

## Knowledge transfer and transformation: moving knowledge from research to policy

Jenny Ozga\*

### Abstract

This paper focuses on *Knowledge Transfer* (KT) as a policy initiative. Knowledge transfer/translation has developed from policy concerns about the gap between research-based knowledge trapped in disciplinary silos and the growing information and knowledge needs of various users. In addition KT maps closely against knowledge economy assumptions as effective KT is believed to provide competitive system advantage. In this context, what is distinctive in contemporary global economic development is 'the action of knowledge on itself as the main source of productivity'. But the production of such knowledge does not take place in a vacuum. The challenge, then, for governments driving towards knowledge-based economies is not just to promote active knowing as an economic resource but to seek to manage and contain the knowledge that generates as a collective community resource, within acceptable limits. It is the difficulties that this simultaneous need for freedom and control presents that form the core of this paper.

**Keywords:** Knowledge. Policy. Economy.

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\* PhD from The Open University (UK). Professor of the Sociology of Education. The University of Oxford Department of Education.

## Introduction

This paper considers *Knowledge Transfer* (KT), a policy initiative that has grown in importance in the UK and more widely, as policy makers attempt to extract more value from research and transfer or translate that knowledge into support for evidence-based policy-making in the context of the Knowledge Economy (KE) and Knowledge Society (KS). My argument is that in order to appreciate fully the different dimensions of KT, and the tensions within it, some contextualisation in policy terms is necessary. In this paper, the contextualisation is in the UK, and more specifically, in the context of policy in Scotland. The policy discourse within which KT is located, and the various purposes it is designed to serve, shape its reception by the research community. To develop this argument, I look the origins of KT and at its impacts on research and health by drawing on a recent research project<sup>1</sup> on KT in higher education in Scotland.

Knowledge transfer or knowledge translation originally developed from policy concerns in the UK about the apparent gap between research-based knowledge, which is seen by policy-makers as being trapped in disciplinary silos, and the growing information and knowledge needs of various users, including service users who are increasingly re-defined as 'consumers', as well as policy makers themselves (OZGA; JONES, 2006). Policy interest in KT in the UK and beyond was and remains closely linked to the growing importance of the knowledge economy in shaping policy for education in general and for research in particular. Effective KT is important for policy-makers in a situation where knowledge is understood to be the critical resource within late capitalism, a resource that must be harnessed to underpin profitability. In a situation of financial stringency, KT grows in importance as a direct contributor to the knowledge economy.

Yet knowledge itself has become more fluid and unstable, as the lived experience of globalisation has contributed to changing assumptions about the nature of this knowledge. Traditional linear relations between 'research' and 'application' are being questioned and alternative processes of meaning-making are sought (APPADURAI, 1996; OZGA; POPKEWITZ; SEDDON, 2006). Such processes foreground the extent to which new knowledge is activated and transferred in situations that are not fully regulated or defined through routine processes, and where creative problem-

solving is encouraged. Knowledge production is said to be optimised through processes of co-production and development in action, as seen in the well-known debates over Mode 1 and Mode 2<sup>2</sup> knowledge, to which I return later in the paper. In these new knowledge production forms and processes, creative thinking, innovation and problem-solving are valued over and above the consolidation of static knowledge stocks and their linear transfer into 'outputs' (STEHR, 2002). Yet this new production of knowledge, so apparently valuable in economic contexts, is not well-served by limited policy and institutional designs for KT, and there may indeed be tension between policy imperatives to economise or valorise research knowledge, and optimum conditions for new knowledge production. Each of these developments, the increased steering of research by governments anxious to extract maximum value from knowledge production and the emergence of new forms of knowledge production, present substantial challenges to the traditional organisation and practice of research.

