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Knowledge for Development

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INTRODUCTION

In this paper I am concerned with understanding the genesis of current development cooperation agencies' (and others') strong interest in knowledge as a central element of development policy and practice. This interest relates both to the growth of internal knowledge management strategies designed to make aid more effective and efficient, and to an emphasis on the role of knowledge in promoting development in the South.

The paper arises out of a study with my colleague, Kenneth King, on the emergence of these themes. The broader study looks at four agencies: the World Bank; the British Department for International Development (DFID); the Japan International Cooperation Agency (JICA); and the Swedish International Development Cooperation Agency (Sida). Some mention will be made of elements of these agencies' knowledge strategies but the detailed analyses of these agencies is to be found in other papers (King 2002a and b; McGrath 2002; King and McGrath 2002b).[1]

I will outline the origins of this interest in knowledge from its roots in political economy and management studies, showing how it has entered into agency discourses. I will then seek to outline some of the alternatives to this discourse that problematise its notions of both knowledge and development. However, this is not the place to go into the more than 2 500 years' worth of philosophical debates about knowledge.

THE ORIGINS OF KNOWLEDGE-BASED AID

The Knowledge Economy

In traditional economic theory, wealth is created out of the three factors of production: labour, land and capital. The path to industrialisation, at least for Britain as the "first industrial nation" (Mathias 1969) and for those following close on its heels, has widely been seen as being through the exploitation of abundant natural resources. However, even from the earliest period of economic take-off into industrialisation, technological innovation was crucial to success. Such success was not built primarily on recourse to traditionally accepted forms of knowledge, but on learning from experimentation and reflection on practice. Nonetheless, a sense of the importance of knowledge for economic success can be seen in the Industrial Revolution. In 1826, British industrialists and scientists founded the Society for the Diffusion of Useful Knowledge, which produced a penny magazine that reached 200 000 subscribers at its peak (McGinn 2001). As the Industrial Revolution progressed, so the dominance of the practical

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technologist began to be challenged by the growing relationship between science and industry. Knowledge and progress were also closely related in the partnership between Christianity and civilisation in Victorian Britain and its empire. This again was given name in the Society for the Promotion of Christian Knowledge. However, whilst the industrial economy was profoundly a knowledge economy, it was not named as thus.

Some leading economists did write explicitly about the economic role of knowledge long before the notion of the knowledge economy achieved prominence. Marshall (1891) included a brief discussion of knowledge in his *Principles of Economics*. Schumpeter (1934) addressed knowledge in his *Theory of Economic Development*. Hayek wrote an article published in 1945 entitled, "The use of knowledge in society" (Hayek 1945). Machlup (1962) had a book published with the title, *Production and Distribution of Knowledge*. He and others in the human capital school were to develop a clear account of the role that knowledge played in the economy and society.[2]

However, it was in the context of a perception of radical economic, political, social and technological transformation at the end of the 1960s that the critical importance of knowledge for economic success was to come to the fore. Although some authors such as Drucker (1969) saw some of the key elements at the time, it was only from the mid-1980s that a detailed account emerged of a period of fundamental change in the advanced capitalist economies. A group of accounts suggested that a crisis occurred in these economies between 1968 and 1973 that shifted them from one mode of organisation to another (e.g. Piore and Sabel 1984; Hall and Jacques 1989; Boyer 1990). This crisis period corresponds to the time from the political challenge from the youth surrounding the Vietnam War and student protests in North America and Western Europe in 1968 to the First Oil Crisis of 1973. Political and cultural rebellion by significant sections of the youth were combined with a sharp economic downturn that decisively ended the Keynesian golden age of post-war high employment and low inflation. The new phenomenon of "stagflation" emerged as unemployment and inflation both rose. The system of fixed exchange rates, agreed at the Bretton Woods conference at which the International Monetary Fund and the World Bank also were instituted, collapsed. Taken together, these major changes brought an end to the dominance of Fordism, which had been characterised by mass systems of production; mass consumption of standardised products; and mass-based modes of political and cultural organisation and identity. In its place emerged Post-Fordism, characterised by more flexible production systems; new niche markets; and the greater individualisation of product and service. Allied to new debates surrounding Post-Modernism, the emphasis in cultural, political and social organisation shifted to individuals' multiple identities. The importance of class apparently declined and interest group politics emerged as a powerful socio-political force (King and McGrath 2002a).

As the 1990s developed, this account was expanded by accounts of globalisation (e.g. Giddens 1990). Although there is considerable contestation within globalisation accounts, there is some agreement over the centrality of the growth of global networks of production and of the speed

[2] It is worth noting in passing the importance of information to economic theory. Debates about the importance of asymmetries and imperfections of information have been central to debates between neo-liberal and neoKeynesian economists (see Leijonhufvud 1981). As our case studies of development cooperation agencies show, there is often a conflation of information and knowledge in current accounts. Indeed, one of the leading current analysts of what we would call the knowledge debate, Manuel Castells, writes of the Information Age (Castells 1996).

and intensity of relationships within them. More importantly, a new infrastructural and technological architecture allows the almost instantaneous flow of capital and information between sites that form part of a global network. These financial flows lead to a new financial system, with the massive growth of markets in futures and other new financial tools to expand ways of extracting profit. The process of globalisation is fuelled by, and in turn fuels, the rapid development of new information and communications technologies (ICTs). Within a decade, social interactions in the North have been transformed by personal computing; the internet; email; mobile phones; text messaging; video conferencing; and digital photography. Multi-facetted globalisation also brings with it its own new forms of global institutions, most notably the World Trade Organisation (Castells 1996; Held et al. 1999; King and McGrath 2002a).

