FULL REPORT OF RESEARCH ACTIVITIES AND RESULTS

Knowledge Transfer in Higher Education in Scotland
(ESRC KT project: RES-000-22-0747)

1. Background

The idea of the Knowledge Economy has considerable implications for universities in general and research in particular. Knowledge has particular significance in the context of contemporary globalisation. On the one hand, knowledge is privileged as a critical resource within late capitalism, a resource that must be harnessed to underpin profitability. On the other hand, the lived experience of globalisation has contributed to changing knowledge, so that traditional relations between 'research' and 'application' are questioned and alternative processes of meaning-making are sought. New knowledge is activated and transferred in situations that are not fully regulated or defined through routine processes, where creative problem-solving is encouraged. It is optimised through co-production of new knowledge which can be implemented in action. Creative thinking, innovation and problem-solving are valued over and above the consolidation of static knowledge stocks. Yet this new production of knowledge, so valuable in economic contexts, presents serious challenges to the traditional organisation and practice of research.

If, as Castells[1] (1996:17) argues, the distinctive feature of contemporary global economic development is 'the action of knowledge on itself as the main source of productivity' then, in the context of research, knowledge is *internal* to (ie part of), rather than *external* to and distinct from, the economic process. Knowledge production is brought into close relationship with economic policy, and universities and their research are significant players in this policy frame. The centrality of research to the knowledge economy helps to explain the evidence of enhanced research steering practices across different national settings, including the UK. The drive to a knowledge economy/society has produced a range of policy pressures on HE in the UK, including those concerned with improving knowledge mediation or transfer (KT). Ironically, there may be some tension between the policy imperatives to economise or valorise research knowledge, and the optimum conditions for new knowledge production and transfer. Furthermore, knowledge economy policies have prioritised science and technology, and sidelined other forms of knowledge that are not so obviously translatable into economic returns. Yet there are important public 'goods' produced in research outside the techno-economic paradigm, and research-based knowledge about the new production of knowledge is also to be found in these spaces.

These possible tensions and contradictions inspired this research, and Knowledge Transfer (KT) provided the focus for exploration of these issues. KT has considerable implications for research, and raises wide-ranging questions about the production and use of research knowledge, including questions about how research knowledge is constructed, how it is understood, who benefits from such transfer, and for what purposes. This research explores some of these larger questions through a focus on KT activity in non-commercial areas, where the transfer of knowledge is promoted for civic or social purposes. Scotland is a

[1] Castells, M (1996) The Rise of the Network Society Oxford, Blackwells

particularly appropriate location for this enquiry because policy in Scotland has supported the use of KT funds to enable the transfer of knowledge from academic research in non-commercial fields for social justice ends, so that there is policy endorsement of KT into the public sector, in health, education and from cultural institutions. However KT is only part of the policy steering framework within which HE operates; there are competing pressures on universities and university departments, notably the RAE, which may consolidate the 'static knowledge stocks' referred to above.

This research draws on a range of relevant intellectual resources, including sociology of education, sociology of knowledge and education policy studies, to explore the ways in which researchers understand and respond to KT, with specific attention to the fields of Health, Education and Technology**.**

2. Research Objectives

The aims and objectives of the research, as set out in section 18 of the application form, are as follows (the parts of Section 4 below in which these aims are addressed are noted below, along with relevant outputs, which are listed in full in Appendix 1):

(a) to map and categorise knowledge transfer activity in the HE sector in Scotland (4.1: WP 1: Ozga, J and Jones, R (2006); Jones R [forthcoming 2006])

(b) to map and categorise institutional provision to support KT, across the HE sector in Scotland (4.2: WP 1)

(c) to find out how academic cultures in Health, Education and Technology understand and respond to KT: (4.3 WP 5: Ozga, J (2007, forthcoming); Byrne D and Ozga J [in preparation])

(d) to identify obstacles to and enablers of successful KT in these sectors in HE in Scotland (4.4, WP 4, WP5 Byrne, D and Ozga, J [in preparation])

3. Methods

Overview

The empirical investigation combined quantitative and qualitative methods, in three overlapping stages:

Stage 1: explored the policy context of KT, including the national framing of KT and research policy in post-devolution Scotland, and the institutional policy that shaped the context in which researchers work;

Stage 2: explored research cultures, processes and responses to policy in the research community working in Health, Education and Technology; with specific attention to KT and KT-related issues;

Stage 3: was an in-depth investigation of the knowledge transfer practices of three applied research centres in contrasting institutional settings.