### Research in the knowledge economy

If, as Castells (1996, p. 17) argues, the distinctive feature of contemporary global economic development is 'the action of knowledge on itself as the main source of productivity', then knowledge is unequivocally and primarily part of the economic process. Policy for knowledge production thus becomes closely aligned with economic policy, and universities and their research are important objects of policy development. Growth is highly dependent on maximising the outputs of knowledge workers and the productivity of knowledge resources (KENWAY; BULLEN; ROBB, 2004; PETERS, 2001). In the specific field of education, policy is increasingly preoccupied with attempts to build the new KE. This is an agenda that shapes actions across different regions and nations of the globe and that is driven by powerful transnational organisations like the EU, the OECD and the World Bank who redefine education as the obtaining of credentials by individuals and nations that permit them to participate in the new KE. Education and Training dominate policy agendas focussed on upskilling new knowledge workers and developing research and thus the knowledge that will secure success (ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, 2003). Research funding organisation and quality

assessment are all affected by these developments. Kenway, Bullen and Robb (2004) illustrate the trend towards prioritising techno-scientific research and its modes of operation and organisation, so that research is increasingly concentrated in designated centres of excellence, organised in teams and characterised by differences in conditions of work and employment rights. Traditional intellectual autonomy is challenged by the need to meet industry needs and, as a consequence, science is becoming 'less a public good than a tradable commodity'. The World Bank publication 'Building Knowledge Economies' illustrates the new emphasis on the translation of ideas into commodities:

Continuous, market-driven innovation is the key to competitiveness, and thus to economic growth, in the knowledge economy. This requires not only a strong science and technology base, but, just as importantly, the capacity to link fundamental and applied research, to convert the results of that research to new products, services processes or materials and to bring these innovations quickly to market. (WORLD BANK, 2002, p. 21)

The centrality of research to the knowledge economy helps to explain enhanced research steering-policy agendas (of which knowledge transfer is a part) across different national settings including the UK. Research steering processes emerge at the national level that promote particular methodologies, particular forms of quality and recognition measurement (for example various forms of metrics, benchmarking and citation indices), and particular forms of research management (RANIS; WALTERS, 2004). The UK's research assessment exercise has been exported widely (OZGA; POPKEWITZ; SEDDON, 2006). Funding bodies define the way reports must be submitted, demand retention of intellectual property rights over data, and require interaction with specified users. These trends reflect a perspective on research that prioritises its 'use-value' and its problem-solving potential for policy-makers, as key indicators of quality. Thus, knowledge transfer policy is framed by sets of assumptions about the knowledge economy, which are translated into research steering policies, and consequently reflect strong pressure to maximise outputs and enhance commercial returns, which may conflict with other, less economically-driven

forms of 'translation' of knowledge into use, and for use by non-commercial actors.

However, some of the risks of privileging the KE are recognised. If, as Peters argues, possession and exchange of knowledge define distinction and allocate status in the new KE, then those without this commodity (or who possess unvalued, untradeable knowledge) risk alienation and material disadvantage. At the level of policy discourse concerning the Knowledge Society, these risks are to be managed through improved communication of knowledge that enables responsible self management by citizen-consumers (CLARKE et al., 2006) and through better transfer of knowledge from universities into public and social policy (BLUNKETT, 2000; NUTLEY, 2003) in order to improve policy making and create good governance. Culture and creativity are included in these policy developments as resources that are to be transferred and traded in the attempt to manage risk, build entrepreneurship and enable social networks that can act as sites for the creation and exchange of social capital.

From this perspective, KT and its variants have a reach that extends well beyond commercialisation and 'spin out' agendas in university-based research and into alignment with moves towards evidence-based or evidence informed policy. The argument being offered here is that KT not only embodies the policy discourse of the KE, but is implicated in the solution to the problems that the KE creates for the stability and security of the KS. KT relates to evidence-informed policy-making, through its emphasis on the problem-solving potential of knowledge. The social sciences become a resource for governing, and KT policy strengthens tendencies towards the consolidation of and agreement about what constitutes 'the evidence base' for social and public policy. Just as the evidence-based 'movement' is supported by policy-makers' claims that ideological differences no longer exist, so the growth of KT increases pressure for agreement about what constitutes evidence in the social sciences, and also about how that evidence may be interpreted and translated into action. KT is linked to evidence-informed policy-making and to the growing trend (at least in research in education) towards policy-driven evaluation rather than curiosity-driven research. KT requires a focus on lessons learned from research (i.e. the identification of and agreement about what should be transferred); and KT may define practitioners as

recipients of transferred knowledge, rather than actors who mediate or generate knowledge independently.

