an analysis of the mechanisms through which impact had been generated and any contextual factors which may have affected these impacts. In all its case studies, the REC has emphasized the importance of grounding the methodological approaches in conceptual frameworks that take into account the nature of impact in the social sciences. Evaluators showed a marked preference for qualitative methodologies. In the light of the impacts described in Section 5 above, and the factors that affected their generation, it is clear that such an approach is necessary to capture the complexities involved.

A qualitative approach to impact assessment based on robust conceptual models allows for an evaluation of impact processes and contexts. Any specific impacts identified can then be assessed against this background. The use of multiple methods enables the triangulation of findings and enhanced confidence in the results. Mixed methods can include document analysis, surveys and interviews with researchers and users. In-depth case studies of specific impacts can convey the complexities of the relationship between research and policy/practice. Web searches were used by some of the evaluators, analysing the profile of a researcher in 'grey' literature as a proxy indicator of impact; while these on their own are unlikely to give any clear understanding of research impact, they will serve as another means of triangulating data, adding extra insights to a qualitative understanding.

Models that anticipate the communication flows between researchers and potential users can help to provide a framework for analysis. Linear models, such as the payback method can be useful where there are obvious links between research outputs and impacts that follow a clearly identifiable pathway. However, such models are reliant on a coherent "trail of evidence", which is rarely present in social science research. As discussed above, the nature of social science research makes it almost impossible to attribute impacts directly to research outputs.

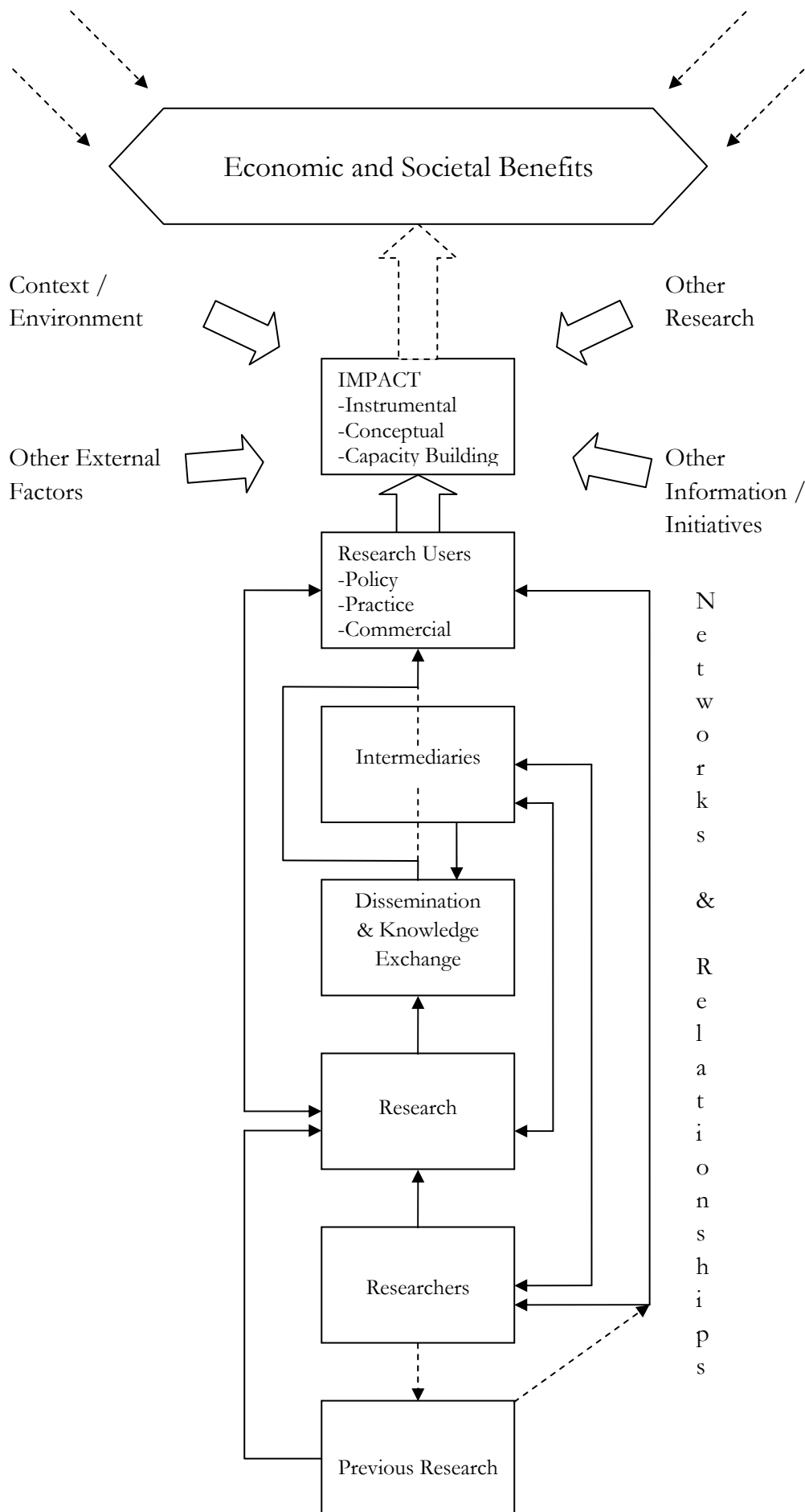
A more useful model will identify flows of information, contexts and impact processes. As discussed above, there are certain key factors that are vital for impact generation. It is worth repeating these factors here, for clarity:

- Established relationships and networks with user communities
- Involvement of research users at all stages of the research
- Well-planned user-engagement and knowledge exchange strategies
- Portfolios of research activity that build reputations with research users
- Good infrastructure and management support
- Where appropriate, the involvement of intermediaries and knowledge brokers as translators, amplifiers, network providers

Investigating the extent to which these factors are present is useful for a number of reasons. Firstly, their existence indicates the likelihood that impact has been generated, even if it cannot be identified in specific terms. Thus they serve as proxy indicators of impact. Where impact can be identified, an analysis of these factors can also help us to understand the nature of the research influence. Furthermore, evidence of successful impact processes can contribute to guidance to other researchers from the outset.

Based on the evidence gathered from the case studies, the ESRC is developing a conceptual framework that will inform future evaluations. The emerging model is included below, and will be refined as issues become clearer.

# Draft Model: Impact Framework



## Next Steps: Economic Impact Evaluation

The REC is now extending its portfolio to include economic impact evaluation. This is a challenging task because of the absence in most cases of recognisable markets for social science outputs, and the widely acknowledged difficulties associated with attribution and time-lags. These issues were the subject of a scoping report prepared for the Council in 2007 by Frontier Economics Ltd and published on the ESRC's web site. A key feature of the REC's approach is that economic evaluations are only relevant in certain circumstances and should be applied in the context of broader qualitative assessments that capture the full range and context of research impact. It is vital to recognise that the economic impact of social science research includes both direct contributions to economic performance and wider social benefits such as improved public policy and quality of life.

Following the scoping study, the REC commissioned Frontier economics to undertake a trial of the methods proposed. The trial took the form of a study of impact at two of the ESRC's Research Centres. The trial aimed to:

- Identify and describe the ways in which the Centres have achieved economic impacts through research, dissemination, networking, and related activities;
- Apply appropriate techniques to calculate values for the economic impact of selected aspects of the Centres' activities
- Present the results of the economic assessment within a broader analysis of the Centres' policy and practice impacts
- Reflect on the results and identify lessons for future economic evaluations of other major ESRC investments.

The evaluation covered selected areas of research at the following ESRC Centres:

- **The Centre for Economic Performance (CEP)** was established by the ESRC at the London School of Economics in 1990. CEP is directed by Professor John van Reenan. Its main objective is to study the determinants of economic performance at the level of the company, the nation and the global economy, by focusing on the major links between globalisation, technology and institutions (particularly the educational system and the labour market) and their impact on productivity, inequality, employment, stability and wellbeing.
- **The Centre for Skills, Knowledge and Organisational Performance (SKOPE)** was established in October 1998 under the direction of Professor Ken Mayhew. It is based jointly at the universities of Oxford and Cardiff. The Centre's objective is to examine the links between the acquisition and use of skills and knowledge, and their contribution to organisational and economic performance.

It is important to note that the trial was primarily a methodological study and did not comprise a full evaluation of impact at either of the two centres.

The REC is currently considering the trial results. They indicate that there is some scope to value some research outputs, and to generate estimates of impact at that level. Both Centres had strong impacts on national policy and, where national benchmarks of those policies were available, it was possible to estimate values for those contributions. In particular, the Centre for Economic Performance made an enormous contribution to the

introduction and development of the National Minimum Wage. Frontier estimated that, even assuming that CEP was responsible for only a very small proportion, say 2%, of the national impact of the policy, the value of their contribution would be £24 Million.

Against these positive results, the trial pointed to the importance of benchmarking the economic value of ESRC research impact against monetary estimates of the impact of the policy or commercial interventions to which it has contributed. This recommendation might restrict the range of valuation work that the Committee is able to undertake. However, the REC is now planning to explore further the use of valuation techniques through a “tracking backwards” approach. This will take as a starting point existing benchmarking data from national policy evaluations and attempt: (i) to identify through qualitative analysis the social science, and specifically ESRC-funded, research contributions to those interventions, and (ii) to estimate quantitative values for the research contributions based on the relative importance of the research impact.

## Conclusions

The ESRC’s Research Evaluation Committee has made substantial progress towards its main aims:

- to identify and analyse evidence of research impact on policy and practice
- to understand how impact is generated, and help the ESRC to improve its performance in this area
- to develop impact evaluation methods

Over the past three years we have:

- Conducted case studies in a range of research settings using different methods
- Captured evidence of important impacts on policy and practice
- Identified and analysed the key drivers of impact and how it is achieved
- Developed a conceptual, non-linear, impact framework to underpin evaluation
- Established a robust methodology employing qualitative and some quantitative techniques

The Council is using the results of the REC’s work to develop its policies for assessing and managing research in ways that will maximise the potential policy and practice impacts. The evaluation evidence demonstrates the ESRC’s major contribution to economic and social well-being in the United Kingdom and the Committee is now developing new approaches to quantifying that impact.

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