'Researching practice': a first step in evaluating the complex practices in a universitycommunity 'Knowledge Co-op'

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18 months ago the University of Cape Town (UCT) established the UCT Knowledge Co-op Project to make the knowledge, skills and professional expertise within the university more accessible to external constituencies. The facility is based on the model of Science Shops which has been in use for decades in Europe and other Northern contexts. Various aspects of the model have been evaluated in this context (See e.g. Hende & Jorgensen 2001; Zaal & Leydesdorff 1987); yet the literature is scant on its implementation in more resource constrained contexts like South Africa where few community groups are aware of a need for research or benefits it might have to them. Because of this a research project was set up (with funding from the National Research Foundation in South Africa) in the first year of operating the UCT Knowledge Co-op to evaluate the facility as it develops. The study aims to develop new knowledge about the factors that need to be taken into account to transform the way the university engages with the community and develop a 'new contract' between science in its widest sense and society (Gibbons 2005). Such university-community partnerships are complex as they involve different constituencies with specific interests:

On the outside, HE-community partnerships [may] appear simply to involve multiple members with a common goal. But each member enters the partnerships with individual interests that are specific and more important to itself than to others... (Cox, 2000:9).

It is important to make visible the elements of this 'dynamic' in order to better understand how to improve practice in order to engage in ethical and authentic ways in the future (part of our goal for Year 2 of the project). In the first year a literature review was compiled (Penfold & Goodman 2011) and stakeholder interviews conducted at 5 research sites. This paper reflects on the theoretical framework for this study and explores some of the conceptual tools we have begun to draw on. It concludes with dicussion of how the work completed in 2011 informs a 'theory evaluation' of the Co-op.

University-community partnerships: 'boundary work' in higher education

In order to make sense of university-community partnerships, we argue one needs to shift the unit of analysis from individualised practices towards the transaction or boundary zone and develop conceptual tools to illuminate the complex practices that occur in the relationship and during the engagement. In developing our conceptual framework, we draw on the concepts from the work of Michael Gibbons (2005) on 'transaction spaces', 'boundary zones' and 'boundary work'. As Gibbons notes:

Boundary work needs to be facilitated and managed and to do this specific knowledge and skills are required ... engagement as a core value will be evident in the extent to which universities do actually develop the skills, create the organisational forms and manage tensions that will inevitably arise when different social worlds interact (Gibbons 2005:11-12).

Supporting Gibbons, Winberg (2006) talks about the usefulness of understanding transaction spaces in the South African higher education context. She argues that they are key to understanding the 'articulations between higher education and its contexts in the South African situation' and 'emergent transaction spaces' are important sites for negotiation between participants from a range of academic and non-academic contexts:

'transaction spaces' provide the means and processes by which macro, meso and micro concerns can 'speak' to higher education – as well as the means by which educators can 'talk back' to other contexts (Winberg 2006: 164).

With its focus on complex joint activities activity theory (Engeström 1996; Russell 2002;) provides a very useful starting point in defining a unit of analysis (the activity system) for exploring and understanding what are often very complex interactions and relationships:

AT provides a basis to understand how the activities in which humans engage shape their thinking and acting.... [S]ome AT perspectives focus on how situational factors shape human actions (e.g. Engestrom 1993). (Billett, 2002:85).

Our interest in activity theory is based on the potential usefulness of this set of perspectives i.e. to delineate a social practice and the factors that constitute it. Following Engeström (1996), there are 'three generations' of activity theory. In first generation activity theory there are three essential elements: subject/s, object/s and tools. The subjects are individuals or subgroups engaged in an activity (in our case, the broker). The object is the 'raw material' on which the subject brings to bear various tools, e.g. the 'object of study' (e.g. collaborative research, doing community service). In any activity system, the motive is linked to 'object' as it shapes the outcome of the activity's overall e.g. student learning, community needs met. Tools, both material and/or conceptual (Cole 1996), are understood as things that mediate subjects' action upon objects, i.e. they mediate or facilitate subjects doing things (e.g. a concept, a computer, or a text).

For the second generation, Engeström expands the framework to examine systems of activity at the macro level. The importance of this shift is that it foregrounds interrelations between the individual subject and his/her community of which he/she was a member. The community is the broader or larger group interacting in the activity and of which the subject/s is a part (e.g. students, educators and community members). The division of labour refers to the power relations and different roles that are evident in an activity, often causing contradictions in the system. The rules operating in any activity are broadly understood as not only formal and explicit rules governing behaviour, but also those that are 'unwritten and tacit', often referred to as norms, routines, habits, values and conventions (Russell 2002; Engeström 1996).