These developments are not inevitable, nor are they as coherent as the brief review above might suggest. KT policy contains elements of the contradictions signalled at the outset of this paper. The discussion of the nature of knowledge itself – generated by changes in society and in the transmission of information – have produced, among other things, debates about the risks and benefits of developing Mode 2 knowledge production in forms and processes that combine the academy, the state and the private sector (GIBBONS et al., 1994). Mode 2 knowledge production encompasses a shift from a linear process of knowledge production and subsequent dissemination to an interactive, iterative, problem-focused, trans-disciplinary model that sits well with some aspects of KT (GIBBONS et al., 1994; NOWOTNY; SCOTT; GIBBONS, 2001; DELANTY, 2001).

This may make research more useful to policy makers, but it may also create greater opportunities for socially-contextualised knowledge production, which breaks the hold of elite knowledge producers, and strengthens their accountability to a wider social base. Some commentators argue that the strongly contextualised production of Mode 2 knowledge offers opportunities for democratisation of knowledge production in close relationship with society and wider social movements (NOWOTNY; SCOTT; GIBBONS, 2003; LIBERATORE; FUNTOWICZ, 2003), as Mode 2 knowledge is required to be “socially robust”, that is deemed to be valid not by narrowly defined scientific communities but by wider “communities of engagement” (NOWOTNY; SCOTT; GIBBONS, 2003, p. 192). This conceptualisation of knowledge-in-action draws attention to social learning processes that recognize how knowledge moves differently within and between different social groups. Researchers engaged in such co-production of knowledge will be required to: “transcend the immediate context of application, and begin to mark out, anticipate and engage reflexively with those further entanglements, consequences and impacts that it generates.” (GIBBONS, 1999, p. 84).

There is an obvious tension between the democratising potential of knowledge production positioned somewhere beyond the political system and the market place (NOWOTNY; SCOTT; GIBBONS, 2003, p. 192), and the capacity of policy makers and other powerful actors to shape

knowledge through their influence on contextualised production and to guide and shape activity in apparently distributed, open and equitable networks of policy makers, researchers and user-group representatives. Network forms carry possibilities for collaboration, but they are vulnerable to capture by particular interests, and they may be understood as part of a general shift from government to governance. By this I mean that they offer ways of ensuring co-operation and joint resource mobilisation of those actors and interests that lie outside, or are resistant to, hierarchical control (KICKERT et al., 1997). Indeed critical analysis of the discourse used to characterise Mode 2 knowledge (for example social relevance, responsibility, reflexivity, fluidity) highlights the strong normative pressure on researchers to work with the apparent logic of democratic development, to enhance their responsiveness and usefulness and thus align the transformation of knowledge with the transformation of capitalism, creating new levels of interdependence. This interdependence is captured by Thrift's analysis of how the cultural circuit of capitalism produces knowledge about itself, becoming increasingly knowledgeable and thus moving into academic preserves (THRIFT, 2005, p. 21). Part of this process, Thrift argues, involves capital and traditional knowledge producers in the academy coming to "think more alike about thinking" (THRIFT, 2005, p. 21).

This brief discussion of the framing of KT by the KE and the KS highlights some fairly substantial tensions and contradictions in policy for research steering, and some considerable implications for research practice. In assessing these possibilities, one element that we need to know more about is the way in which KT is understood by policy-makers, institutions and researchers. The next section of the paper introduces the policy context of the research findings, which are then summarised.

## **KT policy in the context of Scotland**

The context of the research reported in here is important, in that there is a combination of historical and contemporary public attitudes to education – and to universities – in Scotland that influences the reception of KT as a global discourse and supports some indigenisation of this 'travelling' policy (JONES; ALEXIADOU, 2001; OZGA; JONES, 2006). Political devolution enacted in 1999 with the (re) creation of the Scottish parliament,

though building on administrative devolution (KEATING, 2005), changes policy relationships within the UK. The key point is that the existence of a parliament, along with traditional distinctiveness, makes difference more possible (MCCRONE, 2003). Education was a key area of policy making from the first days of the parliament, and the key developments in relation to teacher pay and conditions and tuition fees for higher education depart quite considerably from parallel policies in England (OZGA, 2005).

