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Knowledge exchange: capacity building in a small university

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Abstract

Purpose – The aim of this paper is to examine an early articulation of some of the key factors in building capacity and the potential for knowledge exchange (KE) within a small, learning and teaching-oriented organization.

Design/methodology/approach – An action research study is planned as a practical enquiry. In common with other action research, this study is being carried out in a single organization and is aiming to devise and plan changes in practice.

Findings – A reorganization of the institution in line with policy is critical to ensure that the university insulates itself from the significant risk of knowledge isolation. The context, a relatively static workforce, a learning and teaching focus and the size of an organization may effect its ability to be responsive and knowledge productive in KE.

Research limitations/implications – Early insights relate to a reorganization of systems to support KE and the context in which that change will take place. The paper seeks to propose a way to research organizational change in a university in the face of new policy and strategic drivers.

Practical implications – A critical understanding of policy promoting KE is a sound underpinning to practice and strategic improvement in the area. The purpose and values underpinning enterprise initiatives can legitimate a university to reclaiming a pivotal social and commercial role in regional regeneration.

Originality/value – KE supported by a small university requires “strategic capability”, as proposed by Harrison and Kessells. A workforce competent to deliver on three critical factors within the organization; economic performance, knowledge productivity and learning capability.

Keywords Organizational development, Higher education, Action research, Knowledge transfer

Paper type Research paper

Introduction

Knowledge transfer and knowledge exchange are recently devised terms to encourage a recommitment from the university sector to build capacity for research and enterprise activity and to make a knowledge contribution to society. This renewal of an ancient purpose to research, then teach and then apply knowledge is intended to bring about new or improved products and service in respect of commercial or public services. It is perhaps also a change of emphasis. Where traditionally knowledge production has been a goal, the sector is now being encouraged to participate in the use and application of knowledge and universities are in receipt of a range of funding to support innovation and the infrastructural changes to the organizations to support this goal.

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The opportunity for this form of enterprise is generally recognized to be the appropriate partnering of academic practitioners (either researchers, academic tutors) with commercial or private, voluntary or charitable organizations to deliver knowledge-based outcomes to critical social or commercial problems. This may result in spin off companies' intellectual property (Wright *et al.*, 2004) but this traditional means of capitalizing on research is not becoming the norm, in spite of considerable effort and investment in these research-based products. An alternative model and an equally important demonstration of academic accountability in relation to knowledge production is a commitment from the universities to allow academics to gain experience and expertise as consultants and curriculum developers and thus achieve strategic objectives with commercial or public sector partners. In this way, higher education institutions (HEIs), demonstrate a new role and becomes accountable to regional communities and economic development.

Typically, organizations that are able to transfer knowledge effectively are more productive and more likely to survive than those that are less adept at knowledge transfer (Argote *et al.*, 2000) and some organizations are able to realize remarkable increases in performance through knowledge transfer and exchange processes. The organization's knowledge base is as important as its ability to correctly appraise the external environment. The aim being to anticipate knowledge need and capitalize on the knowledge transfer in a productive partnership. But successful knowledge exchange is difficult to achieve and sustain and is a process development (Szulanski, 2000) in which academic staff share their knowledge with others to innovative projects and create sustainable partnerships.

The participation in enterprise activity has a less well-established tradition of scholarship and is often regarded as less relevant than research activity within HEIs. This is seldom due to a lack of interest in "real world issues" but a result of the research assessment exercise (RAE) which until very recently has offered the universities a financial and reputational incentive to engage in research over knowledge based partnership activity as demonstrated through individual tenders and joint projects.

The academic institution has the advantage of being a highly complex knowledge-based organization (Barnett, 2004) with an emerging role related to creating knowledge and frameworks of understanding to support society and purposeful living. The higher education institution has then, a range of competing priorities, in relation to academic workload, income generation and academic credibility alongside any energy or vision to become enterprising. Any new strand of activity (knowledge transfer and exchange being regarded as a new imperative) needs to be considered alongside the existing commitments and priorities and undertaken in such a way as to add value, rather than "add toil" to the existing system.