Post-Fordism, globalisation and the ICT Revolution combine to bring about the argument for a knowledge economy. Together they lead to a massive increase in information flows and a new economic emphasis on turning information into knowledge. Early in the literature on globalisation, Robert Reich (1991) produced an account of the *Work of Nations*, designed to be the definitive account of the new model of economic organisation in the same way as Adam Smith's (1966 [1776]) *Wealth of Nations* had outlined the nature of the early Industrial Revolution. At the core of Reich's argument was the need to produce enough "symbolic analysts", the core knowledge workers of the new knowledge economy. Knowledge now was the only factor of production that mattered, "the only source of long-run sustainable competitive advantage" (Thurow 1996: 74).

The knowledge economy account quickly captured the attention of political leaders. Reich was soon to move from Harvard to become Clinton's Labour Secretary. In Britain, the Blair Administration was to find its own "knowledge guru" in the shape of Charles Leadbeater (2000), who was to be an influential advisor to the Department of Trade and Industry. A remarkable range of other countries also took the knowledge economy message to heart, as reflected in the following self-depictions: the "clever country" (Australia); the "information island" (Bermuda); and the "intelligent island" (Singapore). In 1996, coincidentally at the same time that it was setting out the International Development Targets, the Organisation for Economic Cooperation and Development produced an influential report on the knowledge economy (OECD 1996).

Knowledge Management

In parallel to the emergence of the language of the knowledge economy came a corporate discourse and practice of knowledge management. In the early 1990s in the United States, a growing awareness of a changed external environment for firms was coupled to the rapid spread of new ICTs to produce a sense that information needed to be better managed. From early on in the process, there was also a sense in many corporations of the knowledge and experience that had been lost by corporations during the often severe "downsizing" of the 1980s. Increasingly, corporations sought to develop strategies for knowledge management. From the mid-1990s, this widespread change in corporate practice began to generate a rapidly expanding literature in management studies.

As the literature of the knowledge firm developed so two broad tendencies in theory and practice began to emerge. The first may be termed the technological approach. Here the emphasis was on the capture of the knowledge that already existed in the firm. As one book succinctly put it: *If Only we Knew What we Know* (O'Dell et al. 1998). This school of thought put the emphasis on codified knowledge, that which had been organised, synthesised and recorded. This process of capture was closely linked to the promise of new technologies. Databases rapidly became an important element of the knowledge firm. Moreover, the development of email and corporate intranets meant that this captured, codified knowledge could quickly be transmitted around the corporation.

This model of knowledge seems at times to come close to being about information or even data. Moreover, it appears to have a largely unproblematised view that knowledge is universally applicable and can be captured in a set of synthesised notes on best practice that can be shared round an organisation. Knowledge is seen as being present in individual heads and the challenge is in extracting this so that other individuals can learn through acquiring this knowledge. From the perspective of education, this appears very much like the banking model, so roundly criticised by Freire (1972).

The second broad tendency in the account of the knowledge firm may be termed the social. Here the emphasis is much more on tacit knowledge. Often drawing explicitly on the work of authors such as Polanyi (1967), the argument was that much of what was really useful knowledge was embedded in the experiences of individuals and could not easily be captured and codified (Davenport and Prusak 1998). This led to an emphasis on how to connect people within organisations through the sharing of stories and through learning together in teams. The model of learning here was much more experiential, reflecting both Deweyian and Marxian traditions. There was more emphasis on the creation of new knowledge than on the dissemination of that which was already codified. Interestingly for our study, Nonaka and Takeuchi (1995) argued that Japanese economic success was built on its performance in knowledge creation through active learning. Their account of the social nature of such learning reinforced the accounts of American academics such as Lave and Wenger (1991) which had spread into the management literature. Lave and Wenger stressed the importance of "communities of practice" as sites of learning, a concept that was to spread rapidly through corporate knowledge management schemes. The title of their book, *Situated Learning*, also points to the importance in this account of context and a rejection of the universalist position of the technological approach. Instead of nuggets of best practice, the emphasis here is on sharing stories (Davenport and Prusak 1998; Denning 2000).[3]

That two tendencies can be drawn out from the theory and practice of knowledge management of course does not mean that there is a simple polarity in this area. Indeed, authors increasingly are stressing the existence of different types of knowledge and a range of knowledge needs within firms (McGinn 2001). Thus, there has been the growth of a theory and practice in which a social account is at the core but elements of the technological approach are seen as useful.