Although in its initial stages KT policy was largely understood across the UK during the 1980s and much of the 1990s as commercialisation, in post-devolution Scotland a stronger emphasis by comparison with policy in England appears in developing KT for the “wider economic, educational, social, healthcare and cultural benefit of society.” (SCOTTISH HIGHER EDUCATION FUNDING COUNCIL; SCOTTISH EXECUTIVE, 2001, p. 4). The project reported on here focused on KT activity in non-commercial areas, where the transfer of knowledge is apparently promoted for civic or social purposes. The research explored the ways in which researchers understand and respond to KT, with specific attention to the fields of Health, Education and Technology. The aims and objectives of the research were: (1) to map and categorise knowledge transfer activity in the HE sector in Scotland, (2) to map and categorise institutional provision to support KT, across the HE sector in Scotland, (3) to find out how academic cultures in Health, Education and Technology understand and respond to KT, and (4) to identify obstacles to and enablers of successful KT in these sectors in HE in Scotland.

The empirical investigation combined quantitative and qualitative methods, in three overlapping stages: the first stage 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; the second stage used a survey to explore research cultures, processes and responses to policy in the research communities working in applied areas of Health, Education and Technology research with specific attention to KT and KT-related issues; and the final stage was an in-depth investigation of the knowledge transfer practices of three applied research centres in contrasting institutional settings.

## Summary of main findings

Analysis of policy texts and policy interview data suggests appreciation by policy-makers of the significance 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).<sup>3</sup> In the context of the decline of manufacturing and heavy industry, “knowledge is a key competitive weapon” (SCOTTISH HIGHER EDUCATION FUNDING COUNCIL; SCOTTISH EXECUTIVE, 2001) 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 and social 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: but all policy actors see KT as connecting to social and cultural policy and to social and civic well-being, as well as to commercial purposes.

A further important finding relating to the policy context is that KT from research is seen by policy actors as a resource for *governing*: 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; and consider how Scottish HEIs can help shape and contribute towards this agenda.” (KTP1).<sup>4</sup> 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).<sup>5</sup> 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, networked form of governance.

Institutional managers and researchers themselves have narrower, more restricted understandings of KT. Institutional KT managers have a fairly uniform and rather limited vision of KT, which is particularly strongly focused on commercialisation—they express frustration with the perceived incapacity of researchers to prioritise income generation. Researchers in these fields also see KT as commercially-biased, and assume that it is an

area of specialist activity in which they have little interest or expertise. At the same time, these researchers report very high levels of engagement in dissemination. Dissemination activities are often carried out without either protected time or adequate funding – but KT is perceived as something apart. These differences in orientation and understanding may be inhibiting the development of significant KT activity outside the traditional commercialisation fields, especially where researchers either do not know about institutional plans for KT support or see them as not related to their work. There is little evidence that researchers see KT as a way of supporting their strongly-stated commitment to doing policy-relevant research.

Indeed, the motivations for doing research recorded by respondents to the survey in stage 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%).

Although there is little evidence of knowledge about KT funding or institutional policy for KT support, the vast majority of the researchers responding to the stage 2 survey 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 KT is assumed to be a different kind of activity. This is partly a question of terminology (hence perhaps the shift to ‘translation’ or ‘transformation’ in the policy discourse), 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 ways in which researchers understand the implications of changing forms of knowledge (i.e. from Mode 1 to Mode 2) for their

work 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 there is missing data. 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<sup>6</sup>-assessed forms). It seems to be the case that the debates on changing knowledge are not entering into the research cultures investigated here, nor are they generating reflexivity about research purposes and processes that might encompass ideas of 'democratisation' or networked, more representative forms of research engagement. Instead there is evidence of responsiveness from a relatively insecure group of workers to policy pressures for evidence-based research, and of increased involvement in policy-engagement and dissemination. In passing, it should be noted that an 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.*" (RESEARCHER RESPONDENT 012).<sup>7</sup>

## Conclusion

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 there is a need to find ways to remove 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. More fundamentally, the research reported here indicates an absence of engagement with contemporary debates about the nature of knowledge – including its role in the KE/KS, which suggests difficulties for the successful implementation of KT either for the policy purposes of commercialisation and governance, or for the co-construction of knowledge in a revived public sphere.

