

**AUTHOR:**Camilla Adelle¹ **AFFILIATION:**¹Centre for the Study of Governance Innovation, University of Pretoria, Pretoria, South Africa**CORRESPONDENCE TO:**

Camilla Adelle

EMAIL:

cadelleup@gmail.com

HOW TO CITE:Adelle C. Creating knowledge democracy in South Africa: The role of communities of practice. *S Afr J Sci.* 2019;115(7/8), Art. #5888, 3 pages. <https://doi.org/10.17159/sajs.2019/5888>**ARTICLE INCLUDES:**

- Peer review
- Supplementary material

KEYWORDS:

cognitive justice; research partnerships; science–policy–practice interface; research collaboration

PUBLISHED:

30 July 2019

Creating knowledge democracy in South Africa: The role of communities of practice

In our pursuit of a more equitable, just and sustainable society, we must examine not only who makes decisions, but also on whose evidence these decisions are made. The question of whose knowledge is to be recognised, translated and incorporated into action¹ is especially important in South Africa as universities attempt to respond to calls to decolonise the curricula. In this Commentary, I argue that widening the scope of knowledge production is an essential role that universities can play in creating knowledge democracy. Communities of practice are presented as a way in which scientists can cultivate research partnerships with stakeholders outside of science to co-produce knowledge needed to solve society's current complex challenges.

The concept of knowledge democracy 'respects multiple modes, forms, sources and idioms of knowledge production, representation and dissemination'². According to Hall and Tandon³, what is generally understood as knowledge in universities represents only a very small proportion of the global treasury of knowledge.

*Knowledge is created through research, through the experience of the wise, through the act of surviving in the world, and is represented in text, poetry, music, political discourse, social media, speeches, drama and storytelling. Knowledge is linked to practical skills, to our working lives and to universal and abstract thought. Knowledge is created every day by each one of us and is central to who we are as human beings.*⁴

However, these other ways of knowing are relegated by modern science to the realm of beliefs, opinions and intuitive or subjective understandings, which at best may become objects for scientific inquiry.³

The separation between lay and scientific knowledge dates to the creation of Oxford University and other early tertiary education institutions in Europe some 500 years ago. This act had the effect of

*[E]nclosing knowledge, limiting access to knowledge, exerting a form of control over knowledge and providing a means for a small elite to acquire this knowledge for the purposes of leadership of a spiritual, governance or cultural nature.*³

The walls of the universities quite literally came to demarcate the 'knowers' on the inside and the 'non-knowers' on the outside.³

As university knowledge systems around the world are today based not only on this Western model of academic enclosure but also on the Western canon of literature, philosophy and culture that it has produced,³ it is perhaps not surprising that in South Africa we see both: a continued separation between lay or indigenous and university knowledge systems; and, at the same time, calls by our students for the decolonisation of universities. The epistemologies of most peoples of the world, whether indigenous or excluded on the basis of race, gender or socio-economic status, are missing.

Universities themselves have perpetuated this injustice. Gaventa and Bivens⁵ argue that 'universities [need] to think not only about justice in the larger world, but also about their own distinctive role in shaping cognitive justice and knowledge democracy'. We need to reflect on how inequalities in the production of knowledge contribute to other types of inequalities (including those that we seek to address through research): 'In a world in which knowledge shapes power and voice, and vice versa, the fundamental inequality in the production of knowledge about inequality itself must be addressed.'⁶

The idea of knowledge democracy and cognitive justice not only recognises that different forms of knowledge exist, but argues that this plurality must to go beyond tolerance to actively recognising the need for diversity:

*The idea of cognitive justice...sensitizes us not only to forms of knowledge but [also] to the diverse communities of problem solving. What one offers then is a democratic imagination...where conversation, reciprocity, translation create knowledge not as an expert, almost zero-sum view of the world but as a collaboration of memories, legacies, heritages, a manifold heuristics of problem solving.*⁷

From the perspective of cognitive justice, therefore, the integration of different types of knowledge is not only a moral necessity, but also a pragmatic one. Multiple perspectives can contribute to our capacity to find workable solutions to some of our society's most complex problems. In addition, knowledge created with the involvement of the likely users of that knowledge is more likely to be seen by these potential users as relevant and legitimate and hence more likely to be used.