[3] We shall come back to the work of Steve Denning in subsequent pages in his role as Programme Manager for the World Bank's Knowledge Management Programme.

As positions on knowledge management have matured, so the language has begun to shift to knowledge sharing, which seems more reflective of a social rather than technological understanding. The emphasis on knowledge sharing has seen issues of trust and organisational culture come to the fore (Davenport and Prusak 1998; Leadbeater 2000). This emergent interest in organisational culture and a borrowing from researchers of learning, such as Lave, points to the potential intersection of the model of the knowledge firm with that of the learning organisation.

Organisational Learning

An interest in the possibilities of and barriers to organisational learning has a long tradition in economics and management literature, although historically subsumed under the broader literature on the organisation of the firm (e.g. March and Simon 1958). It was the work of Argyris and Schön (1978) that was to develop the notion in a rigorous and sustained manner. Much of their attention was focused on the barriers to learning that existed within firms in terms of structures and cultures that prevented learning or discouraged sharing of information. They emphasised the need to move beyond reactive "single loop learning" to develop a systemic and systematic approach to "double loop learning". Such learning requires not just that the problem is solved but that steps are taken to reorganise organisational structure and culture as necessary. As the 1990s began, the notion of the learning organisation was to be popularised by Senge. In keeping with the style of the popular management text, the argument was based firmly in brief case studies and positive thinking. It stressed the importance of teams and the ways in which the barriers to double loop learning could be overcome. Although this account is clearly influenced by the shifts in the corporate world linked to the emergence of Post-Fordism, there is no sense of the emergence of ICTs or globalisation.[4]

Although there are clear intersections between the knowledge firm and the learning firm, Davenport and Prusak (1998) note that the two literatures have largely developed independently of each other. Senge's index only has one reference to the compartmentalisation of knowledge, whilst much of the knowledge literature does not seem to be concerned about learning, or has an implicit banking model that is far removed from Senge's dynamic sense of learning. Yet, as this brief account of knowledge and learning firms shows, there is much overlap now that more recent knowledge accounts have stressed culture, structures and incentives and have begun to draw on accounts from learning theory.

KNOWLEDGE-BASED AID

Knowledge for Development

In a sense, knowledge has always been part of development, whether as the spread of Western knowledge across the globe or in the everyday practices of development actors as they draw upon knowledge for their work. However, the notion of knowledge for development was to

[4] Of course, these were not widely discussed concepts at the time.

receive explicit attention in the late 1990s as the World Bank began to be influenced by a number of the trends and discourses outlined in the previous pages.

In the late summer of 1996, James Wolfensohn, the recently appointed President of the World Bank, was looking for a big idea for his speech to the Annual Meeting of the World Bank and IMF that September. This speech was likely to be of particular significance as there was strong pressure on Wolfensohn to reform the Bank in order to reduce its perceived profligacy and to improve the effectiveness of its aid. For the Wolfensohn Presidency not to simply be one of decline and defensiveness, it was vital that an original and persuasive account could be developed for the need for radical change. Finally, it was suggested to him that the growing interest in knowledge in the corporate and political realms would be an area worth exploring. So it was that the Annual Meeting saw Wolfensohn declare the World Bank to be the "knowledge bank":

> We have been in the business of researching and disseminating the lessons of development for a long time. But the revolution in information technology increased the potential value of these efforts by vastly extending their reach. To capture this potential, we need to invest in the necessary systems, in Washington and worldwide, that will enhance our ability to gather development information and experience, and share it with our clients. We need to become, in effect, the Knowledge Bank" (Wolfensohn 1996, cited in World Bank 1996).

Knowledge management was made a core theme of the new "Strategic Compact" between the Bank's management and staff, the strategy for organisational renewal (World Bank 1997). Within two months of Wolfensohn's speech, a high level working group chaired by Vice-President, Jean-François Rischard, had produced a report outlining the new knowledge strategy of the Bank. One element of the programme that they recommended was a series of research studies into the economics of information and knowledge, with the possibility of this becoming a theme of a subsequent World Development Report, the Bank's most high profile annual document (World Bank 1996).

This possibility was soon to become reality. The 1998-9 World Development Report was on the theme of *Knowledge for Development* (World Bank 1998). The Report started from the premise that the ICT Revolution makes developmentally useful knowledge potentially available for poor people more quickly and easily than ever before. However, through its links to globalisation, it also brings the possibility of an expanding "digital divide". It argued for investment in education; embracing of globalisation; and the liberalisation of the telecommunications sector as central to the narrowing of knowledge gaps. It also drew heavily on the "new institutional economics" (e.g. North 1990) to argue that informational failures must be addressed.