Policy Text Analysis, Interviews

Stage 1 combined **Policy Text Analysis** of key KT texts (national and institutional) with a survey **(Survey 1**) which gathered data on KT support mechanisms in 18 of the 20 Scottish HEIs. The policy text analysis provided background material for interviews carried out with key informants (10) from the Scottish Parliament, Scottish Executive, SHEFC and Universities. The policy text analysis included consideration of 20 key policy texts produced in Scotland (by the Scottish Executive, the Scottish Higher Education Funding Council, and the Scottish Parliament) between 1999-2004, along with 5 relevant texts from England, and 1 from the OECD. This review allowed us to identify (a) key elements of policy discourse in Scotland, (b) differences between different policy actors, and (c) relevant contextual background and lines of enquiry for the interviews. In addition, we undertook a review of information about KT activity from university websites, before preparing and delivering Survey 1, in order to gain information about levels and types of KT activity, and to identify KT managers or other personnel who could respond to the Survey. The website material was read discursively, that is for its projection of a particular institutional narrative of KT engagement. Appropriate contacts were identified (by telephone or web search) in 18 of Scotland's 20 HEIs. Two institutions failed to identify a KT contact, despite repeated requests. Completed surveys were returned from all 18 institutions. Some institutions (6) did not complete all sections of the survey, as they did not want to provide information about the use of KT funding. Information about KT processes and support mechanisms is regarded as commercially sensitive, even when guarantees of confidentiality had been given. The survey provided information about (a) institutional arrangements for supporting KT (b) types of KT activity supported in HEIs (c) how HEIs funded their KT activity.

Survey of Researchers

Stage 2 of the research developed from the analysis in **Stage 1**, and consisted of the design and delivery of an electronic survey of researchers in Education, Technology and Health in a representative sample of Scottish HEIs, including pre and post-1992 institutions with a range of knowledge transfer strategies, and analysis of these data. As well as drawing on Stage 1, Survey 2 was also shaped by the resources drawn from the growing literature on the nature of knowledge, and on knowledge production for the knowledge economy/society. The key ideas here related to changes in the role and nature of knowledge (for example in the shift from mode 1 to mode 2 knowledge in a new context of reflexivity, in which knowledge, policy and practice and associated repertoires of expertise and scientific procedure are understood as themselves subject to scrutiny and interrogation. We designed questions that explored researchers' views of knowledge production, to see if they were influenced by these ideas, which have obvious relevance for KT, especially civic or social KT. Internal CES and UoEs seminars were useful in testing our proposed design. The survey questions explored disciplinary formation and shaping of research, and its effects on researchers' agendas and purposes. It aimed to assess the impacts of external and internal research drivers on research, with the assumption that these different factors would have consequences for attitudes to dissemination/transfer. The six-page survey contained 27 questions, and was divided into three main areas of enquiry: (i) personal/background details including role and status, and funding sources (ii) attitudes to, and views about research, knowledge and knowledge transfer (iii) views about the research field, its characteristics, contribution to society and policy, and

capacity for KT. There was also a 'free' section for general comments on research, dissemination and knowledge transfer.

Additional preparatory work was required to 'map' the research landscape in the selected fields of Health, Education and Technology in the HEIs in Scotland. A large data base was constructed drawn from 14 institutions whose websites revealed research activity in the areas of Health, Education and Technology. These were classified by type as 'Ancient', ie of 14th-16th century origin (4 institutions) 'Old', ie of 18th-19th century origin, and roots in science and technology, (4 institutions) and 'New' ie post-1992 institutions (6). There were 127 research centres containing 1,200 academics distributed across these institutions. Given the time and resources available, we decided to focus on 'applied' research. We constructed a sample of 600 researchers in Education, Health and Technology, evenly distributed across types of institution, and all working in Research Centres or Units that appeared to be engaged in research that explicitly sought to improve policy, practice, or public outcomes so that considerations of audience and wider application were likely to be present. We targeted this large population because we (correctly) anticipated low response rates. The survey was emailed to all 600 researchers, and follow-up emails and telephone calls elicited a response from 83, of whom 41 were in Education, 21 in technology and 21 in Health. The low response rate (13%) is indicative of the low levels of recognition of KT among researchers in general; responses were highest from researchers in senior positions (47% of respondents), those with more than ten years experience (60%) and on permanent contracts (64%). Thus the results are not representative of the views of researchers in general, but are biased towards those of established research leaders. It may be that the low response rates from less established researchers indicates a relationship between job insecurity, the need to prioritise applications and project work, and the lack of engagement in or involvement with KT.

