

Delivering on the Promise: Success and failure in academic knowledge transfer

Paul Micklethwaite, Kingston University

ABSTRACT

British Universities are increasingly engaging in 'knowledge transfer' activities. Significant government funding is available to allow academics to formally engage with business, public sector and community partners.

Knowledge transfer is a recent phenomenon on this scale. It may be a new kind of activity for the academics involved, so there is a need to share best practice in 'how to do it'. Successful examples are available, and promotional material ensures that all knowledge transfer projects are *apparently*, ie. they are presented as being, successful. We may learn more from cases which are less successful, or even unsuccessful. Such examples are more difficult to find in the promotion, dissemination and reporting of knowledge transfer.

This paper considers some of the less successful, more problematic aspects of knowledge transfer project design and delivery, based on personal experience as an academic engaged in several projects in the area of Designing for Sustainability. The paper addresses notions of success and failure in knowledge transfer, highlighting a potential mismatch between real and reported success, and potential tension between useful outcomes and assessed project outputs. It also identifies some potential pitfalls in project design and delivery.

WHAT IS KNOWLEDGE TRANSFER?

"Knowledge transfer is about exchanging good ideas, research results, experiences and skills between universities, other research organisations, business, government, the public sector and the wider community to enable innovative new products, services and policies to be developed."
(ESRC 2007)

Knowledge transfer is often discussed via the metaphor of a dialogue or conversation between the research community and potential 'users' of research. The ultimate purpose of this dialogue is to get research applied in policy and practice. This goal is often related to national economic competitiveness; if the UK is to compete in the global marketplace it needs to commercially exploit its research base by successfully converting research into innovation. The academic research community is seen as particularly ripe for this kind of strategic exploitation. The gains need not be solely economic, however:

"[S]uccessful innovation is about the creation and implementation of new processes, products, services and methods of delivery which result in significant improvements in outcomes, efficiency, effectiveness or quality across public, private and voluntary sectors."
(ESRC 2007)

Support for this kind of activity may come from UK Government or European Union sources. In 2004 the UK Government announced a ten-year Science & innovation investment framework in which knowledge transfer is prominent (HMSO 2004). Recent political emphasis on knowledge transfer is therefore due to continue, and it will presumably persist as a source of funding for universities, via such mechanisms as the Higher Education Innovation Fund (HEIF).

Academic knowledge transfer is collaboration between academic researchers and non-academic partners. The HEIF began in 2001 to "[support] institutions to engage in a broad range of knowledge transfer activities with business, public sector and community partners, for direct or indirect economic benefit." (HEFCE 2007) Government-funded research councils such as the Economic and Social Research Council (ESRC), the Engineering and Physical Sciences Research Council (EPSRC), and the Arts and Humanities Research Council (AHRC), offer similar schemes. Through these schemes, academic researchers have increasing opportunities to apply their research in a more concerted way. As a result, 'knowledge transfer' may be a new kind of activity for many academics, who may not be used to engaging

with wider non-academic audiences in the cause of innovation, however broadly defined. There is therefore a need to share best practice in 'how to do' knowledge transfer.

KNOWLEDGE TRANSFER REPORTING

Successful examples of knowledge transfer projects are widely available via the marketing and dissemination activities of knowledge transfer schemes such as those funded by the HEIF. Promotional material ensures that all knowledge transfer projects are *apparently* successful, ie. they are presented as being, and so are seen to be, successful. This observation probably applies equally to any case in which continued or further funding depends to some extent on a demonstration of success in the reporting of completed previous projects. While success stories can be inspiring and instructive, we may however learn more from cases which are less successful, or even unsuccessful. Such examples are more difficult to find in the promotion, dissemination and reporting of knowledge transfer activities. This paper was prompted in part by a perception of a mismatch between knowledge transfer as it is typically reported, and personal experience in the delivery of several such projects, briefly outlined next.