Although strongly grounded in the economic paradigm of the Bank, with its technical and apparently value-free style (Meyer-Stamer 1999), the Report did catch some of the messianic fervour with which knowledge had been brought into the Bank's canon. Nowhere is this more apparent than in the first two paragraphs of the Report:

> Knowledge is like light. Weightless and intangible, it can easily travel the world, enlightening the lives of people everywhere. Yet billions still live in the darkness of poverty – unnecessarily. (World Bank 1998: 1)

With this comes a tendency to overstress the importance of knowledge in poverty and to portray the poor as being in a knowledge deficit:

> Poor countries – and poor people – differ from rich ones not only because they have less capital but because they have less knowledge. (World Bank 1998: 1)

The Report went on to argue that much of the reason for South Korea's better economic performance than Ghana is based on its superior knowledge use (World Bank 1998: 20).[5]

The Report suggested that much knowledge could be sourced from the North but that there would also be a role for national systems of research and development in the South. As well as the ability to generate new knowledge or acquire it from outside, the Report highlighted the importance of being able to absorb relevant knowledge. Such relevant knowledge is about correct policies and management systems but it is also about health, agriculture and sanitation.

Development cooperation agencies have a clear role in this vision:

> Development institutions have three roles in reducing knowledge gaps: to provide international public goods, to act as intermediaries in the transfer of knowledge, and to manage the rapidly growing body of knowledge about development. (World Bank 1998: 6)

For the Bank to be a successful actor in knowledge for development, it must be successful at knowledge management:

> How well these institutions perform depends on their ability to manage vast amounts of information. For example, every World Bank staffer who works in a developing country accumulates knowledge about a particular sector or region or activity. Often this knowledge is used for the specific task requiring it, then shelved. Think how much more valuable it would be if that knowledge were made available to every other staff member working on similar issues and projects. Then add the much greater benefit to be had from sharing that knowledge with the rest of the world.

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[5] What the Report actually says is that most of the gap between the two countries' performance cannot be explained by conventional analyses, it being implied by the context that knowledge is likely to be the explanatory factor. It is interesting to note that this rather cautious and implicit statement had given way to a far bolder and cruder statement by 2000:

> Forty years ago, Ghana and the Republic of Korea had virtually the same income per capita, but by the 1990s Korea's income per capita was six times Ghana's. More than half of that difference can be attributed to Korea's success in acquiring and using knowledge. (World Bank 2000: 1)

The appearance of such a simplified and, on the face of it, simplistic statement in what was a brochure about the Bank's knowledge work may be argued to be of relatively limited importance. However, much more significantly, it was repeated in the first draft of the World Bank's new higher education policy (World Bank 2001).

> The information revolution is making it easier to manage this wealth of knowledge. By 2000, the World Bank intends that relevant parts of its knowledge base will be made available to clients, partners, and stakeholders around the world. The objective is to develop a dynamic knowledge management system capable of distilling knowledge and making it available for further adaptation and use in new settings. To do that effectively, however, also requires building the capability in developing countries to assess and adapt relevant policy and technical knowledge to local situations, and when necessary to create new knowledge, which in turn may be relevant for other countries. (World Bank 1998: 7)

The vision was one in which the greater internal focus of the Bank on managing its own professional knowledge would inevitably lead to benefits for partners (or clients in the Bank's language) as the Bank would be able to provide for them the best practices from a range of countries.

However, this vision illustrates one of the central controversies that the World Bank's knowledge vision generates. The account is one in which the Bank has superior technical expertise and breadth of comparative development experience as compared to other agencies or clients. However, the Bank is willing to share of its knowledge. This assumes and hides a number of things. First, the Bank's knowledge is portrayed as technical and value-free, notwithstanding the depth and breadth of the critique of the Bank's ideological biases. Second, it is assumed that there are clear cut answers to development problems, regardless of the weakness of development in practice. Third, policymaking is seen as a rational and technical process in which the best knowledge is converted into the best policy, in spite of the range of evidence about the inevitably political and contested nature of typical policy processes.

Moreover, the stress on the external focused aspects of knowledge for development need to be placed alongside the reality that the bulk of the finance for the Bank's knowledge strategy was for internal activities. Although these were seen as being in the ultimate interest of the clients, it is still striking that the bulk of the resources would be directed at the knowledge needs of Bank staff rather than those of Southern countries. This tension between the internal and external dimensions of knowledge for development is at the core of our critique of knowledge-based aid (King 2000; McGrath 2002).

Although there is some passing mention of indigenous knowledge, and some reference to the role that agencies can play in South-South knowledge sharing, too much of the vision of the Report is on Southern deficits and Northern (particularly World Bank) transmission (Caddell 1999). Knowledge that is culturally, socially or spiritually valuable is not part of the vision, which remains resolutely on the economic sphere.

Knowledge-Based Aid Activities

It should be clear from the discussion so far that knowledge is understood in a number of, often conflicting, ways. Rather than attempt to define it, it is more useful to look at the ways that it

has been used in practice in development cooperation. From this, the range of what constitutes knowledge-based aid may be seen.

Internal knowledge management and staff development

As was noted above, the bulk of funds in the World Bank knowledge programme were devoted to internal knowledge management and this appears to be typical across agencies. Internal activities have included database development and other more technological and informational initiatives. Intranets have been seen as crucial by some agencies, such as DFID (McGrath 2002). However, agencies have increasingly focused more on the social aspects of knowledge sharing. Indeed, Steve Song, of the NGO Bellanet suggests that communities of practice have emerged as the most popular element of internal knowledge activities across agencies (Song 2001). Increasingly too, the non-technological aspects such as meeting spaces have attracted attention, perhaps most notably in the new DFID headquarters (McGrath 2002).