There is a need, then, for change in the attitudes, behaviours and expectations of institutional managers, policy makers and researchers in order to build longer term relationships between the different co-producers, which are socially embedded and that enable negotiation that builds trust and collaboration. Building such relationships is extremely difficult in the context of policy pressure that focuses on extracting outputs. As we have seen, policy makers are alert to the capacity of knowledge transfer to contribute to the governance. By comparison with the researchers in this study, they are more aware of the ways in which networked forms of knowledge co-production can privilege those with positional power. As Clegg and McNulty (2002) point out, each partner in a network has a distinct organisational habitus, a set of dispositions, embedded values, and practices, which dictates what counts as 'ordinary ways of working'. These ordinary ways of working are rooted in the prior networking and cultural capital which are important resources for particular partners and may deny other partners' knowledge, routines, and voice.

Realisation of the progressive possibilities in the operation of networks of knowledge co-production, though difficult, is not out of the question. Some factors that could contribute to that end are the much increased significance of education and knowledge production in policy agendas (this increases pressure, as we have seen, but it may also allow greater leverage by the knowledge producers). A further consideration is the inherent difficulty of 'managing' knowledge production, and of restricting to intended outcomes the active knowing that develops in creative, problem-solving relations that require fluidity and negotiation. Networks of support, interaction, stimulation, and development may produce and thrive on the inherent ungovernability and instability of such organisational forms (BERESFORD, 2000). Researchers working in higher education are well-placed to exploit these possibilities, if they accept the trade-off between

autonomy and value for society suggested by Jacob: “[...] in order to justify continued access to public funding, the research community must agree to surrender some of its autonomy and devote its resources to creating value for society in the first instance and value for science in the second.” (JACOB, 2003, p. 127).

In these contexts of co-production KT is redefined as learning. Good quality knowledge production is influenced by and responsive to the ability of the different actors-researchers, practitioners, policy-makers, members of voluntary groups, members of the public and young people- to re-evaluate their existing knowledge and learn from the processes in which they are engaged. The quality of learning will, in turn, be dependent on many factors, including their capacity to be open to absorbing new information and new ways of seeing, their level of preparedness for the task, their prior knowledge and their ability to assimilate new information. Understanding knowledge in action, and taking seriously the processes of learning from research as ‘translation’ (FREEMAN, 2006) make it clear that it is not sufficient to tell people about a new idea or approach. Rather transfer rests in communication, usually across cultures and communities of practice (WENGER, 1998), which must speak in meaningful ways to those who should ‘hear’.

Supporting such learning through research involves creating conditions that favour communication across disciplinary and status boundaries, which are receptive to cross-cultural differences and that enable local and global networking. Redefining research as collective learning demands considerable change from researchers, who are attempting to deal with contradictory pressures on their work. Governments driving towards knowledge-based economies are preoccupied with promoting the co-production of knowledge as an economic resource, and this impels them to confine and manage it as a tradable commodity, rather than a public good. Yet there is scope in the knowledge production processes of universities for the redefinition of KT. As Delanty puts it:

Universities can play a major role in the knowledge society if they accept what might be called the principle of transgressivity, that is the university is not the exclusive site of expertise but a site of public discourses [...] universities are transgressive cognitive

zones where the contradictions of the knowledge society are most apparent, and, as such, the potential exists for universities to become important agents of the public sphere, initiating social change rather than just responding to it (DELANTY, 2003).