The survey data were coded and analysed using SPSS, and produced descriptive statistics on (a) Background Information about nature of post, sources of funding, preferred funding sources, distribution of time on research and research-related tasks (b) personal views on research, motivations, degree of autonomy, pressures on research agendas, nature of knowledge produced, processes of knowledge production and dissemination (c) nature of the Field (ie Health, Education Technology): degree of tacit or coded knowledge, nature of disciplinary boundaries, quality assessment, contribution of research, audience, dissemination practices, barriers and attitudes to KT/use of KT funds.

Case Studies of Research Centres

Stage 3 developed from the analysis of stages 1 and 2. Drawing on that analysis, three case study sites were purposively selected, in Research Centres in the fields of Education, Health and Technology. Detailed, in depth interviews, which were recorded and transcribed, were carried out with a total of 30 researchers, representing different ages and stages in research careers. The interviews followed a common schedule and focused on the significance of KT to the Centre, understanding of KT and its impact on research, forms of KT carried out by the Centre, audiences for KT activity, impacts of KT on policy/practice/public. In addition to the interviews, the work of each of the Centres was also observed over a one week period.

The identification of three Research Centres for case study work proved quite difficult, in part because of the changed timing of this stage of the research, because of the PIs extended

sick leave which led to postponement of the start date from August to October. This delay meant that we were seeking extended case study work in Summer 2005, when many researchers were on leave. The unfunded extension until December 2005 enabled the completion of the case study work, and the analysis and synthesis of all the data. Some Centres were unable to co-operate with us because of lack of time. Gaining access was especially difficult in Health Research.

4. Results

4.1 KT activity in Scotland

There are different approaches to, and understandings of KT in the policy, institutional and research communities in Scotland. There are further differences within the policy community. Institutional KT managers have a fairly uniform picture of KT, and that is strongly focused on commercialisation. Researchers share this view of KT, and, for the most part, do not see it as a priority, though they are actively engaged in dissemination. These differences in orientation and understanding may be inhibiting the development of significant KT activity outside the traditional commercialisation fields, especially where researchers see institutional plans for KT development as irrelevant. There is little evidence that researchers see KT as a way of operationalising their stated concern to do policy-relevant research.

The picture of KT activity that emerges from this research is quite complex and categorisation is difficult. Complexity is present at the policy level and at the institutional level, and is also revealed in the data gathered from research centres and individual researchers. At the policy level, while KT was largely understood during the 1980s and much of the 1990s as commercialisation, there is evidence that post-devolution Scotland, though following a global script in its constant preoccupation with creating a 'Knowledge Society' and building 'Smart, Successful Scotland' (SHEFC 2001), is inflecting this script in particular ways. The Scottish Executive supports KT for the 'wider economic, educational, social, healthcare and cultural benefit of society'. (SHEFC 2001:4) Analysis of the policy texts and policy interview data suggests appreciation of the possibilities of KT in the specific context of Scotland, where knowledge is identified as a major resource: 'the universities allow us to punch way above our weight' (Scottish Enterprise Respondent 1). In the context of the decline of manufacturing and heavy industry, 'knowledge is a key competitive weapon,' (SHEFC/Scottish Enterprise 2002). Policy-makers, whatever their location, connect the specific context of Scotland to the inclusion of cultural and social KT, along with KT as a contributor to public policy, in their overall assessment of KT and its role in the creation of a KE. This complex interlinking of economic, cultural and social references provides a frame for their discussion of emergent KT policy. Within that generally broad approach to KT there are differences of emphasis: Scottish Enterprise sees KT as part of the internationalisation and globalisation of Scottish business, MSPs see KT as not exclusively about commercialisation or social and cultural policy, but cutting 'right across the board'; the Funding Council identifies policy-related KT as part of universities' contribution to social and civic well-being, but, as we have seen, KT managers prioritise the commercialisation agenda.

