# Knowledge transfer partnerships: a case study

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# **ABSTRACT**

Knowledge transfer partnerships (KTPs) enable universities to work collaboratively with businesses and other organisations. KTPs have mutual benefits for both organisations, enabling the university to increase its commercial potential and business/service organisations to increase their capacity for growth, development and sustainability. This article presents a literature review of KTPs followed by a case study of a KTP between a university (University of Greenwich) and a charity (The Metro Centre), which provides services to people experiencing issues related to sexuality, gender and diversity and that primarily supports lesbian, gay, bisexual and transgender (LGBT) people. An evaluation of this KTP has demonstrated gains and benefits for both the university and Metro, primarily in terms of increasing the evidence-base of the work of Metro and developing its research capacity. This has resulted in the acquisition of significant national funding for a range of projects and studies related to the aims of both the University and Metro.

Key Words: knowledge transfer partnership • collaboration • partnership

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Knowledge transfer partnerships (KTPs) encapsulate how universities can meet the needs of business and other organisations, including small and medium enterprises, with a focus on local partnerships. Increasingly, universities have to demonstrate the economic value of their activities and by engaging with the KTP, the university has the opportunity to increase its commercial potential. Moreover, providing research expertise to medium enterprises can enable those enterprises to create their capacity for sustainable development and growth which in turn can raise their capabilities for having a positive impact on the health needs of more people in the local population.

This article examines a KTP between a School of Health and Social Care in one university and the Metro Centre, a charity based in south west London. The article presents the background the KTP, drawing on the literature related to KTPs in

the UK, and examines the benefits and positive outcomes form this KTP between a university and a local charity

# **Background: The Metro Centre**

The Metro Centre (METRO) is a charity based in Greenwich, London, which provides services to all people experiencing issues relating to sexuality, identity, gender and diversity. At its core, METRO remains a local charity dedicated to supporting lesbian, gay, bisexual and transgender (LGBT) people with firm anchors in the local area and has important and long-term ongoing support from both the NHS across London and from most local authorities in London.

From its inception, METRO has taken a holistic approach to LGBT health and wellbeing, and continues to acknowledge that its ability to create supportive environments for LGBT people depends not only on its strengths as an organisation but also on its capacity to build alliances and partnerships that empower all people who confront discrimination because of their sexuality, gender and/or identity, or their human immunodeficiency virus (HIV) status.

In recent years, METRO has developed a range of specific partnerships with individuals and organisations that support African people and communities affected by HIV. These have resulted in METRO providing a range of services for African people living with, or at risk of becoming infected with, HIV, including mentoring, community mobilisation, HIV and STI testing, general health screens, contraceptive advice, sexual health promotion, community development and outreach. These activities for African communities have been consolidated and expanded since METRO merged with Harbour Trust in December 2010, as Harbour Trust had a long history of supporting African people affected by HIV.

In a period of transition for the sector in which METRO works, the KTP has been a timely addition to the partnerships in which the organisation engages. The KTP has worked alongside the changes that METRO is making to ensure the long-term viability of the organisation in the context of reduced funds from statutory bodies for third sector organisations. Although it has not changed the business of the organisation, the KTP has strengthened METRO's ability to manage and lead change.

# **Purpose of the KTP**

The overarching aim of the KTP was to strengthen the quality of existing services and to develop new services, as outlined in its strategic plan for 2009–2014, which recognised that the company must undertake research in its core areas of business—sexuality, gender, identity and diversity. The KTP, therefore, aimed to build the research capacity of staff and volunteers to enable them to use and conduct research and to access and contribute to the evidence-base in these core areas of business. By building research capacity the aim was to improve knowledge in these domains and enhance research capacity to ensure that METRO remains a leader in

a constricting and competitive third sector funding environment. METRO wished to become better able to identify, prepare, critically assess and respond to funding and commissioning bodies, and be able to deliver effective health, welfare and social care services for statutory commissioners.

# Literature review

Knowledge transfer partnerships (KTPs) are a UK-wide programme enabling organisations to improve their competitiveness, productivity and performance (Research Councils UK, 2013a). Through a collaborative partnership, organisations benefit from the extensive expertise and knowledge which exists in UK educational institutions. The organisations involved are diverse and include the business community, the health and social care sector and local authorities. The institutions involved include higher education institutions, further education colleges, public sector research institutions and research and technology institutions are referred to as the knowledge base institutions (KBIs).