It is worth noting that communities of practice can be both internally and externally focused. However, in practice it seems that the vast majority of agency communities have internal participants only.

Intranets and communities of practice are intended to develop staff capacity in response to the new challenges faced by agencies. A number of other activities also take place in agencies towards the same ends. In some agencies, formal staff development programmes are well-developed but this varies considerably. Across a range of agencies there has been a growth in recent years of departmental and inter-departmental seminars designed to keep staff up-to-date with important development issues. In DFID, a series of sectoral resource centres have been established to improve knowledge flows from research to operational and policy staff (McGrath 2002).

The frequent overlap and confusion between knowledge and information in agencies has also resulted in initiatives for e-working to be included in knowledge programmes. Everyday practices of agency staff have been transformed in recent years by new technologies and a number of agencies are engaged in ambitious programmes of digitisation of documents, and even libraries in the case of the DFID (McGrath 2002).

Inter-agency knowledge sharing

Inter-agency sharing has received relatively little attention in terms of the knowledge debate. This may be due to the previous growth of common reporting systems through the OECD and donor working groups. Although ICTs have clearly supported the work of these groupings, little has emerged in the way of new inter-agency communities of practice. However, one large initiative that has emerged is the Accessible Information on Development Activities project, which seeks to develop a common digitised database on aid activities. This seems to be a classic example of the technological approach to knowledge sharing.

Research

Research on information and knowledge was one of the four strands of the World Bank's initial knowledge strategy. However, research more generally has always been, and continues to be, a crucial element of their knowledge activities. Research means different things to different agencies. For the World Bank, a lot of research is done in-house by its large staff of disciplinary specialists (King 2002a). In Sida, research is primarily thought of in terms of the support to Southern research (see below and King and McGrath 2002b). In DFID, research is primarily something that is funded by DFID but carried out by the British academic community, in increasingly genuine partnership with Southern researchers (McGrath 2002). In Jica, much of the formal knowledge on which practice is based comes from "development studies", "basic design studies" and "thematic and country studies" in which Japanese consultants play the primary role (King 2002b).

International public goods

The 1998-9 World Development Report highlights the issue of international public goods as one with which development cooperation agencies should be concerned:

> Just as there are national public goods, so there are international ones, and many types of knowledge fall into this category. No single country will invest enough in the creation of such goods, because the benefits would accrue to all countries without the creating country receiving full compensation. But international institutions, acting on behalf of everyone, can fill this gap. (World Bank 1998: 6)

The World Development Report goes on to cite the example of the Consultative Group for International Agricultural Research and this is a network with strong financial support from a number of agencies. Other examples would include the search for an AIDS vaccine and the attempt to eradicate malaria.

Infrastructural and institutional development

The importance of support to Southern ICT infrastructure is clearly present in both the World Bank's 1996 knowledge strategy and in the 1998-9 World Development Report. This is reflected in a range of projects and programmes, including the infoDev programme of the World Bank and various telecentre and other community connectivity initiatives from a range of agencies and NGOs. This issue is at the heart of the language of the digital divide and the response to this of the G-8 since the Okinawa Summit.

From the World Bank and DFID in particular there is also a strong argument that ICT infrastructure in Southern countries will never develop successfully unless telecommunications markets are freed up. The influence of the New Institutional Economics is seen very clearly in the language used here, both in the World Development Report and the DFID White Paper of 2000 (DFID 2000).

Knowledge transfer

Structural adjustment led to an increased agency focus on getting the right policy advice to Southern governments. However, this advice was intimately connected with the growth of conditionalities. Rather than an attempt to engage in a process of contextually-grounded learning with partners, agencies appeared to be engaged primarily in a process of prescriptive knowledge transfer based in their own universalising theories. This legacy of transfer with conditionality is an important barrier to the success of more recent agency attempts to move into a more symmetrical knowledge relationship with partners. Although the language of partnership has been accorded more importance, the language of conditionalities remains in new forms, such as the International Development Targets.

Away from the policy arena, there is little sense that agencies have made much impact in their avowed aspiration to transfer "developmentally useful knowledge" to the poor. Whilst old extension approaches have largely lost favour, no new approaches to knowledge transfer to the poor have successfully emerged as yet.

e-learning

Agencies have long had a fascination with the possibilities of ICTs for supporting learning, including radio, television and video. The emergence of the internet and email have served to strengthen this focus. It has also led to a sense of new possibilities for the short courses that agencies have offered to professionals and policymakers in the South. A number of agencies, including the World Bank and Jica, are clearly excited about the vastly increased numbers that can be reached through e-learning. However, questions can be raised about the quality of this learning as opposed to traditional face-to-face methods, and the degree of contextualisation that is taking place. In talking of aid to e-learning, it is important to note that the same OECD governments that are promoting e-learning as part of their aid programmes are often also supporting e-learning as a means of increasing the export earnings of their higher education institutions. Tensions between these two strategies are inevitable.