Policy promoting knowledge exchange

A key aim of Higher Education Funding Council of England (HEFCE) is to enhance the contribution of higher education to the economy and to society. The sector is also seeking to secure public interest and confidence through a demonstrated role and engagement in the knowledge economy:

Stronger partnerships will be encouraged between HE institutions in each region and the Regional Development Agencies (RDA) and other agencies charged with promoting economic development (DfEE, 2003).

So-called third stream funding began in 1999 with the introduction of funds to institutions to build their capacity to respond to business and the wider community. This stakeholder approach to higher education is supported by “Innovation Funding” (HEIF), which is now in a fourth round. The HEFCE seeks to identify the outputs in terms of; deliverables, outcomes for business and community, value for money and improvements in effectiveness or efficiency. In addition, they want a demonstration of “distance travelled” in the development of a culture and academic/non-academic workforce that supports enterprise with organizational strategies to sustain HEIF funding beyond 2007.

The use of research knowledge in the commercial sector is promoted in the *Lambert Review* and this document sets out a strategic ambition to a partnership approach to research and development (R&D) in the production of new intellectual property (available at: www.hm-treasury.gov.uk/media/9/0/Lambert-review_final_450.pdf). It is intended to encourage and incentivise universities to capitalize on the trend towards global research networks and collaboration with business. In addition the policy related to employer engagement and the widening demand for partnership has prompted a range of response, one which reports on a survey of higher education for the Department of Education and Skills and the capacity for “business facing” and innovative response from the universities (Wedgwood, 2007). These policies and commentaries highlight the need for the universities to become “fit-for-purpose” in relation to the knowledge demands of industry. This has mainly related to technical and scientific outputs but a new challenge came in 2006 with the *Leitch Report*, which identifies “skills” as the agenda to support competitive advantage in British industry (available at: <http://www.dfes.gov.uk/furthereducation/uploads/documents/2006-12%20LeitchReview1.pdf>). This report somewhat altered the emphasis and sought a commitment from the higher education sector to promote and to enable skills learning in the workforce. The focus here was to build a vocational element into academic study and thus add value to the graduate through skills and usable knowledge. In many universities innovation and enterprise partnerships are now about shared curriculum development. The need to develop entrepreneurship through learning in higher education is a similarly linked initiative promoting innovation through the capability of graduates, which focused on their need to develop in areas such as networking ability and interactive learning (Peters and Ollsen, 2005).

Currently, the measures used to show success in enterprise tend to be based on the achievement of short-term income streams for the individual universities or commercially driven metrics used by regional development agencies. Enterprise cannot exist in a vacuum and knowledge transfer and exchange activity depends on a new understanding of academic activity as participative and “useful”, the intellectual response to the problem situations encountered in the public and commercial sector and society as a whole. Promoting “knowledge as understanding” (McLoughry, 2001) has been a neglected area and the following section is an attempt to see “exchange” as an organizational challenge for the higher education sector and consider the contrasting responses from the universities to manage the organizational change.

Towards sustaining knowledge exchange

In order to build capacity in an academic setting, a diagnosis needs to take place as to the way that knowledge is generated and used within academic practice, there are

clearly going to be discipline-oriented differences and traditions of the knowledge base. Science and engineering foster a more technical understanding and in contrast, vocational subjects, health and arts requiring a more pluralistic understanding and use of knowledge. Glanfield (2003) presents organizations as being mechanical, scientific and engineered and also complex, participative and dynamic systems. The pervasive understanding of any organization is evident in the day-to-day activity, but also in the history and economic imperatives which are considered to be the main concern of academic staff and of the leadership executive.

A number of basic factors come into early consideration when attempting to build capacity for knowledge-use. The schematic shown in Figure 1 contrasts large with small university and dissects this with a mission to undertake research or have curriculum with learning and teaching as a focus. It has been possible to identify a range of recognizable models of knowledge management and enterprise[1] within the different positions. Whilst distinctions are relatively crude, they are a starting point for the generation of a critical theory on which to base further explanation and analysis and of course, action (Van de Heijders *et al.*, 2002) The boxes aim to describe four different outlines of the ways that university approach enterprise activity. Figure 1 aims to identify the characteristic conditions which operate in higher education organizations.