KTPs are beneficial to both partners at a number of levels. For KBIs, they offer the opportunity to be creative and innovative, to apply their research and knowledge to authentic challenges in real life settings and to engage in fruitful, strategic interaction with the organisations, thus enhancing their understanding of business priorities and processes. KTPs also offer KBIs the potential to improve the quality of teaching they provide by enhancing academics' understanding of reality of the 'workplace'. In addition, KTPs enable KBIs to enhance their academic reputation through increased research income and the consequent generation of papers, presentations and publications. For the partnership organisations, KTPs offer the opportunity to develop their competitive advantage through the transfer of knowledge and expertise:

'As a result of a single KTP project lasting between one and three years, an average business benefits from an increase of over £220000 in annual profits before tax, the creation of three genuine new jobs and an increase in skills of existing staff. (Technology Strategy Board, 2013a)

KTPs also present the option of embedding a culture of innovation in their organisation through working with academics and highcalibre graduates.

KTPs were launched in 2003, replacing a previous model of business and educational collaboration, the Teaching Companies Scheme. Since 2007, the Technology Strategy Board (TSB) has managed the UK-wide programme. The TSB is a public organisation which reports to the Department of Business, Innovation and Skills, and works closely with the UK Research Councils (Research Councils UK, 2013b). The aim of the TSB is to help to broker success by enabling business, industry, research and learning organisations to collaborate on innovative projects and reach their full potential (TSB, 2013b).

KTPs provide an important element of the TSB's toolkit to increase the capacity and capability of key members of the UK innovation system (Council for Industry and Higher Education, 2012) (CIHE). They are funded by twelve Government organisations led by the Technology Strategy Board, each KTP is partly funded by government with the balance of costs paid for by the collaborating organisation. The government grant is paid through the KBI, average project costs are around £60 000 and larger companies tend to receive a lower level of funding (TSB, 2013a). There are approximately 800 KTPs in the UK and the partnerships last for between six months and three years (CIHE, 2012).

## Knowledge transfer

Historically, business innovation has been 'closed', occurring within the internal research and development departments in large organisations. In this traditional model, based



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upon a more authoritative model of knowledge development, organisations generated their own ideas, developed them and took them to the market supporting their use as an integrated business model (Chesbrough, 2003). Gibbons et al (1994) suggest that a new form of knowledge production started emerging at the end of the twentieth century which was context-driven, problem-focused and interdisciplinary. This model is manifest by creating multidisciplinary, fixed term teams to investigate specific real world problems to develop new knowledge which meets the needs of the twenty-first century. Gibbons and his colleagues labelled this 'mode 2' knowledge production and distinguished from traditional research, which they labelled 'mode 1', which was investigator-initiated and disciplinebased knowledge production and appropriate for the twentieth century. Due to the pressures and implications of global forces and the global flow of knowledge, the closed innovation model is no longer sustainable and KTPs are part of a new paradigm of open innovation (CIHE, 2012).

Open innovation has also been driven by the increased mobility and transience of human resources and capital for example the ability of skilled and experienced people to work in a range of companies and countries, an increase in the number of skilled graduates and the fact that closed knowledge silos with their linear processes have been weakened by the decreasing shelf life of technologies and services (Chesbrough, 2003).

### The nature of partnership: barriers

The two KTP partners create a team to undertake a project of strategic importance to the organisation. The KBI identifies an academic partner (the Knowledge Base partner) with the appropriate skills and expertise to supervise the project and the organisation employs an associate, often a postgraduate researcher or a university graduate, to work under the supervision of the knowledge base partner (Technology Strategy Board, 2013).

Bruneel et al (2009) note that the process by which organisations work with universities is becoming more difficult. In a survey of organisations with significant experience of working with universities, it was found that the The two most cited barriers to effective partnership were the long-term research orientation of universities and the lack of suitable government research programmes?

two most frequently cited barriers to effective partnership were the long-term research orientation of universities and the lack of suitable government research programmes in specific research area; other barriers identified included the rules and regulations of universities and government and concerns regarding confidentiality and intellectual property (Bruneel et al, 2009).

# The nature of partnership: facilitators

A number of facilitating factors required to promote successful KTPs has been identified and is referred to the 5 Cs model (CIHE 2012). The factors are company recognition of an issue to be addressed through open innovation and knowledge transfer, co-recognition of this issue with a potential knowledge base partner, co-formulation of an innovation project by the partners, co-creation of new knowledge to address the issue and the commercialisation of the product created by the KTP.