Finally, third generation activity theory is aimed at providing tools and concepts that can enable us to understand and explore multiple viewpoints, value systems and 'networks of *interacting* activity systems' (Daniels 2001, 91; emphasis added) where contradictions highlighted by contested activity system objects emerge.

Drawing on the tools of activity theory outlined, two features of university-community partnerships are made visible - what we call in the first instance an *expanded community* and in the second, a *dual* (but interrelated) object (McMillan 2008). These features that can impact the overall system, causing the contradictions that are often an inherent part of such activity systems (Engeström 1993).

University-community partnerships like those brokered by the Co-op involve an expanded, more diverse community than the traditional university-based one of students and educators. The 'community' in university-community partnerships also includes an outside community. Communities, and the respective activity systems of which they are a part, represent different ways of engaging in the world, different histories with specific tools of mediation, and different kinds of knowledge and ways of knowing, all of which can challenge the more traditional university activity system in significant ways.

The dual (but interrelated) object refers to the fact that there are both learning *and* service goals to be achieved through university-community partnerships. Third generation activity theory talks of the possibility of a 'contested object' across two activity systems when they interact with each other. This is because such partnerships are inherently not only about student learning but about some form of community *service* as well. Due to different motives, this inherent tension in university-community partnerships can impact on the outcomes of the partnership overall, challenging notions of what counts as 'success'.

The features discussed above, and the tensions and contradictions that result from these, are key to understand in complex partnerships such as those between university and community.

Brokers and 'boundary workers': mediating contradictions in the system?

In developing this frame we focused on the primary 'broker' (Wenger 1998) or 'boundary worker' (McMillan 2008) mediating these partnerships. According to Wenger, 'boundary work' is complex as it involves 'processes of translation, co-ordination and alignment between perspectives'. In order to influence the development of a practice, to mobilise attention and to address conflicting interests – in other words, to assist with learning by introducing elements of one activity system into another – requires legitimation on both sides of the boundary i.e. within the university and the community. The experience of the UCT Knowledge Co-op broker supports this:

Experience in both worlds is crucial because if I had not had the involvement in both research work [in a] university setup, as well as working in the NGO, I think it would be quite difficult to do this... and it's important [to help] two partners understand the respective contexts... (Interview 16.08.11)

However, because brokers often need to address conflicting interests of more than one constituency, they need to carefully manage the 'co-existence of membership and non-membership' of particular communities of practice (Wenger 1998: 110). These issues are key to understand going forward.

Conclusion: theory evaluation and broker roles

The NRF study team is still in the process of working through the findings from the 5 pilot sites in 2011 and finalising its conclusions, in particular with regard to the role of the broker. Some pointers as to how the theoretical framework is applied to one research site will be given in the conference presentation.

We conclude with dicussion of how the work completed in 2011 informs a 'theory evaluation' of the Co-op and some of the questions about the role of the broker that will inform the study going forward.

In year one of the NRF project (2011) we concentrated on conducting a theory evaluation on the basis of the stakeholder interviews. Theory evaluations attempt to unpack the logic behind the service utilisation and delivery systems of a given intervention. This evaluation aims to assess if the underlying theory of change is viable. The evaluation questions ask what are the Co-op's goals and objectives, are these well defined and feasible? The evaluation focused on understanding the Co-op's role in the engagement, including assumptions and expectations regarding the engagement with the target population and whether these are aligned with those of all parties (academic, student and community). It also sought to develop an understanding of the pilot project interactions so as to document lessons learnt in order to inform future practice. The provisional theory evaluation results suggest that while the Co-op's goals and objectives are clearly defined and the service delivery system is highly efficient the nature and flavour of the actual engagement between the stakeholders varies from case-to-case. The variance is directly related to diversity of constituencies and their contexts. The theory evaluation has elicited a number of key questions that need to be researched in the second and third year of the project. These questions are related to unpacking some of the activities and interactions that form the core of the Co-op's functioning. The purpose of this is to use these to formalise and institutionalise broad best practice guidelines for the effective management and utilisation of the Co-op's services for all parties into the future.

We end by providing a brief overview in the form of questions of some of the key themes emerging about the role of the broker. These reflect the emergence of our guidelines for ethical practice (focus on Year 2 of our project 2012):

- Where does the role of the broker begin and where does it end?
- O Whose role is it to ensure quality assurance the broker or the academic?
- What level of brokering is the focus between university and community or between student and informants?
- What kinds of skills, knowledge and values are required to be a successful broker?
- Where is the most suitable location for a brokering facility university-wide or in specific faculties?

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