Whilst 1992 is often cited as having created a split in the priorities and status of the organizations (traditional university and Polytechnics), there is some evidence to suggest that approaches to knowledge sharing can be distinguished between newer and older universities in their relative success in gaining external contracts and integrating the activity in a meaningful way for staff and students (McKeown *et al.*, 2006). The newer universities saw their role in relation to the policy agenda as linking with business and community imperatives, directly transferring knowledge. This was distinct from the more indirect knowledge transmission activities where university

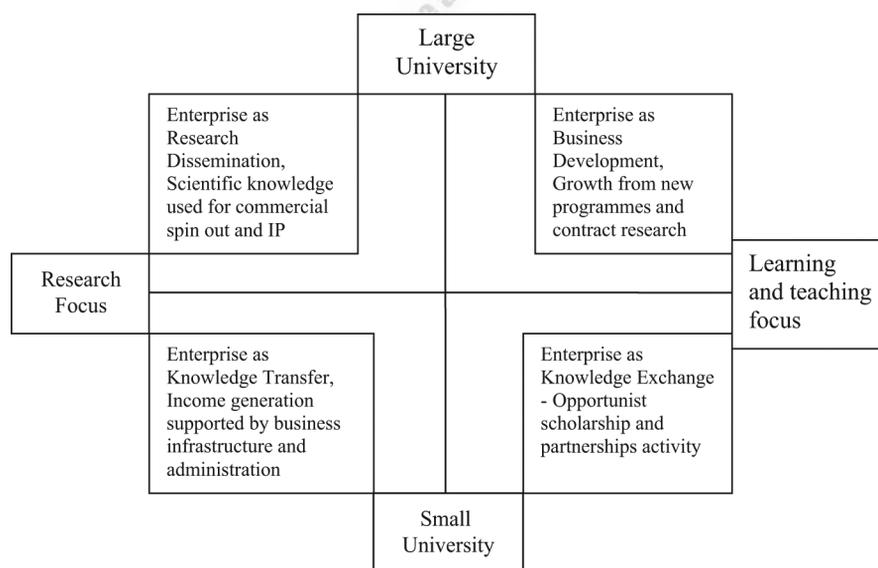


Figure 1. Range and scope of knowledge utility in universities

generated knowledge through research which gradually gets diffused into society through a variety of mechanisms (McGregor *et al.*, 2006), including graduates entering the workforce.

The suggestion here is that a simpler explanation based on of the size (number of staff and students) and strategic purpose and history which dictates enterprise style. A tension exists between the way that the system maintains the internal business, in the case of education, (the focus on undergraduate student and curriculum) and how it develops a capacity to innovate and engage in additional external consultation and engage in robust knowledge exchange. The size of the organization is of relevance in assessing the ability to appreciate external intelligence and assimilate and utilize knowledge. The infrastructure and support systems to support organizational learning need to be considered alongside the incentives to reward externality and partnership projects. Size is a consideration the generation of absorptive capacity and of knowledge exchange in relation to the strategic goals of the organization (Lord and Farrington, 2005) and it is clearly of relevance when aiming to grow reputation and ability to deliver on external contracts and sustain partnerships. In a small organization the resources are used to maintain the core business and the ability to diversify and grow, opportunity is likely to be proportional to size.

Policy pressure and Research Assessment Exercise (RAE) preparations provide a perverse set of incentives for the smaller organization for which the credibility of a research culture is balanced with a pragmatic need to use opportunities open to it and capitalize on partnerships with local and regional entrepreneurs and regional development agency with which it can partner on key strategic outcomes. An example of this may be considered as sustainable regeneration, a focus on region-wide commercial and economic targets and the possibility of knowledge exchange in multi-professional teamwork in the service of community. The flexibility and generative capacity within the academic workforce could be a significant asset, given the correct systems level responses from human resources and within the financial management of the faculties.

The change process in any organization is guided by the overt strategic planning process and a move in the direction of “knowledge exchange” as described, requires a specific and planned “turn” in the direction of organizational learning and a deeper academic commitment to the ambition of meeting the knowledge needs of a wider society. As many small organizations are aware, this purpose is not motivated by altruism, but rather by a need to become flexible and responsive to the changing demands of the wider market and the need to create a competitive advantage in relation to other education providers. Knowledge generation through research has traditionally been a lucrative opportunity for the sector and an imperative and responsibility, which most academics have incorporated into their ethos of practice. This is not the case with knowledge exchange and considerable work needs to be done if the system is going to be able to meet the policy agenda.