Barriers can occur which will impair the success of the partnership can happen at any stage of the project. Gibbons et al (1994) and Ternouth (2011) identify the importance of gate-keepers in collaborations between organisations and KBIs to incorporate knowledge into a business application. Gatekeepers play a crucial role in the processes of translation and transformation across the partners' boundaries. Following its survey on KTPs, the CIHE has updated the term gatekeeper to 'boundary spanner' to manifest the shift away from the more pejorative 'blocking' meaning the term gatekeeper may have, towards one which

encapsulates the facilitation and communication work this role requires (CIHE, 2012).

# KTPs in practice

KTPs vary in their nature and range across a wide number of partnerships. Three examples of KTPs demonstrating their diversity follow are described.

# Kingston University, the local authority and the Metropolitan Police Force

Kingston University engaged in a KTP on behalf of the Metropolitan Police at Kingston borough level, to work towards an understanding of and engagement with black and minority ethnic groups (BME). The partnership was funded by the Economic and Social Research Council. The police and local authority believed that there was a much more work to do in improving communication and encouraging engagement with the BME community. The project aimed to identify: the extent to which BME participate the community life of the borough and the barriers to BME engagement with the authorities (Davidson, 2010). The project was led by a professor, and two government placement fellowships were held by associates who successfully gained access to the community to carry out interviews, conscious of cultural differences, sensitivities around the topic and expected difficulties in establishing contact. From the findings, ten practical recommendations were made.

# Newcastle University and JRI Orthopaedics Ltd

As a research group, Centre for Rehabilitation and Engineering Studies (CREST) at Newcastle University had established strengths in upper limb biomechanics. In particular, it held a patent on a novel design of shoulder replacement appropriate to the increasing numbers of older

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people needing surgical treatment (Newcastle University, 2102). JRI approached CREST, because, as an organisation, JRI lacked detailed knowledge and experience of the highly specialised area of shoulder biomechanics, implant, instrument design and surgical techniques. A KTP was established, funded by the TSB and the Northern Way (a collaboration of three northern regional development agencies) which led to a new product range for the company and further research experience for the university. In just three years the partnership developed an innovative shoulder system which has successfully been exported internationally.

# Durham University, North East Offender Health Commissioning Unit and Her Majesty's Young Offenders Institution Low Newton

The three main stakeholders of this KTP were the North East Offender Health Commissioning Unit (NEOHCU) (primary project funder), Durham University (academic partner), and Her Majesty's Young Offenders Institution (HM YOI) Low Newton (business partner). In addition, the three year partnership was supported by the National Self-Harm Expert Reference Group with cross governmental representation alongside professionals and in service users. The partnership had a number of aims: to reduce the number of self-harm incidents, and their cost, to identify measures which would permanently reduce the incidence of self-harm, to improve morale among prison staff dealing with self-harm and to ensure the findings from the KTP inform national policy (Durham University, 2012).

Following the KTP, it was found that there was a reduction of 56% in recorded incidents of self-harm—although other developments were also taking place in the prison simultaneously. The total continued savings following the KTP were anticipated to be £684 000 over the next three years. The authors conclude that the KTP's success was attributable to the methodology of the KTP which inculcated collaborative, multidisciplinary working relationships in the prison and crucially, the active involvement of staff and women in the partnership.

These three examples of KTPs were offered to demonstrate the diverse ways and diverse organisations that can work in partnership. In summary, much of the literature regarding KTPs and their the impact of has been found to be grey literature, that is, informally published literature such as reports and monographs found on the research pages of the websites of universities and partner organisations. The benefits of grey literature are that it tends to be contemporary and original. However, it can mean that knowledge about KTPs may be difficult for a wider audience to access and therefore benefit from.

# The KTP between Greenwich University and METRO– how it worked and why it worked well

Working together was interesting due to the very different organisational cultures—particularly in relation to approach to research. For METRO, research was a means to an end and was used to justify resource allocation and their continued 'raison d'etre'. The university, on the other hand, came from a culture where there was greater emphasis on the rigour and systems associated with conducting and disseminating research.

However, both organisations shared a commitment to improving the health and wellbeing of individuals who identify as LGBT or who experience issues related to sexuality, identity, gender and diversity. Each of the partners therefore understood each other's language and shared common goals. However, during the KTP both learned about each other and it served to break down some myths and stereotypes. A mutual respect evolved and an acknowledgement of the differing qualities and skills that both partners possessed. The partnership also helped to demystify research.