EXAMPLES FROM DESIGNING FOR SUSTAINABILITY

This paper is based on personal delivery of knowledge transfer projects in the area of Designing for Sustainability. These projects included collaborations on many individual design development projects seeking to accelerate the introduction of more 'sustainable' products to market. None of these projects were Knowledge Transfer Partnerships (KTPs). Projects included various modes of knowledge transfer, including public lectures, professional training, one-to-one business support, and large-scale multiple-partner industrial collaboration. While some of these activities might be seen as 'delivery' oriented (ie. one-way), the dialogical spirit of knowledge transfer was to some extent present in each.

DELIVERING ON THE PROMISE

The title of this paper has several potential dimensions in our discussion of academic knowledge transfer:

1. The promise to collaborating partners (living up to what you say in your promotional material)
2. The promise to funders (living up to what you say in the funding bid)
3. The promise of knowledge transfer as a mechanism (realising the potential to contribute to economic and social well-being, both in general and in specific cases)

In the knowledge transfer projects discussed here, often a form of provider-client relationship took hold between the academic researcher (myself), and an individual collaborating non-academic partner (eg. a sole trading designer), or between the university and a collaborating company or external organisation. A relationship initiated as knowledge transfer from the academic side was often perceived as a form of consultancy from the non-academic side. There is a need to manage the expectations of the non-academic collaborating partner, and establish the intended nature of knowledge transfer as a dialogue. There is a danger that promises are made up-front, eg. in seeking to recruit partners, which may be difficult to deliver on, compromising the potential of knowledge transfer as a mechanism for collaborative innovation, and the academics involved.

SUCCESS AND FAILURE

It is worth considering notions of success and failure in knowledge transfer projects. The ESRC lists separately the potential benefits to "those carrying out the research" and "those using research". (ESRC 2007) Academics are likely to be the former. Here are the benefits of engaging with the audiences of your research, according to ESRC:

- gain better understanding of the needs of potential users
- inform and improve the quality of your research
- gain valuable skills and experience

- develop networks and improve your influencing skills
- increase the prospects of your research being applied
- enhance your reputation
- increase your opportunities for further research funding and career opportunities
- open up the opportunity of joint funding

Here are “some of the benefits of working collaboratively”, from the same ESRC source:

- increase the scope of your research and attract extra funding for the project
- apply evidence-based knowledge and expertise to important business problems or research agendas
- gain experience of current business or policy development and assist strategic change and learn complementary project management skills
- generate research ideas and teaching material relevant to business/policy makers
- enhance your reputation as well as your research and teaching skills
- develop and strengthen your networks
- increase your chances for future funding
- improve your career opportunities

These two lists of success factors are fairly identical. In my own experience, from which this paper is written, networking with wider academic and non-academic communities engaged in sustainable design and sustainable business was a clear personal benefit. Moreover, not only did I become better-connected with relevant audiences and communities, to some extent those communities also became strengthened via workshops and other events. The needs of potential users of my research and knowledge certainly came to the fore, with the result that I quickly learned the limits of my expertise in the attempt to make the transition from academic researcher to real-world facilitator of change. The sudden need to apply knowledge which had hitherto been more abstract presented challenges, and addressing these challenges certainly forced me to consider the relevance of my expertise to design and business practitioners, even if my interventions were not always successful.

The immediate measure of success or failure for knowledge transfer activity is via the metrics imposed to measure project outputs. The relevance and meaningfulness of these project outcome targets is not always clear. The metrics used to assess whether these targets have been met may, equally, not always be easily intelligible. In such cases some creativity and imagination can be required to translate what you are actually doing on a project into the assessment categories provided. Where imagination fails, activities may simply not appear on the report sheet. This can create tension if what you might consider to be useful outcomes are not assessable as valid project outputs. The official success of a project, in terms of the targets met, can become divorced from what you may consider to be actual meaningful achievement. In this sense real and reported success may be quite different. This can engender a feeling of ‘trying to succeed in spite of the system’, of playing a game in which the final result does not reflect what actually took place on the field.

Evaluating the success of a project on these terms also requires the involvement of specialist independent auditors to carry out an assessment of the officially recorded version of the project. On large funding programmes this supports a dedicated administration and auditing sector, a layer of professional activity which exists solely to implement the evaluative instruments of the funding programmes. These assessments typically require a significant paper trail for each contact and each relationship within a collaboration. Much effort is devoted by the academic to satisfying these impressive administrative and recording requirements, perhaps to the detriment of the collaboration itself as partners are repeatedly chased for statements and signatures. Anecdotal estimates vary as to how much of a project’s budget and resource is typically spent directly benefiting successful collaboration, ie. working with a collaborating partner. The most pessimistic estimates can be as low as 10%.