Strategic capacity

There is now considerable empirical evidence that demonstrates how different knowledge reservoirs, combined with different behavioural methods for knowledge transfer and exchange can show differentials in performance and bring about competitive advantage (Argote and Ingram, 2000) and have external impact.

Furthermore, by embedding knowledge production in the routines and interactions involving people (Argote and Ingram, 2000), organizations can both effect knowledge “transfer” internally and share and build the capacity for learning and exchange.

A “strategic capability”, as proposed by Harrison and Kessells (2004) is a workforce competence which relates to three critical factors within the organization; economic performance, knowledge productivity and learning capability. The term supports a view of organizational development as emergent and dynamic and one in which the workforce (in the case of the university, the knowledge worker/academic community) values its engagement with the external work explicitly to support the sharing of knowledge. An example of how knowledge exchange can demonstrate strategic capability is offered below:

An approach made by a Non Governmental Organization NGO with specialist expertise approached the university and requests a partnership to development and delivery a postgraduate programme. At the meeting attended by three staff from different subject disciplines, health, management and political science and from two different faculties, there is an opportunity to discuss the shared values of the university in relation to the NGO’s mission. The brand and strategic aims of the university are referred to at this meeting, the academic partners wishing to demonstrate that the university had an ambition in common (humanitarian aid) and that the partnership would be likely to sit well within a new “centre”, a structure devised by the university to support a whole systems response. At this early meeting the actions are set to share “collaborative agreement criteria” with the NGO and an additional offer is made to undertake a small piece of consultancy to support their internal processes and funding mechanisms in relation to taking a development forward. The estimated cost of the project is shared and the key people in the organization are named along with a key contact for any follow up contact. The conversation was described as energetic and productive (by the NGO representatives) and lead to further conversation between the three internal staff about the viability of a new MA programme.

Harrison and Kessells (2004) describe the need for employees to work from an understanding of the systems and processes of the organization but to engage with partners with an explicit aim to share knowledge and to “learn from doing”. The conversation in the example is based on academic staff knowing and understanding their own subject but also a commitment to enact the values and strategic aims of the university. A learning culture is critical to the development of strategic capability and often is a transformation necessary to the organizational growth. The social capital becomes the invisible web that captures the knowledge that exists and is shared within the community (Parker *et al.*, 2001). The challenge of building “strategic capability” is laid on a foundation of human interaction, mostly informal and unmanageable but in some areas possible to enshrine in terms of human resource structures or perhaps more significantly in the spaces and facilities offered, corridor water coolers and “common rooms”. To embed learning and knowledge production in the system the strategic management and leadership needs to make a cultural shift towards team practice and actively motivate and develop the ability to work in partnership.

One significant feature of strategic capacity is the ability to recognize the value of new external information and be able to assimilate it and apply it to innovation or improvement projects, include the development of products and services. High “absorptive capacity” is acquired through social and professional networking and boundary spanning and calls for high level skills in those areas not traditionally valued by organizations and especially new to the development plans of academics and

academic managers. A lack of absorptive capacity has also been found to be the most significant barrier to knowledge sharing (Szulanski, 1996), the lack of awareness of the importance of new information and knowledge, being an impediment to the assimilation and utilization of that knowledge. Change agents are particularly important in assisting others to recognize the benefits of adopting new ways of working (Jones, 2006) and this can be practically by instigating regular meetings or by adopting IT systems which promote exchange. Strategically, reducing the insularity of the manager and adopting integrative approaches to the functions of the organization promotes knowledge transfer. Other role definitions have been identified to fulfil and develop strategic knowledge sharing and the broker or “boundary spanner (Zahra and George, 2002) is also identified in the literature and in policy documentation (Clark and Kelly, 2005) as the person associated with knowledge stimulation, specifically in relation to research utilization.