Post-positivist critics of the linear understanding of science–society relations, in which knowledge production and use remain separate processes, have long argued that science alone cannot solve these types of complex issues.⁸ In these circumstances, cause and effect may not be easily identifiable and uncertainty is inherently present. Rather than searching for a single 'right' answer, the intention of scientists should be to arrive at "reasonable" decisions [that are] "appropriate" to situations that are both morally and factually ambiguous^{9(p.71)}. Nowotny et al.⁸ describe this as a shift from generating 'merely' scientifically reliable knowledge towards more 'socially robust' knowledge. It is for these types of complex, cross-cutting problems, therefore, that universities can most contribute to creating knowledge democracy through the co-generation or co-production of knowledge.



Defined as the 'collaborative process of knowledge production that involves multiple disciplines and stakeholders of other sectors of society'¹⁰, the co-production of knowledge should ideally be based on a dialogue on equal terms between groups of stakeholders with shared styles of thinking. However, accepting the diversity of knowledges on equal terms, and embarking on the co-production of knowledge, means letting go of assumptions about the primacy of science and recognising other ways of knowing beyond the university's gates.

The research process can no longer be characterized as an 'objective' investigation of the natural (or social) world. ...Instead, it has become a dialogic process, an intense (and perhaps endless) 'conversation' between research actors and research subjects...^{11(p.187)}

Facilitating these conversations requires creating a 'new architecture of knowledge'¹² that makes spaces to shift accepted ways of knowing and acting and embrace new knowledge partnerships as being at the heart of our universities' contribution to nurturing a knowledge democracy and cognitive justice.

So how can universities and research institutes bring about this shift towards a more pluralistic regime of knowledge? How can they provide spaces and intellectual resources to complement and build on the enormous knowledges that exist in our communities and society more broadly?¹³ What role can we as individual scientists play? Oswald¹⁴ argues:

We as researchers are in a privileged position where we can set research agendas, ask certain questions, involve certain people – we are gatekeepers for what counts as valid knowledge and evidence.

One approach that we have been piloting in our work – in the DST/NRF Centre of Excellence for Food Security jointly hosted by the University of the Western Cape and the University of Pretoria – is to build research partnerships through communities of practice. A community of practice (CoP) is a group of people who share a common interest or concern and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.¹⁵ CoPs can fulfill a variety of related functions. They can connect people who might not otherwise have the opportunity to interact; provide an opportunity to share information; help people organise around purposeful action; stimulate learning through the transfer of knowledge from one member to another; and generate new shared knowledge that helps people transform their practice.¹⁶

It is this latter function, as sites of social learning, which is of most interest for the co-production of knowledge. The concept of the 'agora' has been used to characterise this problem-generating and problem-solving environment in which actors and knowledge from inside and outside of science meet and the co-production of knowledge takes place.¹ It is populated not only by arrays of competing 'experts' and the organisations and institutions through which they bring their knowledge and experience to bear on decisions taken, but also by variously jostling 'publics'.¹ The 'agora' is in its own right a domain of primary knowledge production, through which people enter the research process and where knowledge is embodied in people, processes and projects.

Communities of practice were originally developed as an analytical concept by Wenger and Lave in the 1990s to study learning by apprentices through participation in networks. Lave and Wenger¹⁷ argued that learning is not an individual process, but a social process situated in a cultural and historical context. However, the concept was quickly taken up by organisational and management studies which presented CoPs as vehicles to promote intra-institutional learning. A myriad of articles now aim to guide the reader on how to cultivate, nurture or steward a CoP. For example, Cambridge et al.¹⁶ set out design principles in the form of a set of key questions to be considered when setting up a CoP. These questions include: For whom is the community? What are the key issues for this group? What is the primary purpose of the group? What kind of activities will the CoP undertake? Numerous articles also depict CoPs as dynamic structures that constantly evolve and whose life cycle can

be mapped out over time into several phases. For example, Wenger et al.¹⁵ describe five phases: realising potential, coalescing, maturing, stewardship and transformation. Other articles also set out a dazzling array of reasons for the failures of CoPs, such as a lack of identification with the CoP from members, lack of a core group, and low-level one-on-one interaction between members.¹⁸