A further important finding relating to the policy context is that KT from research is seen as a resource for governing in the SHEFC and Scottish Executive policy texts and interviews: there is a recognised need for 'evidence on the long-term priorities for Scotland; to discuss current work to forecast what will be important issues for Scotland in 20 years' time; and consider how Scottish HEIs can help shape and contribute towards this agenda.'(KTP1 22/04/05). The higher education sector is understood not just as a source of specific expertise, but as being able to 'influence and shape national policy while it is being formulated' (Scottish Executive Respondent 2). In other words, a new relation between governing and research-based expertise is envisioned: expertise moves beyond the task of *policy informing*, and becomes *policy forming* in a more complex form of governing.

The motivations for research recorded by respondents to Survey 2, or gained from Research Centre interviews reflect strong policy orientations: researchers in Education (87%) and Health (60%) are motivated primarily by the wish 'to inform policy development and implementation', (in contrast to Technology, where only 29% identified this as a significant motivation). Across the three areas, researchers also confirm that research is more institutionally and policy-driven in recent years (37%), while only 23% say that it is more intellectually driven (technology researchers select this more frequently, at 31%). There is little evidence of connection to the possibilities of *policy forming* that new forms of knowledge production might sustain. However the Technology Research Centre case study did provide evidence of a highly contextualised and strategic appreciation of opportunities offered by current developments, including opportunities for public education and policy impact.

4.2 Institutional support for KT

Evidence gathered from KT managers in institutions (through Survey 1) and from the KT content on the web suggests that, at that level, commercialisation possibilities continue to shape KT engagement by HEIs. There is an almost universal lack of attention to cultural, social or civic KT in institutional planning or documentation, and in the survey returns from KT managers, only 2 HEIs highlighted their public sector KT work. It is evident that there has been a considerable growth of KT activity in Higher Education in Scotland recently, with KT playing a significant role in institutional strategic planning, and with KT activity supported by dedicated KT officers and offices, most of whom have business or commercial backgrounds. Three of the more established institutions reported cultural and social KT activities alongside more commercial KT work. Areas with the greatest involvement in KT are biochemistry, biotechnology, engineering, medicine and pharmacology, ICTs and software development. Of course websites are not themselves transferring knowledge, but rather seeking to publicise opportunities for commercial development. As a consequence they may underreport KT that has cultural, social or civic purposes, but the other data sources suggest that individual researchers had little knowledge of KT or KT funding opportunities, and most reported that they had not used KT funds for dissemination/transfer purposes. There seems to be something of a gap between the researchers and the institutional support mechanisms. Researchers understood and experienced messages about KT from the institution as commercialisation, while KT managers felt that researchers were somewhat uninformed about KT, or placed it last in a list of priorities that ran from research, through teaching, to KT as a 'poor third'.

4.3 KT and Academic Cultures in Health, Education and Technology

Although there is little evidence of knowledge about KT funding or institutional policy for KT support, the vast majority of the researchers responding to survey 2 are active disseminators, and the majority are using multiple modes of dissemination, tailored for different audiences, and recognise that dissemination has changed, to embrace workshops and conferences for user groups. A small minority indicated that dissemination was now characterised by engagement of all those involved and expected to benefit in planning, conducting, evaluating and reporting research findings. Dissemination is high on researchers' agendas, but it seems that KT is assumed to be a different kind of activity. This is partly a question of terminology, but probably also reflects the gap between research cultures and institutional, entrepreneurial KT cultures. In fact researchers in this study are strongly committed to, and shaped by, public and policy concerns, but this work is not being recorded or recognised as KT.

The relationship between forms of knowledge and capacity to transfer is more difficult to read from the data. There were difficulties in analysing the data, as the questions addressing the nature of knowledge in the field were considered by some respondents to be difficult to answer, and we have missing data (which might also suggest that these are, indeed, areas of weak coding or boundaries). Across the different fields, there is an emphasis on pragmatic research methods, on externally-generated criteria of quality and on practice and policy-oriented outcomes. Researchers do research 'to produce knowledge that can make a difference to the wider community' (63%) and to 'make a contribution to advancing knowledge in my field' (57%). Perhaps unsurprisingly in these applied fields only 13% do research to enable theoretical developments or methodological developments (8%). Researchers across the fields report a degree of insecurity of status, along with considerable pressure on funding and on time. It is possible that the combination of material conditions of work, and weak disciplinary framing, reduce capacity for reflexivity and thus for consolidating knowledge, and this may affect transfer (including transfer in its traditional RAE-assessed forms). However it could also be argued that these characteristics support new knowledge production-in action, and are conducive to transfer. More in-depth work is needed on this topic.