The success of a small academic organization may relate to its strategic ability to encourage the knowledge worker to collaborate with the commercial community and internal need. Institutional scenario thinking opens up new opportunities by creating strategic conversation and scenario planning is used to build what is known this “strategic capability” (Harrison and Kessells, 2004), where managers and workforce are able to perceive market developments and expectations, accept failing initiatives and react accordingly as they might in a commercial, market driven context. It represents a rejection of formulaic routine planning and a bureaucratic dominance, which is highly regarded in the sector.

It is doubtful that this method, nonetheless engaging to some in the academic community, will result in a marked change to the level and range of knowledge exchange if other factors and functions of the organization are not a part of the re orientation and this is where it is essential to consider a whole systems approach. Like the owner-manager of a small to medium-sized enterprise (SME) the degree and direction of change is relative to the operational norms of the existing business. There is little room for exploring theories and testing ideas with an existing staff and infrastructure stretched to capacity.

Methodology

The study is taking place at York St John University, a relatively small institution gaining university status in October 2006. With nearly 6000 students, the University is committed to:

[...] the provision of excellent, open and progressive higher education that embraces difference, challenges prejudice and promotes justice, and is shaped by the University’s Church foundation.

The strategic plan aims:

[...] to build capacity and good practice in research and knowledge exchange” and this initiative is based on a commitment from the University to use knowledge to inform and partner with the local and regional community.

The University’s income in 2006/2007 was reported as £33 million. This includes an increase in funding council grants of 18 percent, this compares with published figures on percentage income from funding council grants is typically 38.7 percent of total income. Staff costs and other operating expenses make up about 56 percent of

expenditure undertaken in line with the learning and teaching activity. York St John University has learning and teaching orientation and is critically dependent on student fees, particularly those related to contracted activity with vocational education.

Of the academic staff who would engage in knowledge exchange, there are currently 193 full-time equivalent (FTE) with a head count of 224. The academic recruitment has remained stable over the last three years with a turnover of staff at 7 percent. This, results in a very stable, some would argue static community. The staff survey in October 2006 reflected a range staff perception, there being a strong acknowledgement of the “friendship and camaraderie” and also a clear understanding of their role and satisfaction in the work related to student contact. When asked if the current workload was unmanageable 53 percent disagreed although 82 percent saw their workload as having increased in the previous 12 months. This is of relevance to the current undertaking, being both a change process and of relevance to the workload priorities for academic staff. The university has recently introduced a performance development review and this, along with development opportunities may be used to steer academic practice towards meeting the strategic objectives of the organization. The role profile for senior lecturers to:

[...] participate in and develop external networks, for example to identify sources of funding, contribute to student recruitment and to secure student placements, market the institution, facilitate outreach work, income generation, obtain consultancy projects or build relationships for future activity.

With student engagement, clearly a priority in the context of learning and teaching organization the academics’ workload are being reconsidered given the requirement to externalize. The HERA contracts have been introduced to underpin recruitment processes, reward individuals and provide opportunity for progression. The academic’s range of activity and scholarship may increasingly be influenced by the aspect of the profile referring to knowledge exchange.

Methods

Action research makes use of varied methods and results in new learning and contributes to new knowledge (Warmington, 1980). The work of the researcher is essentially systems oriented and the interface between the many and various functions of the organization, including Human Resources, is an important aspect to balance with the central consideration of this study. There a range of different forms of action research and this study recognizes the researcher as “insider” position, creating the opportunity for “participative action research” (Herr and Anderson, 2004). The process of defining and articulating the problem and the potential solutions, will seek to validate the actions and participation of collaborators in the development of new enterprise activity. In the first stage, the “organizational diagnosis”; the research includes a semi-structured interview with a number of the executive of the university and several with the senior management team, including a dean and the director of Estates and Facilities. These methodological choices are based on the role and responsibility of the academic manager and their ability to understand and influence the subsequent activity towards building an “enterprise” capacity within the University.

A diagnosis includes a survey of all academic staff ($n = 196$) and a focus group of senior academics ($n = 5$) aim to illicit a wide perspective to support a dialogue and

further planning for specific and directed action within the university. Opportunities for projects and external consultancy will be shared among knowledge exchange-interested staff will allow the organization to identify a position and a business model for future enterprise.