While CoPs are often portrayed in the literature as harmonious and based on trust and shared values, our experience in nurturing a CoP on local food governance in the Western Cape supports recent arguments that not all CoPs are the same.¹⁹ In contrast to the traditional conception of CoPs as intradisciplinary, CoPs can also transcend different disciplines and organisations. These transdisciplinary CoPs bring together actors from across the knowledge-policy-practice interface and are much more likely to include individuals with very different viewpoints, and 'ways of knowing'.²⁰ While inevitably difficult to negotiate, these are precisely the spaces where co-production of knowledge is most needed to tackle complex societal problems.

Issues of power, including open disagreement and conflict, are often overlooked in the literature on CoPs, and especially in the 'how to' guides. By focusing mainly on the more harmonious and homogeneous intradisciplinary CoPs rather than transdisciplinary CoPs, the literature can obscure the degree to which CoPs are influenced and shaped by their context, which includes the institutional, political and cultural context. From our experiences in the Western Cape, we have found that asymmetries of power within a transdisciplinary CoP can result in some stakeholders hesitating to speak up within what can be perceived as an expert-dominated space. This is particularly the case for more vulnerable, but nevertheless knowledgeable, stakeholders who are closer in nature to the wider citizenry than to traditionally recognised experts.

Conversely, these same pressures can lead certain stakeholders to 'come out fighting' if collectively agreed codes of interaction are not in place. Unmanaged, these tensions can escalate to a level of conflict that some CoP members find uncomfortable. Differences in institutional culture and practice of CoP members can also lead to disagreement on whether the CoP should focus on 'talking' or 'doing', 'top-down' or 'bottom-up' approaches, and to what extent certain stakeholders such as 'big business' should be included (or not). While issues of power, conflict and disagreement have been underplayed in the literature, our experience indicates that these need careful reflection to be better understood, managed and harnessed. The co-production of knowledge requires multiple perspectives and, in the sense that social learning is 'negotiated meaning' in a 'push pull' process,¹⁹ it would not be feasible to expect these power relationships and tensions to be absent. Indeed, it could be argued that they are the essence of co-production. If we are all experts now, the ordering of this brave new world of pluralistic expertise is being played out and negotiated in these spaces.¹

Communities of practice are not the only way in which to create such shared spaces for the co-production of knowledge with stakeholders from outside of science. These spaces can be created through scenario exercises, deliberative stakeholder workshops, learning journeys or digital storytelling, to name but a few other approaches. These approaches are also not new, especially not in South Africa where research is often driven by the need to solve real-world policy problems rooted in specific places and communities. However, this type of co-production of knowledge is not ubiquitous or even the norm in many disciplines and fields of research.

But perhaps this situation is not surprising considering that the co-production of knowledge takes time, resources and a willingness to step outside of 'our comfort zone'. It also requires certain skills and an attitude that we may need to strive hard to obtain. More fundamentally, it requires embarking on triple loop learning (learning how to learn) because it shifts our understanding of how we create knowledge and learn as scientists – or how we 'do science'. However, the scientific system is not set up for enabling and encouraging this type of transdisciplinary work. When the career incentives are weighted in favour of publications in high-impact (disciplinary) journals and funding proposals require a detailed road map of the anticipated research, including expected outputs, it is hard



to fully engage in potentially resource-intensive and unpredictable knowledge partnerships.

Crucially, however, if we are to move beyond creating fragmented and unused (or 'orphan') solutions to complex problems in our society, universities must act to widen the scope of recognised knowledge and move towards nurturing knowledge democracy. This requires universities to openly and actively engage with stakeholders and citizenry as a whole in the co-production of knowledge. We must also reflect on our own individual roles as scientists in creating knowledge. Establishing CoPs around existing research themes and teams is one practical way many of us at (South) African universities can begin to construct a new architecture of knowledge, one knowledge partnership at a time.

Acknowledgements

This article was funded by the DST-NRF Centre of Excellence for Food Security. I thank members of the Western Cape Food Governance Community of Practice as well as my colleagues Bruno Losch and Florian Kroll for their enthusiasm and dedication to our joint endeavour.

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