4.4 Obstacles to and Enablers of KT

The key obstacle to KT identified by this research is the RAE. It features in almost every return, and in the interviews with Research Centre members. KT managers also saw the RAE as an inhibitor of engagement with KT. This comment stands for many:

> *'It's really not about what's most effective – it is all about what counts for RAE – basically, if it doesn't count on RAE returnability, I don't have time to do it. This is ruthless, but that's what the RAE is all about.'*

There is a significant exception to this result, and that comes from the case study of the Technology Research Centre. There the RAE and the forms of peer review that it recognises are seen as productive and useful marks of recognition for a curiosity-driven research agenda that has ensured international recognition for the pioneering work of the Centre. KT is also well-represented in the Centre's activities, embracing both spin out/commercialisation

developments and public good activities. This particular Centre has enabled a synergy between high stakes research and KT, and attributes its success in this to the kinds of people it attracts-people who work across disciplines and therefore have an interest in, and capacity for, making connections and problem-solving-in other words for the production of 'new' knowledge, but meeting traditional quality criteria.

Researchers elsewhere reported lack of time and resources as barriers to KT, and lack of recognition of KT in promotion procedures. One researcher identified 'the inability of some researchers to tailor their findings and recommendations for particular audiences'.

Implications

This research suggests that, if KT in the social, civic and public policy fields is to be encouraged, in line with SHEFC and Scottish Executive policy, then we need to find ways of removing obstacles presented by (a) the dominance of the RAE (b) the institutional focus on commercialisation and (c) the lack of support for researchers to encourage and sustain active dissemination and 'outreach' activity.

5. Activities

The project has engaged in many dissemination activities as listed below:

12th August 2004, CES Edinburgh

Jenny Ozga presented an internal seminar to CES researchers: 'What is KT and why is it important?'

14th January 2005

Jenny Ozga accepted an invitation to make a keynote presentation to a Scottish Executive Education Department Schools Research Conference designed to improve transfer from research to education policy and practice. Her paper was on 'Knowledge Transfer: Changing the Relationships between Research, Policy and Practice'

9th March 2005

Jenny Ozga and Rob Jones presented a paper to the University of Edinburgh School of Social Policy and Politics seminar series 'Policy Work in Progress' on 'Knowledge Transfer Policy'. This presentation provided an opportunity to discuss the approach to policy (especially analysis of policy discourse) in an informed forum.

10th May 2005

Jenny Ozga was asked to present a paper on KT to the Research Unit for Social and Comparative Studies in Education, Helsinki University. The presentation was further discussed in a seminar on May 11th with senior University administrators and academics, who were interested in developing this area of activity in Helsinki University.

14th November 2005

Jenny Ozga was asked to make a presentation to a seminar on 'Children's Research in Partnership' organised by the Scottish Executive Children and Young People Analytical Services Unit, with the purpose of bringing together SEED and the research community to discuss ways of improving aspects of research commissioning and management. Her presentation discussed aspects of successful knowledge transfer.

14th December 2005

Jenny Ozga and Delma Byrne (CES) presented a paper to the Society for Research in Higher Education (SRHE) annual conference at the University of Edinburgh. The paper was called 'Research into Policy and Practice' and summarised the main findings of Survey 2.

March-May 2005

In addition to these activities, as a consequence of her research work in this area, Jenny Ozga was invited to participate in meetings of a SHEFC/SEED Knowledge Transfer Seminar on KT and Public Policy. Participants in this seminar included the permanent Secretary, the Chief Researcher, Senior Policy officers from SEED and SHEFC, and senior HE managers and academics.

July 2006

Following interest in the SRHE presentation, Jenny Ozga has been invited to present to the ESRC seminar series 'Geographies of Knowledge/Geometries of power: Global higher education in the 21st century, organised by Debbie Epstein with Phil Brown Rebecca Boden and Rosemary Deem. Her paper is on Knowledge Transfer and Higher Education.