Technical cooperation and capacity development

Technical cooperation and capacity development have always been important elements of aid, and continue to be of importance. At its best, technical cooperation has had a rich view of knowledge, stressing the importance of culture; of face-to-face contact: and the tacit nature of much of the useful knowledge (Sida 1992; King 2002b). Particularly in the Swedish model, there is a strong sense of the relationship as one of mutual knowledge construction and of the importance of capacity development for all partners, including in Sweden, and at the systemic level (McGrath and King 2002b).

Short courses and scholarships

The period in which agencies have become so interested in knowledge is also the period in which long-term scholarships for study in the North have fallen into deep decline. Whilst students continue to move North in large numbers, they are typically from the Newly Industrialised Countries (most recently and dramatically China), often funded by their governments, or from the small elites of the poorer countries, through private funding. Thus, a significant source of knowledge capacity development for the poorest countries has declined markedly and has not been replaced by the promised growth of in-country programmes.

Short courses have remained important for a number of agencies and continue to bring "change agents" North. However, the knowledge and ICT revolutions have led to an apparent shift in the organisation and delivery of such programmes. There has been a move away from courses that were devised because the host country had expertise, for instance in hydroelectricity or forestry in the case of Sweden, to ones that reflect more of a sense of Southern needs. There has also been a degree of shift away from a simple one-way transfer mode in which the Northern instructors were assumed to have the knowledge, to a more democratic approach in which the participants are assumed to be knowledgeable. This is linked crucially to a greater acceptance of the importance of context, a key message of the knowledge revolution. ICTs have allowed a new emphasis on networks (or communities of practice) of participants after the courses have ended. However, the future of these programmes is brought into some question by the rapid expansion of e-learning provision by agencies. The relative merits of the different modalities remains inadequately addressed though as the new technologies capture the imaginations of agency staff. Lower unit costs have attracted far more attention than issues of quality.

Southern knowledge capacity

The university systems of much of the South have experienced two decades of decline. This has largely been due to the changing fashions of aid.[6] The education for all orthodoxy led many donors to pull back from their support of higher education. More seriously, this came on top of the impact of structural adjustment in reducing Southern governments' ability to support higher education from their own funds.

The knowledge economy discourse has begun a revisiting of this position by many agencies. Most importantly, the World Bank is due to publish a new Higher Education policy in mid-2002, which is directly influenced by knowledge economy arguments, some of which can be traced clearly to the 1998-9 World Development Report.

The tradition of support to Southern higher education had been kept alive through the 1980s and 1990s by the large American foundations, e.g. Ford and Rockefeller, and the

[6] However, as Mkandawire (2000), for instance, has argued, African governments have often been suspicious of the knowledge generation role of universities, being much more comfortable about them as producers of high level human resources.

research-specific agencies and development research councils of some Northern countries. The Swedish Agency for Research Cooperation (a department of Sida since 1994) has been a particularly strong supporter of national knowledge capacity in the South. Its vision has been of supporting systems for knowledge acquisition and adaptation as well as generation. Importantly, it has avoided a narrow focus on "developmentally useful knowledge" in favour of a broad vision of the importance of public higher education as a core element of a national knowledge system (King and McGrath 2002b).

This vision of the centrality of public higher education is not so apparent in the thinking of the World Bank. The draft higher education policy continues the Bank's fascination with the private sector. The Bank is also very interested in the role of think tanks. It argues that these are important contributors to critical debate about policy and, hence, to good governance (Stone 2002). However, the rise of the think tank may in practice reinforce attempts to claim technocratic neutrality for development theory rather than further illustrate trends towards positionality. The possibility of ideology-free research is clearly present, for example, in Stiglitz's (2000 [1999]) keynote address to the first GDN conference.

The role of private sector research and development in the South is also a clear theme of both the *World Development Report 1998-99* and the 2000 UK Globalisation White Paper appear to have been influenced by endogenous growth theory (e.g. Romer 1986), which suggests that the spillover of firms' research and development advances plays an important role in overall economic growth. Indeed, it is argued that effective investment in research and development is more useful for growth than investment in physical capital (Kaplan 2000). Moreover, in keeping with knowledge economy arguments, this relative importance is seen as likely to grow over time. For countries in the South, this leads the World Bank and DFID to stress foreign direct investment as one important way of accessing developmentally useful knowledge. Thus, pro-globalisation policies are seen as promoting knowledge-led competitiveness.

Southern knowledge sharing

The World Bank's support for think tanks is most apparent in the evolution of the Global Development Network (Stone 2000 and 2002; King 2002a). This is explicitly intended to be a forum for Southern knowledge sharing, through conferences, collaborative research and electronic activities. However, its structure and debates about its governance have highlighted a tension between an economistic and technocratic vision of development on the one hand, and a greater ideological and disciplinary pluralism on the other. Interestingly, this tension saw different elements of the World Bank supporting opposite positions.

