
Supporting Communities of Practice

**A reflection on the benefits and challenges
facing communities of practice for research
and engagement in nursing**

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Dedicated health workers across the world demonstrate commitment and purpose far beyond the call of duty. According to the Global Health Workforce Alliance and World Health Organization (2013), nearly all countries suffer from skill imbalances, creating huge inefficiencies in their health systems, and in most countries population-based public health is neglected. Strategies are therefore needed to ensure adequacy in staff numbers, appropriate skill mixes and outreach to vulnerable populations. Motivation strategies need to focus on adequate remuneration, positive work environments, opportunities for career development and supportive health systems. Competencies need to be improved by educating health workers in appropriate attitudes and skills, creating conditions for continuous learning, and cultivating skills in leadership, entrepreneurship and innovation. The Global Health Workforce Alliance and World Health Organization (2013) maintains that every country must devise a workforce strategy suited to its specific health needs and human assets, and that all countries can accelerate health gains by investing in and managing their health workforce more strategically. WHO concludes that workforce development demands strong action by all stakeholders.

South Africa is confronted with a quadruple burden of disease: a very high prevalence of HIV and AIDS, which has now entered a synergistic relationship with TB; maternal and child morbidity and mortality; an exploding prevalence of non-communicable diseases, mostly driven by lifestyle risk factors; and injuries and trauma often related to violence. In response to this burden, South Africa has developed a strategic plan to overhaul the health system, including reconstruction and revitalisation of the nursing profession. This plan should ensure that our country has well-trained nurses who can contribute to addressing the health-care needs of all South Africans in order to create healthy communities. These interventions need to cover everything from prenatal and postnatal care, to the food supply and marketing chain, to the built environment, all of which promote healthy eating and active, healthy living. To achieve this, the public health

sector needs to forge strategic working partnerships with both the health and non-health sectors – with parents, child-care providers, schools, health-care providers, community organisations, the food industry, store owners and retailers, and the media.

The situational analysis for South Africa's 'Strategic Plan for Nurse Education, Training and Practice 2012/13–2016/17' indicates that clinical training departments are no longer in existence in the majority of health service institutions in this country (Department of Health 2013). Consequently, there is insufficient supervision and management of students as well as a general lack of good clinical role models. There is also a disjuncture between the skills and competencies of nurse educators and those of nurses in clinical practice. This is exacerbated by the lack of liaison between nursing education and nursing practice. Against this background, there is a need to identify and learn from successful models and best practice in nursing education, research and service (Department of Health 2013). There is also a need to find innovative ways to overcome the multiplicity of challenges in the healthcare environment.

Globally, communities of practice have become a convenient way for nursing educators and practitioners to collaborate to meet practice needs, to develop evidence-based practice and to disseminate new knowledge to practitioners (Andrew, Tolson & Ferguson 2008). Communities of practice also provide a unique space for workplace professional development, including research training and support and evidence-based practice beyond the nursing and healthcare environments.

The concept of communities of practice is not new, but it remains one of the most important concepts in social or situated learning theory (Hoadley 2012). Verburg and Andriessen (2011) describe a taxonomy of types of 'knowledge-building communities', which included communities of practice, communities of interest and communities of purpose. They identified archetypes based on two dimensions of variability, namely connectivity (based on identity and degree of interaction) and institutionalisation (based on level of formalisation including of deliverables and membership).

Evolving from theories of knowing, learning and technology, communities of practice can be seen as both a learning phenomenon and an instructional strategy. Educators have moved beyond the philosophies of cognitive constructivism and behaviourism to realise that learning must be situated in authentic practice contexts (Hoadley 2012). The latter is the reason for the rising popularity of different types of communities of practice for different contexts. Communities of practice provide this authentic learning space, and increasingly so where interprofessional teamwork and collaboration are required, for example in the health sciences (Li et al. 2009).

This article draws on reflections on and learning from communities of practice that were established in the context of

a multi-university-community nursing education program in Tshwane District, South Africa. We discuss the communities of practice that were formed to address education and practice issues under the umbrella of the Community-Oriented Nursing Education Program for Women and Child Health (CONEWCH) in Tshwane District in South Africa. The program was an attempt to develop nurses' capacity, with a view to achieving the health targets of the Millennium Development Goals. Our lessons learned may be useful to other situated learning contexts in the university-community environment in the post-2015 sustainable development agenda (United Nations 2015).

BACKGROUND TO THE PROGRAM

In 2008, a needs assessment was conducted by the Nursing Science Department at one of the universities, which identified the healthcare facilities (two hospitals and associated clinics) in Tshwane District in South Africa that would be involved in the program. The information gleaned from that process informed the scope of the funding proposal and eventually of the program, which was funded through University-based Nursing Education South Africa (UNEDSA).