Within this kind of context, it may be tempting to inflate the success of a project to the funder and other actual and prospective audiences. This is important if the reputation and credibility of funders, partners and individuals involved suffer as a result of the level of reported success being different from that of

perceived or actual success. This may engender distrust of future activity by those involved, on the part of audiences who remain unconvinced of the spin given to a completed project. For the individual academic, there are also risks in terms of maintaining personal integrity and gaining satisfaction from involvement in a particular project.

A 'TOP 5' KNOWLEDGE TRANSFER PITFALLS

Some problematic aspects of knowledge transfer project design and delivery are now presented. These derive from personal experience. They are not presented in any particular order. Both operational and strategic issues are addressed, perhaps prompting discussion of which are inevitable and which avoidable.

Driven by funding, not by need

Academic research project proposals are submitted in response to funding calls by, for example, the research councils. Money is made available for particular types of project, with some perhaps being ring-fenced for proposals in a specific subject area. The process is similar for projects categorised as knowledge transfer rather than research. A successful application will meet the criteria of the funding call; it may be based on reflecting back to the funder their own statements as to what they are seeking to support. Understandably, applications may be designed primarily to satisfy funding criteria, or at least take those criteria as their starting point. In some cases, bids may be made simply to secure jobs, irrespective of the value of the project being submitted. For knowledge transfer funding criteria to successfully reflect prevailing cultural and policy priorities, it is vital that communities of research users are included in their formulation, hopefully ensuring the relevance of approved bids.

Unrealistic output targets: 'chasing the numbers'

Any funding application is required to give output targets: how many training events will be held; how many businesses will be 'advised' or 'assisted'; how many of those businesses will be from minority groups. Challenging, ie. high, targets will clearly mark out a project as being ambitious, and therefore perhaps more eligible for funding. Yet as these targets accumulate the burden on delivery can quickly become onerous. It may be tempting to up the figures to win the bid, but this may become problematic to deliver. In some cases it may be simple naivety that dictates how many minority-owned new businesses in a certain sector in a certain geographical area are to be supported. This may particularly apply when the bid is written by someone who will not be involved in project delivery. Whatever the cause, the result can be a prolonged exercise in 'chasing the numbers', however unrealistic these may prove to be. This can lead to some interesting machinations in prioritising who to work with, in what way, for how long etc. If the metrics for working with a business are, for example, a one-off consultation or five full days of assistance, with no intermediate measure, there is no incentive to pursue cases which may progress but are unlikely to be converted from the lower to the higher metric. Tactical decisions might then be made within the project delivery team to pursue further targets at the expense of other perhaps worthwhile outcomes which would be invisible to the project's auditors. A more sensible approach would be to seek to redefine the targets, and thus the scope of the project, but this may not be possible.

Ephemerality

The timeline of a two-year knowledge transfer project working with a number of small business partners might look something like Figure 1.