The project has been framed and the research process agreed in such way as to show improvement in the organization, with the study expected to take place over a two-year period between May/June 2007 and September 2008. Stages of the action research cycle (Coghlan and Brannick, 2006) are recognized to include framing the context and purpose, diagnosis, planning action, taking action, evaluating action and writing up of project (see the Appendix).

The recently produced strategies for “Enterprise and Knowledge Exchange” will be taken into account and inform further development of the project. The implementation of the strategy, a shared responsibility between the faculties and the Research and Enterprise Office will inform the change process and has for example produced a definition of knowledge exchange for the University as:

Transfer of new or existing knowledge or expertise (additional to existing taught undergraduate or postgraduate provision) between University staff and external organizations, institutions or businesses or visa versa (York St John University – Knowledge Exchange Strategy, 2007).

The transparency of the research process and the democratic engagement of participants is a key requirement of action research and all participants/collaborators would be advised of the purpose and outcomes of the study. Supportive steer from the CEO is seen as essential (Zuber-Sherritt and Perry, 2002) in managing the complexity and potential conflicts of interests, (McKelvey, 2006) within the organizational development. The project, born of a policy imperative and a strategic objective is relevant to the organization, but may not be a priority for academic staff, still focused on their specific research interests or curriculum responsibilities. The proposal will be progressed by engaging academic staff and managers and is intended to systematically re-awaken the generative capacity of employees and channel it towards knowledge exchange and associated enterprise.

Initial focus; the human resource

Exploiting the talents of the university lecturer, or encouraging a wider role for the researcher or lecturer may be read as a managerial ambition. Those who value the autonomy and seclusion of individual academic practice may see the ambition as a distraction from teaching and learning or research and possibly as an unwelcome inconvenience. For others, the exploitation of knowledge to serve the real world context, and the opportunity to participate in external project management, offers a chance to self reflect and to learn, broadening the range of academic skills and participation[2]. Risks to an extended role in the wider community are; bureaucratization, individualism and a failure to present a moral and purposeful role for the academic community in the external market (Macfarlane, 2005). There is an ongoing debate as to the relative worth of serious and demanding external activity which is largely unrewarded by the university sector or seen as a voluntary contribution and thus does not attract the recognition or reward associated with teaching and research, colloquially speaking “won’t get you tenure, promotion or a pay rise!” (Macfarlane, 2005).

Higher education is populated by and has as its main resource the academic staff, which may be defined as “knowledge workers” (Drucker, 1993). A knowledge worker is necessarily free and autonomous using intellectual capacity within an organizational context (Weick, 1995; Argyris, 1993; Schon, 1983) and in a professional context (Eraut, 1994). Drucker recognized academic “knowledge workers” were thus regarded as having a practitioner level contribution to make and a responsibility to build professional competence to respond to the changing demands of the sector of relevance to their discipline knowledge. They:

[...] have to be prepared to live and work simultaneously in two cultures- that of the “intellectual” who focuses on words and ideas, and that of the manager who focuses on people and work (Drucker, 1993).

The university can be seen as an extreme knowledge worker environment where the mechanisms and incentives offered to engage with other organizations and individuals is critical to the level of engagement. The leadership of knowledge-based organizations may well be more successful if the emphasis is less on the controlling of knowledge and the ownership of intellectual property and more on the predication of outcomes and the identifiable causes and effects (Weil, 1998) of widened and multidisciplinary involvement. Some commentators support the view that academics possess many of the attributes necessary for successful enterprise; vision, creativity, the ability to think laterally, self-confidence, and dogged determination (Birley, 2002), others recognize the range of competencies may be limited by the culture of individualism in academic practice (Usher, 2002).

The traditional model of higher education as largely separate from society and “ivory tower” is an attempt to identify any possible intellectual spaces in which universities may enjoy a position of being their own end (Barnett, 1997). It is likely that the opportunity to network and engage in practical projects will enable academics to gain experience and expertise as consultants and social entrepreneurs (Kivinen and Ristelä, 2002). This could be usefully understood as “the scholarship of application” (Boyer, 1990) and is based on an understanding of service in academic practice (Macfarlane, 2005).