## Notas

- 1 The research reported here was funded by the ESRC (RES-000-22-0747).
- 2 The key texts for discussion of Mode 1/Mode 2 knowledges are Gibbons, M. Limoges, C., Nowotny, H., Schwartzmann, S., Scott, P. and Trow, M. (1994) *The New Production of Knowledge*, London, Sage. Nowotny, H. Scott, P. and Gibbons, M. (2001) *Rethinking Science: Knowledge and the Public in an Age of Uncertainty*, Cambridge: Delanty, G. (2001) *Challenging Knowledge: the University in a Knowledge Society*, Buckingham: Open University Press): these texts explore the idea that knowledge is best developed in the context of practice and in collaborative working to solve problems for society, rather than in forms of knowledge production and research that simply consolidate or accumulate stocks of 'inert' knowledge.
- 3 As part of the funded research exploring the policy context, key policy actors (a total of 30) in the Scottish government and in the agencies responsible for funding research, as well as in the universities, were interviewed about their perspectives on knowledge transfer. The interviews were semi-structured and investigated participants' perceptions of the key issues. Interviewees are identified only by their respective roles-Scottish Enterprise promotes industry-education links.
- 4 This respondent is a university administrator with responsibility for KT.
- 5 This respondent is a government policy maker.
- 6 The Research Assessment exercise grades research in UK universities and that process, which has been organised as peer-review, tends to work with traditional markers of excellence such a publication in prestigious journals, research council grant income, and so on, rather than KT impact.

- 7 Responses to the survey in stage 2 of the research were anonymised and a coding system used to ensure confidentiality. Many respondents drew attention to the negative impact of the RAE's criteria for judging quality on their dissemination activities.

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## Transferência de conhecimento e transformação: convertendo o conhecimento da pesquisa para a política

### Resumo

Este texto aborda a Transferência de Conhecimento (TC) como iniciativa política desenvolvida com base em preocupações acerca da distância existente entre conhecimentos baseados em pesquisa que permanecem presos a nichos disciplinares e as crescentes necessidades de conhecimentos por parte de usuários. A abordagem de TC coloca-se contra os pressupostos da “economia do conhecimento”, posto que para esta a TC eficaz deveria proporcionar vantagem competitiva aos países no interior do sistema capitalista. Para Ozga, o desenvolvimento econômico global contemporâneo distingue-se “pela ação do conhecimento sobre si mesmo como a principal fonte de produtividade”. Contudo, a produção de conhecimento não ocorre no vácuo. O desafio dos governos voltados à economia baseada em conhecimento não é apenas o de promover o conhecimento ativo como um recurso econômico, mas gerir e conter em limites aceitáveis o conhecimento tomado como recurso da comunidade. As dificuldades que esta necessidade simultânea de liberdade e controle apresenta constituem o núcleo deste artigo.

**Palavras-chave:** Conhecimento. Política. Economia.

## Transferencia de conocimiento y transformación: convirtiendo el conocimiento de la investigación para la política

### Resumen

Este texto examina la Transferencia del Conocimiento (TC) como una iniciativa política desarrollada con base en preocupaciones acerca de la distancia existente entre los conocimientos basados en investigaciones que se mantienen presos a un nicho disciplinar y a las crecientes necesidades de conocimientos por parte de usuarios. El abordaje de TC se coloca en contra los presupuestos de la “economía de conocimiento”, ya que para esta la TC eficaz debería proporcionar una ventaja competitiva a los países en el interior del sistema capitalista. Para Ozga, el desarrollo económico global contemporáneo se distingue “por la acción del conocimiento sobre sí mismo como la principal fuente de productividad”. Sin embargo, la producción de conocimiento no se produce en el vacío. El reto para los gobiernos centrados en la economía basada en el conocimiento no es sólo el de promover el conocimiento activo como recurso económico, sino administrar y contener en límites aceptables el conocimiento tomado como recurso de comunidad. Las dificultades que esta necesidad simultánea de libertad y control presenta constituyen el núcleo de este artículo.

**Palabras clave:** Conocimiento. Política. Economía.

**Jenny Ozga**

*E-mail:* jennifer.ozga@education.ox.ac.uk

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