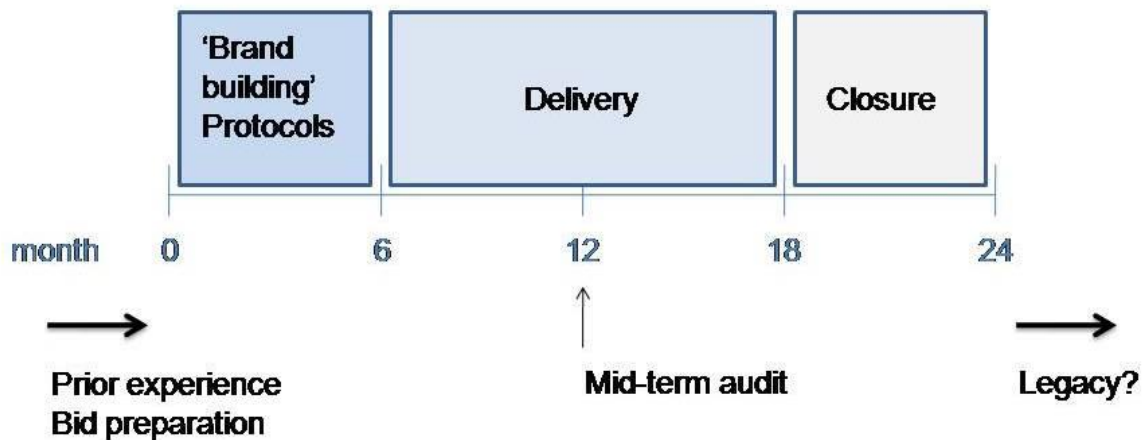


Figure 1. Timeline of an example two-year knowledge transfer project

This example project includes ongoing recruitment of collaborators. A phase of initial 'brand building' is needed to raise awareness of the project among its target audiences in order to recruit participants. This effort must first be planned. It should also be preceded by the design of transparent procedures and protocols by which to conduct multiple collaborations. As a result, there may be little recruitment in the first six months. This launch phase might be speedier if those involved have relevant prior experience, or are building on existing activity (clearly preferable to a 'cold start'). A final closure phase is also likely, in which efforts are focused on completion of final project reporting. The delivery phase of the project, in which active collaboration takes place, may thus effectively be limited to the middle section of the timeline shown in Figure 1. Project legacy is also relevant. Much effort may be devoted to establishing a project, as suggested, but this may not always include a consideration of continuation beyond the project's end. In such cases opportunities to consolidate and build-on the success of a project may be quickly lost.

The reporting burden

What if useable and acceptable procedures and protocols to handle collaborations are not set-up in advance of recruitment? These may not be provided by the funders, in which case much effort will be devoted to *post-hoc* attempts to impose consistency on the paper trail generated by those live and messy real-world collaborations. If clear reporting procedures are not in place from the start, or those used are found to be unacceptable to the funders, then problems will arise. This problem increases in line with the level of reporting required. In some cases it can seem that the reporting procedure becomes more important than the actual outcomes achieved by a project, resulting in a culture of 'ticking boxes' rather than doing more perhaps meaningful work.

Managing expectations

Delivering on the promises made to collaborating partners in knowledge transfer is basically a case of living up to what you say in your promotional material. Pressure to recruit partners may lead to exaggerated early promises which delivery may not live up to. An obvious key requirement is that you are qualified to deliver on any promises made; a failure to manage expectations can only result in dissatisfaction. This boils down to conveying an accurate and consistent message across all modes of communication; otherwise your promises can quickly begin to overstretch your capacity to deliver. A tendency to promise too much may lead to academics 'bending over backwards' to satisfy expectations. A related issue is the level of coordination that exists in the academic provision on a knowledge transfer

project. This is especially pertinent where academic engagement is spread across several individuals or institutions. Internal mechanisms must be in place to ensure consistent and coordinated academic involvement in collaborations with external partners.

CONCLUSIONS

This paper considers some of the less successful, more problematic aspects of knowledge transfer project design and delivery. It derives from personal experience as an academic engaged in several projects in the area of Designing for Sustainability. The paper attempts to identify some of the pitfalls in project design and delivery. It evaluates notions of success and failure in knowledge transfer, highlighting potential mismatch between real and reported success, and potential tension between useful outcomes and assessed project outputs.

This discussion is particularly relevant to the field of Sustainability, in which the examples which inform this paper were all conducted. The challenge of moving towards more sustainable development is primarily that of putting theory into practice, hence the theme of this conference. This is an area in which knowledge transfer can have a significant impact in effecting positive change by generating productive collaboration between academics and the 'real world' outside academia.

By examining the 'negative case' of less successful aspects of knowledge transfer, the author hopes to make a constructive contribution to worthwhile future activities, particularly in the area of Sustainability. The issues raised here may apply more broadly, in which case it is hoped that this discussion alerts others to some of the pitfalls in project design and delivery. This paper responds to a perceived lack of best-practice guidance in this kind of academic work. Knowledge transfer is a potentially powerful mechanism to facilitate collaborations between academics and new partners. The views expressed here are intended to help us deliver on that promise.

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