The KTP lasted for two years; due to the nature of KTP's was highly structured, which meant the team had to stay focussed, keeping to the clearly identified objectives and timescales that had been identified during the KTP bid. This was overseen by the KTP advisor who was very disciplined himself, and who therefore ensured the same discipline was adopted by the individuals involved from across both organisations.

The KTP started at a time of economic uncertainty when METRO was focused on ensuring that it retained its funding sources. The onus therefore was on the KTP Lead to clearly explain the aims of the KTP, present the opportunities for staff and the organisation, and gain trust. This was crucial as the staff at METRO were potential key beneficiaries of the project. Regular meetings took place, which is a requirement of any KTP, and the meetings were informal but business-like. Decisions were made and actions and key people responsible were identified.

This KTP was perceived as a true partnership. The university was not seen as the holders of knowledge to be transferred; the knowledge base of the partner (METRO) was always fully acknowledged and recognised. There was stability in both organisations with no change of personnel involved in the KTP during the two years.

There was a committed and organised KTP Associate, who was not worried about working across two organisations and managed very effectively to navigate the bureaucratic arenas. The groundwork undertaken in preparing the KTP bid meant that there were already excellent working relationships which made the Associate's induction into both organisations more seamless.

The infrastructure that was prescribed as part of the KTP bidding process informed and guided the implementation of the KTP and it set clear boundaries for both partner organisations.

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The structure was clear, realistic with clear timescales and, most importantly, there was complete support for both organisations and the people involved were very competent and highly motivated to succeed.

# Impact of the KTP between University of Greenwich METRO

Evaluation of the KTP between the School of Health and Social Care at the University of Greenwich and METRO identified gains and achievements specific to METRO, gains and achievements for the university and gains and achievements for both organisations. Both organisations derived benefit as there was a two-way flow of knowledge and the benefit extended as much to the university as it did to the organisation hosting the KTP.

## Gains for METRO

As a result of the knowledge transfer partnership, METRO and its staff have assimilated new knowledge and capabilities which shall benefit the charity.

A research needs assessment of METRO staff was undertaken which resulted in the provision of a research study day and critical appraisal skills training events. The research training day focused on gathering and analysing data and information which is essential to facilitate outcome measurement. Therefore, the research study day covered the main steps of survey/ questionnaires including survey design, the collection of accurate data and the analysis of data. As a result of training events there was a substantial increase in the use of different survey tools (e.g. SNAP 10; Survey Monkey) by a substantial number METRO staff which has helped the organisation enhance and refine its data collection and analysis techniques.

In addition, critical appraisal training days were provided to METRO staff by the university. A Critical Appraisal Training Programme was a more intensive avenue undertaken to arm 20 members of staff with the ability to effectively critically appraise research in their field and apply the findings of this to their particular field of practice

The training days were followed up with a

monthly bespoke research bulletin provided by the Associate for METRO staff. The monthly bulletin ensures that staff were aware of the latest knowledge and trends within their particular field, as well as outside their field. The bulletin provided journal papers and other events, such as conferences and seminars. For example, 'Criminalising Homosexuality' organised by the Royal African Society was attended by a number of staff after publicising it through the bulletin.

As part of the KTP, the METRO Needs Assessment 2010/11 Survey was conducted. The provision of a range of research training initiatives by the university for Metro Centre staff has enabled METRO to double the number of respondents from their previous needs assessment survey as the staff had new opportunities to develop more sophisticated techniques of data collection from its service users.

The need assessment captured the comprehensive needs of about 420 people across London and this provided a substantial sample upon which analysis could be made, providing data related to hate crime, HIV and sexual health, and the types of services accessed for issues surrounding drugs and/or alcohol. The findings from the needs assessment enabled METRO to have a better research-informed understanding of the health needs of its service users and the wider population. It appeared that the KTP helped to bridge the theory practiced gap. It confirmed that despite the wide ranging expertise within METRO, prior to the KTP METRO staff did not draw widely on research to inform their practice. Through the KTP the staff overcame the barrier that practitioners often perceive about research and its usefulness in practice. Through the university's research expertise, METRO developed an evidence-base for its work. For example, staff were assisted to examine some of the studies related to the invisibility of people from certain minority groups (King et al, 2008; Meads et al, 2009), which showed a causal link between being LGBT and poorer health outcomes. This, in turn, has informed some of the work undertaken by METRO.