A primary finding of the study was nurse practitioners' need for situated learning to develop knowledge and skills relevant to their practice environments.

After the funding was awarded jointly to two of the applicant universities, both of the universities' Nursing Science Departments and the two district hospitals and their associated clinics formed the CONEWCH program. Lecturing staff of the Nursing Science Departments who had an interest in the thematic areas were invited to join the program, and Nurse Managers at the hospitals and clinics nominated staff to participate in the program. Advertisements were sent out to nursing education institutions to invite eligible persons to apply for Masters and Doctoral program scholarships. Project staff were recruited and contracted. The governance structure of the CONEWCH included the Heads of the Nursing Science Departments at the universities, academic managers, a project manager at each university and one administrative staff for secretarial purposes.

The overall goal of the program was to advance nursing education and research in order to improve the health of women and children in the City of Tshwane and the surrounding rural communities (UNEDSA 2013). The program had three broad objectives: optimise the knowledge and skills of all staff involved (lecturers and hospital staff) to support student learning; institute a research initiative with the focus on improving the quality of nursing care; and manage research groups to generate and disseminate knowledge relating to woman and child health.

ESTABLISHING THE COMMUNITIES OF PRACTICE

The research groups were constituted as communities of practice and became the vehicle for the implementation and achievement of the program objectives. It was further anticipated that the communities of practice would create opportunities for the universities to achieve their teaching, research and community outreach mandates and for the hospitals and clinics to strengthen evidence-based decision-making for improving health outcomes of patients in local communities.

Once the program got underway, pilot communities of practice were formed (in year one) around the following domains: gender-related violence; human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS), and related malnutrition; maternal and perinatal mortality; reproductive health, with special focus on unplanned pregnancies; and health literacy. Each community conducted start-up workshops to develop goals, define roles and develop action plans.

In year two, a roundtable discussion was held with representatives of all of the communities of practice. Initially, the communities of practice had experienced low attendance, lack of collaboration and slow progress with their activities. Following self-reflective strategies, the groups developed strategic responses to these challenges, including revision of their annual work plans, collaborative setting of objectives and establishing work procedures. The revised action plans included projects that individual members had professional interest in, such as clinical audits, developing best practice guidelines, strengthening community engagement, and improving care at the two district hospitals. In addition, the work plans included advocacy, lecture series, service delivery interventions, curriculum development and conference participation.

While participation in our communities was voluntary and driven by members' commitment to their shared domain of interest as registered nurses in practice and in the academy, the empowerment opportunities that were created by the availability of project funding provided incentives for participation. These included, for example, participation in conferences, training opportunities, workshops, networking events and international visitors' programs, which further motivated and sustained the communities of practice.

RESEARCH DESIGN

The authors of this article were involved as part of the program management team as well as being active members of the communities of practice. We chose autoethnography, as described by Ellis (2004), as an approach to researching our communities of practice. We realise that different group members may have had different experiences and thus different ways of describing and analysing their own experiences in their community of practice

(see, for example, the articles by Mataboge et al. 2014, Peu et al. 2014, and Phiri et al. 2015).

The reflective gaze and learning experiences that we refer to in this article resonate with the epiphanies that are often found in autoethnographies, which can be described as remembered moments perceived to have a significant impact (Ellis, Adams & Bochner 2011). Our selection of epiphanies represents our personal research frame. We acknowledge the innumerable ways in which our personal experiences influenced the research process, thereby inadvertently implicating the members of the various communities of practice, other program staff and the program leaders.

We used the After-Action Review (AAR) method to systematically describe and analytically assess our experiences and learning. The AAR methodology has been widely adopted by nursing, health and social care professions (Kinsella 2010). The After-Action Review took place as a professional discussion of the experiences of the communities of practice, focusing on what happened, why it happened, what went well, what could improve, how to sustain strengths and improve on weaknesses, and what lessons could be learned from the experience (USAID 2006). The spirit of the review was one of openness and learning – it was not about blaming or problem fixing. The methodology was purposefully selected because of its rootedness in reflective practice theory, which allowed for a holistic, multi-perspective reflection that covered program management, as well as organisational and systems factors.

In following reflective practice, our process of learning as program managers was bottom-up, self-directed and informal. It involved stepping back from our experience to make sense of it, trying and understanding what it meant, learning from it, and applying the learning to future situations. Used in this context, 'lessons learned' means knowledge gained through experience, which, if shared, will benefit the work of others (Abecker & Van Elst 2009).

We used primary and secondary information, which we obtained through interaction or 'eyewitness accounts', as described by Ellis, Adams and Bochner (2011), field notes, program reports and progress reports from the communities of practice.