September 2006

Delma Byrne and Jenny Ozga are presenting a paper in a symposium organised by Professor Terri Seddon, Monash University, and Professor Lyn Yates, University of Melbourne, at the European Conference on Educational Research (ECER) in Geneva. The symposium is on 'the Social Organisation of Educational research: a cross-national conversation' and their paper contributes by exploring relationships with 'users' of research drawing on data from survey 2 of this project.

6. Outputs

The working papers from the project (and which are referred to throughout this report) are available on the project website (www.ed.ac.uk/ces/knowledgetransfer/htm)

Some have been revised and accepted for publication in journals, and a book proposal from the project is currently in preparation. The current list of outputs is available at Appendix 1. A CES *Briefing* from the project was published in April 2004, and a further *Briefing* is planned for later this year.

Other dissemination activities are listed in Section 5 of this report.

7. Impacts

There has been significant and continuing interest in the project from other academics (as evidenced by the invitation to participate in both the ESRC seminar series and the ECER symposium), and from the policy community, as evidenced by invitations to the Knowledge Transfer seminars detailed above.

A summary of relevant findings from this research has been requested to help inform the UK Social Research Association's evidence to the House of Commons Science and Technology Committee on 29th March.

In addition, though not a direct impact, the work involved in this project made a significant contribution to the shaping of the recently published World Yearbook on Education: J. Ozga, T.Seddon and T.S.Popkewitz (eds) (2006) **Research and Policy in Education: Steering the Knowledge-based Economy** Routledge, London and New York

8. Future Research Priorities

It is important to note here that the project reported on was comparatively modest, and could not explore in depth many of the promising issues that were raised in the enquiry. There are, thus, a very large number of possible future directions, for example:

Knowledge Economy issues

There is already work in progress to explore some of the issues that need further development: the ESRC initiative on research into the impact of HEIs on regional economies connects to the larger KE/KS agenda that produced this research. The impact of the KE on universities in small/peripheral countries and their responses to the internationalisation of research is a topic that needs attention, as is the contribution of the cultural sector and of social science to public well-being and civic good.

Knowledge and Policy

A major topic that emerged very strongly in this research is that of the relationship between research-based knowledge and policy. Discussions of these issues in Network 23 (Policy and Politics) of ECER led to the development of a successful FP6 IP proposal on **Knowledge and Policy.** This is a 5 year project, co-ordinated from the University of Louvain, involving partners from France, Belgium, the UK (CES and the School of Social and Political Studies, the University of Edinburgh), Poland, Hungary, Portugal, and Norway. It seeks to map the knowledge available to policy makers in the fields of Health and Education, and to trace the relationships between knowledge production and policy.

Disciplinary Formations of Research and Knowledge Production

Another priority area is further research on research cultures and processes, in different disciplines and forms of spatial organisation, that links work on the material conditions of production of knowledge, with changes in knowledge and policy pressures on research. The lack of research on research is quite striking.

Appendix 1: Project Publications

Journal Articles

Ozga, J and Jones, R (2006) 'Travelling and Embedded Policy: the case of knowledge transfer' *Journal of Education Policy* 21(1) 1-19

Jones, R (forthcoming, 2006) 'New Terms of Research and Knowledge Production in Scotland – the discourse of knowledge transfer' (Submitted to *Discourse* autumn 2005, returned for revision, resubmission date April 2006)

Ozga, J (forthcoming 2007) 'Knowledge transfer, Research and Policy' invited submission to *Critical Studies in Education* in March 2006, subject to normal refereeing procedures)

Working Papers

WP 1: Jones, R. 'Review of Knowledge Transfer Policy in Scotland'

WP 2: Jones, R. 'Knowledge Transfer in the Context of Scottish Higher Education' (revised and submitted to *Discourse*)

WP 3: Ozga, J. and Jones, R. 'Travelling and Embedded Policy' (published by *Journal of Education Policy*)

WP 4: Ozga, J. 'The Implications of KT Policy for Higher Education'

WP 5: Ozga, J. and Byrne, D. 'Knowledge Transfer: researchers' responses to policy'

In Preparation

Byrne, D and Ozga, J 'Researchers and KT: issues of translation' (drawing on WP5, for submission to *Higher Education Quarterly)*

Ozga, J (2007) 'Knowledge Transfer and Transformation' invited contribution to Special issue of *Cambridge Journal of Education* on Knowledge Transformation and Impact, subject to normal refereeing procedures

Book Proposal: **Knowledge Transfer, Research and Policy**