METRO was in a strong position to bid for newly commissioned services and to lobby for the construction of new services with the limited funds available. These opportunities arose with the passage of the Health and Social Care Act into law?

# Gains and achievements for the university

Within the university, funding from the previous Research Assessment Exercise (RAE) was obtained by the School of Health and Social Care to undertake a systematic review to examine protective factors among LGBT young people, this opportunity arising from a scoping review undertaken as part of KTP work stream. lesbian, gay, bisexual and transgender health and wellbeing has subsequently become a key focus for research within the Centre for Applied Social Studies, which houses a sexual health specialist research group.

# Research gains and achievements for both

METRO and the University were awarded joint funding (£500000) from the 'Big Lottery Fund' for the National Youth Chances Project, a national research study with 16–25 year old LGBT across a five-year period. In addition METRO has been successful in bidding for funding from the Cabinet Office (Transition Fund). This funding (£365000) will be used to facilitate third sector organisations to decrease reliance on statutory funding. The success of this funding bid was partly due to the research capacity building activities associated with the KTP and is allowing the charity to diversify its sources of funding to increase the range of services that they are able to offer. The success of

this bid is due to the insight that has been gained from the KTP, which has given METRO greater insight into the needs of our service users and the gaps in services in our local and regional area.

Furthermore, METRO was in a strong position to bid for newly commissioned services and to lobby commissioners for the construction of new services with the limited funds available. These opportunities arose with the passage of the Health and Social Care Act 2012 into law.

Other new contracts gained by the Metro Centre as a result of the KTP with the University of Greenwich are:

- Trust for London (working in capacity building for LGBT and Asylum support organisations): £45 000 across two years
- Ministry of Justice (working with victims of hate crime): £90 000 across three years
  In its Strategic Plan for 2009–2014 METRO has developed five workstreams, one of which is dedicated to business change that will place the organisation in the best possible position to retain current and capture new sources of income in the years ahead. This workstream has been supported by the KTP as, for example, it has allowed METRO to build new and improve assessment tools for use with service users to assess their satisfaction with current services and plan for new ones. Finally, a number of joint papers have been presented at conferences relating to the work of the KTP.

# **Sustaining the gains**

The new knowledge and capabilities acquired through the knowledge transfer partnership are being are being embedded into the business of METRO in several ways. The transfer of knowledge shall be continued with the award of an honorary lectureship contract by the university to key members of staff at METRO. This provides access to the university's electronic resources, research groups and library facilities; it is envisaged that this will enable the sustainability of the research bulletin.

The METRO Research Day has become an annual event, occurring each year to coincide with World AIDS Day. The event primarily focuses on research, knowledge and service delivery at METRO but also has invited guests

from the University and beyond to add new knowledge and value to the organisation. Evaluation from the inaugural event suggested that there is scope for the half-day event to be more comprehensive and to include, workshops, detailed question and answer sessions and additional speakers. This will have the dual purpose of embedding the concept of research into the fabric of the organisation and enhancing its credibility and reputation as an evidence-based organisation which seeks to be at the forefront of current knowledge and thus practice.

# **Conclusion**

One of the main legacies of the KTP is that METRO staff are using new skills gained across the duration of the programme. Staff have been able to build their skills relating to bidding for funding and for moving beyond the core LGBT services, resulting in new work for the benefit of service users.

KTP's do not have to be 'scientifically' driven (through mode 1 knowledge) like some of the classic KTP projects. They can address knowledge transfer in the 'softer' science perspective (mode 2 knowledge), where it is more difficult, though not impossible to quantify in economic terms.

The university's expectations of the KTP have been exceeded in terms of benefits to the university derived from the KTP in terms of ongoing links with METRO and the potential for further work which has arisen. The university has cemented its links with METRO and has strengthened its networks within the sector. This is epitomised in the successful joint award of lottery funding for the five year national survey of 15000 young LGBT people that will aim to improve their quality of life. Currently, 9200 young people have responded to the questionnaire making it the largest survey of this population in the world. Working together has been a meaningful and worthwhile experience for both organisations involved in this Partnership.

A gap exists for research capacity building and there is potential for adopting the strategies employed through the KTP as a 'toolkit', which could be used by a range of organisations beyond the health and social care arena.

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