A range of agency supported websites are intended to be important sources for South-South sharing through the encouragement of the posting of research papers from the

South.[7] However, the emergence of knowledge-based aid appears to have done little to focus agency support on Southern-based knowledge networking. Indeed, it has been argued that the heavy investment in the Development Gateway potentially threatens existing Southern sites of knowledge sharing (Bissio 2001; Wilks 2002).

Japan has perhaps done more than other donors in its support for South-South knowledge sharing in a tradition that predates the fascination with knowledge-based aid. Elements of this concern include the series of Tokyo International Conferences on African Development and attempts to promote knowledge sharing among policymakers and researchers from Africa and Asia.

Indigenous knowledge

Indigenous knowledge operates within very different paradigms from that of development knowledge as understood by agencies. Nonetheless, there has been a growth in agency interest in indigenous knowledge. This has spread even to the World Bank, where the Africa Region have been behind a major initiative for codifying and sharing indigenous knowledge. This is clearly a highly complex area but issues obviously arise about the extent to which this is a privileging indigenous knowledge on its own terms or is an extraction from it of what is seen as developmentally useful (Arce and Long 1992; Long 1992; Apffel-Marglin 1996).

Knowledge-Based Aid or Learning-Led Development

The possibilities and limits of bridging the knowledge management and learning organisation literature have already been noted. This suggests the merits in thinking about learning-based accounts of aid as well as those based on knowledge. Of course, knowledge and learning are intimately related. However, there are also tensions between their meanings that are in need of exploration. In particular, a number of authors (e.g. Ellerman 2000; King 2001; Tilak 2001) are concerned that the knowledge-based aid paradigm can too easily slip into a focus on what agencies know and want to disseminate rather than on what they and their partners do not know, and need or want to learn. Moreover, given that the discovery of knowledge-based aid is at least partially driven by aid effectiveness concerns, it is somewhat ironic that knowledge is being stressed over learning when there is little evidence for answers to many perennial questions about aid.

A positive vision of the possibilities of learning-based development is possible. This approach would draw together accounts of individual development through learning in communities (Lave and Wenger 1991) and national development through genuine and broad ownership (Sen 1999) in a way that revisits and updates some of the early and now widely neglected development thinking of Hirschman (e.g. 1958 and 1971; Ellerman 2000). This suggests that the challenge

[7] Inevitably, however, these sites are also heavily used by Northern researchers, both to access materials and to post their own.

for agencies and their Southern partners lies not so much in managing knowledge but in supporting social learning as a means of knowledge generation and sharing.

Closely related to these arguments about learning-based development are the concerns of some agencies with capacity development. In this view, widespread national ownership of development will only become a reality if there is considerable support for the development of individual and organisation capacities and wider systems and incentive regimes (Gustafsson 2001).

ALTERNATIVE ACCOUNTS OF KNOWLEDGE AND DEVELOPMENT

The story so far has been that of the origins and nature of knowledge-based aid. However, to stop at this point would be to ignore the very extensive literature that is critical of the notion of knowledge for development, both in its most recent and earlier forms. Therefore, this next section will provide an overview of some of the key elements of such accounts and their implications for an analysis of knowledge-based aid.

Behind these critical accounts of knowledge and development lies a far wider social theory tradition. Kuhn's (1962) work on paradigms and Foucault's (e.g. 1970 and 1972) work on discourse and the "archaeology of knowledge" laid much of the groundwork for current understandings of the contested and constructed nature of knowledge. Educationalists from Bernstein (1971) through Apple (1993) to Muller (2001) have sought to explore what is valued by pupils, schools, economies and societies as "useful knowledge" and what is rejected. Through feminist critiques of patriarchal knowledge construction (e.g. Lorde 1984; Collins 1991) and Southern critiques of Northern constructions of knowledge (e.g. Smith 1999; Mbembe 2001), scholars and activists have sought to lay bare the basis of power upon which knowledge is constructed and reclaim spaces for other forms of knowledge and knowing. These critiques taken together constitute a rejection of the Enlightenment tradition of rationality, truth, universality and the separation of mind and body. Instead, they point to the embodied, interpretive, complex and contextual nature of knowledge.

Knowledge for development and the social theory of knowledge disagree in their views on the limits of knowledge. Critics of development rationality argue that it assumes that the world is knowable objectively. Instead, they point to the construction of knowledge out of a complex interaction between social, cultural, institutional and situational factors that builds upon existing concepts and practices (Gadamer 1975; Arce and Long 1992).

This intellectual tradition leads to a questioning of the way in which development emerged as a notion, and its existence as a particular discipline with its own special brand of knowledge. Leys (1996) has shown how it is based in particular assumptions about modernity and progress, as part of the larger Enlightenment project. Development is also materially located in the particular political economy of the 1950s and 1960s. This includes the Bretton Woods system; Keynesian corporatism (at least in Western Europe); the Cold War; and the primacy of the nation state (Leys 1996; McGrath 1999). Yet both these broader and narrower foundations have been

undermined by major economic, political and intellectual trends of the last quarter of the Twentieth Century, broadly associated with globalisation, Post-Fordism and Post-Modernism.