Conclusion

Capability building in the university sector is therefore summarized as a need to collaborate, to demonstrate critical understanding of policy, a strategic understanding of the organization, and a sense of service. Capacity for knowledge exchange relates to knowledge management and income generation but is ultimately dependant on the people who own and participate in shared activity and are enabled to do that by their organization.

Engagement between higher education institutions and their external partners and clients is growing in both scope and richness, driven by the needs and opportunities of the knowledge economy. The focus is increasingly on knowledge exchange, whether to offer research-based or education based services, or a combination of the two. Knowledge exchange is becoming embedded in institutional strategies, supported by a growing third stream of funding. This engagement, the relationships, opportunities and intelligence that surround it, require systematic control as well as sustainable and effective processes and data management. This paper presents a way of intentionally researching the required organizational change whilst at the same time engaging the

university community in a dialogue and subsequent action to improve the processes and systems that support external engagement. It will be important in due course to report on the outcomes of this study and consider how further policy development impacts on the organization.

The “stock-take” of the knowledge and attitudes of the academic and senior management community will, it is hoped, create the opportunities for further critical consideration of the issues and specifically identify and learn from different knowledge exchange activity across the organization. It is hoped, and is reasonably accepted that the action research process will specifically contribute to the implementation of the knowledge exchange strategy and incentivise academic scholarship in relation to application and knowledge use, beyond the organizational boundary and using a variety of methods. Other action research initiatives within the sector are needed to allow comparison of results among institutions and find measures for the range and scope of resulting enterprise activity.

In the case of the academic setting this presents significant challenges for academic management and faculty who may by virtue of discipline or aptitude be ill prepared for the speedy shift towards knowledge engagement. In this study, the range and level of academic contribution will show up the capacity and the capability of the institution and promote a change management process. Whilst there are clearly some early advocates and some latent dissenters in the system, the plan is to raise a significant dialogue and support a system wide improvement in relation to academic participation, with the hope that external partner demand is increasingly stimulated by the engagement in knowledge exchange.

Notes

1. An alternative dimension of pre- and post-1992 university might also have been legitimate but was not used due to a lack of perceived relevance to the particular university under discussion.
2. My role as academic lead for business development and innovation carries with it a strategic responsibility for the Faculty of Health participation in knowledge transfer and project management mainly in health related activity and for collaborative activity

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Appendix. Objectives

There a range of different forms of action research and my study would recognize my "insider" position, creating the opportunity for 'participative action research (Herr and Anderson, 2004). The study is a process of defining and articulating the characteristics of the potential and desired state with and for academics, in relation to the policy and practice of enterprise:

- to analyze the current level and scope of enterprise and knowledge transfer/exchange activity being undertaken with an appraisal of the external participant activity, undertaken within the academic university contract and within the academic role, (HERA definition of academic role) (methods; survey staff, identify exemplar contracts, interview academic participants);

- to identify and understand the barriers to knowledge transfer/exchange in the context of York St John University both strategic and operational and in relation to higher education policy (methods; critical appraisal of policy in relation to higher education, analyze minutes and strategy documents, interview senior staff);
- to plan interventions and share a framework of ideas (Checkland and Holwell, 1998) and method within the University (methods; monitor the results of KT/E activity, share knowledge and experience of knowledge transfer/exchange, evidence outcomes for HEIF3 and other activity, consider environment and a cultural norms);
- to take part in a change process and seek to capitalize on the knowledge, skills and experience and identify barriers to participation (methods; implement learning meetings, “KT/E associates programme?” investigate workload management methods, contribute to policy and procedure to replicate good practice, focus groups and interviews asking what practical support and guidance to sustain knowledge transfer/exchange);
- to reflect on the involvement and appraise the impact on the organization and formulate outcomes and recommendations (methods; organizational learning framework and tools for transferring and exchanging knowledge, critical friend conversations and appraisal of local enterprise strategy and of procedure and policy i.e. reward and incentive scheme, recommendation to human resources, i.e. academic staff development and appraisal process); and
- to appraise personal and professional learning and identify wider relevance of new knowledge (methods; evaluation workshop, critical inquiry into the cultural needs of academics and others to engage in enterprise, consideration of competencies and knowledge transfer/exchange skill).

About the author

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