A number of authors have also highlighted the problematic nature of development's reliance on Economics as its lead discipline (e.g. Apffel-Marglin 1996; Dore 1997; McNeill 2000). In spite of the trends in social theory noted above, Economics has retained a powerful emphasis on theory over practice; and on truth over values. A limited regard for context, history and power serve to encourage a technocratic approach in which the intensely political nature of policymaking is ignored and non-economic arguments are rejected (McGrath 2001a).

In development thinking more generally, and particularly in elements of knowledge-based aid, there is an assumption that knowledge, policy and development outcomes are unproblematically related. This assumption is rejected by a large body of academic literature on the policy process. The relationship between research and policy is highly complex (Stone 2002) and intensely political. Agency accounts tend to assume that policymaking is based on consensus. There appears to be a mental model operating in agencies in which it is assumed that stakeholders will come to rational decisions based on the available knowledge. However, authors such as Kingdon (1995) have suggested that research rarely gets translated into policy, whilst others point to the ways in which power and ideology shape the resolution of conflicts between different knowledges (Arce and Long 1992).

The move from policy to intended outcome is also problematic. Policy sociologists such as Ball (1990) have suggested that policy is often more about the creation of discourses that mobilise political, ideological or financial resources rather than planning for future practices. Given the asymmetries of power and the presence of conditionalities in the aid relationship, it may be that Northern policy sociology seriously underplays the gap between policy and practice in Southern contexts (McGrath 2001a).

Agency accounts of knowledge for development also are weak on context and complexity. Disciplines such as International and Comparative Education, however, stress the dangers of policy thinking that is devoid of historical and cultural contexts (Watson 1998; McGrath 2001b). In this tradition, policy transfer is seen as far less important than policy learning through adaptation, a notion that is clearly included in some agency thinking (Gustafsson 2000; Stiglitz 2000 [1999]), but is far from mainstream.[8]

Another set of accounts looks at the way in which agencies are poor at using knowledge. Carlsson and Wohlgemuth (2000) highlight a number of ways in which agencies fail to learn. Agency learning is also undermined by the need to disburse, as a number of writers from within agencies acknowledge (Lintonen 2000; Bergmann 2001; Denning 2001).

However, other accounts point to the ways that learning failures arise out of the nature of the development discourse. Anti-development accounts have focused on the way that development texts and practices construct the un(der)developed Other in ways that do more to legitimate development than to address the needs of those who become the objects of development

[8] Sida is unusual among development cooperation agencies for the number of senior staff (past and present) with degrees in international and comparative education. Whether this has encouraged the organisation as a whole to be more suspicious of simple policy transfer and more interested in learning is a matter for speculation.

(Caddell 2002). Roe (1991), Mearns and Leach (1996) and Baumann (1999) all argue that agencies often base their practices on received wisdoms that provide an incomplete or incorrect basis for policy and practice.

Agencies increasingly display a powerful tendency towards identifying quantifiable targets. These include not just the International Development Targets but the attempt to develop a set of secondary targets (Chang et al. 1999). This may reflect the political and bureaucratic contexts within which agencies are operating. However, it also sends powerful signals about which knowledge counts and adds to the asymmetrical nature of development partnerships (Carton 1998; Crewe and Harrison 1998; Berg 2000). Social theory has become increasingly interested in complexity and the existence of multiple truths but this remains far from the agency way of seeing the world (Uphoff 1996).

The currently dominant poverty agenda among agencies can narrow conceptions of what counts as developmentally useful knowledge. This holds for the International Development Targets as an important manifestation of this agenda. The language of sector wide approaches (SWAPs) and the Poverty Reduction Strategy Papers (PRSPs) seems to hold the promise of a partnership-based approach to development where Southern voices are paramount. This vision would seem to accord power to Southern knowledge about development priorities and practices, and reduce the dominance of universal knowledge as constructed by the agencies. However, this positive outcome is highly contested. Crucially, it is far from evident that shifts in language about knowledge and partnership will be enough to effect a radical change in models of development cooperation, imbued as these are with power and vested interests.

At the same time, at the more micro level of projects (for projects are still alive and well in spite of SWAPs and PRSPs), the discourse of participatory development has spread from academia through NGOs and into agencies. This has led to an apparent prioritisation of local over expert knowledge (e.g. Chambers 1995). However, Mosse and Kothari (both 2001) argue that this apparent reversal masks more complex webs of knowledge and power that retain considerable power for the expert (transformed now into facilitator) and for the organisations and ideas of development.

A BRIEF CONCLUDING COMMENT

Knowledge for development is clearly open to serious objections in spite of agency claims that it is about Southern ownership and development. This paper has sought to explore where it comes from as a way of informing the critique of the theory and practice both of internal knowledge sharing activities of agencies and their approach to knowledge for development. Knowledge clearly is important to development but in a highly complex and contested way. Indeed, perhaps the greatest benefit of the "discovery" of knowledge by agencies is its effect of opening up their activities to a new form of scrutiny that challenges them to follow the fuller logic of what they profess to believe in and do as a result of their belief in knowledge for development.

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