In our study, reliability, generalisability and validity as described by Ellis, Adams and Bochner (2011) was ensured by the authors' cross checking of experiences as truthful accounts against 'factual evidence' as reported in the approved project reports and progress reports to the funders. In our study, we specifically focused on learning experiences that may be useful and generalisable to other communities of practice in the university-community environment.

Below we offer a layered account of our experiences in terms of the AAR research questions: What actually happened/changed? Why did it happen? What lessons were learned from our experiences? What do we need to do in future? Our analyses and conclusions are presented alongside relevant data and literature.

DISCUSSION

What Happened/Changed?

All the communities of practice started out with 10–15 members each, though their membership and composition changed over time. Two communities of practice ceased to exist within the second year of the program. Reasons for this included turnover of participants and repositioning of staff in the case of the reproductive health group, and the integration of health literacy as cross-cutting through the work of all the communities of practice, which explains the closing of the health literacy group. In summary, of the six originally established communities of practice, two were discontinued and four remained. One new community of practice was established outside of the funded program.

The original configuration and the reconfiguration of the communities of practice over the seven-year period are shown in Figure 1.

Figure 1: Changes in configuration of communities of practice 2010–2016

Communities of practice focus area	2010	2011	2012	2013 ¹	2014	2015	2016
1. Health literacy							
2. Reproductive health							
3. Maternal and perinatal health							
4. Gender violence							
5. HIV, AIDS and malnutrition							
6. Practice development							

¹ The funding period ended in December 2013.

Figure 1 also shows the configuration of the communities of practice by the end of the funding period (end of 2013) and how they reconfigured in the post-funding period (by mid-2016). At the end of the funding period, all the communities of practice experienced resource constraints and questioned their ability to continue their activities in the next financial year. Individual researchers who had already been awarded scholarships from the funding program could continue their research. Individuals and collectives thus began a process of applying for funding from a range of university research and collaborative funding sources. However, the period between application and awarding of funding placed several of the communities of practice in limbo.

The reconfiguration of the communities of practice over time reflects the dynamic nature of our communities of practice, as also observed by the World Bank (2005) and Wenger (2006). The World Bank (2005) reports that their communities of practice go through phases: some fizzle out due to apathy and inactivity, others join together, and several are phased out. Wenger (2006) aptly describes a community of practice as dynamic, in that the interests, goals and members are subject to change, and shifts on different levels should be expected and supported.

Why Did It Happen?

In the literature, communities of practice have been described as feature-based and process-based. Both Wenger (1998) and

McDermott (2000) used a life-cycle metaphor to describe communities as developing through stages akin to birth, maturation and death. Wenger (2006) suggested that communities of practice may need to be nurtured into continuing existence, and identified a number of critical success factors. Several of these related to institutional support and infrastructure, as well as integration of communities of practice into the organisations that the members are attached to. Building on systems theory, Wenger-Trayner (2013) views a community of practice as a social learning system in which learning relationships exist among its members internally and externally.

As a result of learning, changes in interaction are inevitable and can stabilise or destabilise the community of practice (Huberman & Hogg 1995). Our communities of practice experienced destabilisation on different levels.

The most disruptive event was the *end of the funding period*. In this regard, it needs to be noted that the CONEWCH was university-led from beginning to end in regard to obtaining and managing the grant. The end of the funding period implied that the communities of practice had to become self-sustaining units where individuals would be held accountable for the group's performance. This contributed to members becoming self-driven and the groups to become outcomes-driven.

Staff movement in the program team also caused disruptions in the management of the communities of practice as well as in the overall running of the program.

Shifts in identity and implications for relational practice: We adopted emancipatory decision-making, as described in the Wittmann-Price Theory of Emancipated Decision Making (EDM) in women's healthcare (Wittmann-Price & Bhattacharya 2008), in our communities of practice. Opportunities were provided for reflection and dialogue, and for articulating the groups' respective shared domains of interest. This prompted further emancipatory and empowerment initiatives.

Our communities of practice were diverse in their characteristics, relationships, self-organisation, boundaries, identity and cultural meaning, as predicted by Huberman and Hogg (1995). Community development is not a 'one size fits all' proposition. Each community that they observed had its unique 'personality', strengths and challenges as well as stages that communities transform to.

The differentiation process is a means of increasing the complexity of the system since each sub-system can make different connections with other sub-systems. Instability emerges as either the diversity or the size of the community increases or due to changes in the environment of the community of practice. According to systems theory, the system has endogenous mechanisms of adaptation for adaptive readjustments on the basis of local available information, which will restore the equilibrium of the community of practice in the organisation (Luhmann

1995). The differentiation of sub-systems and adjustments reflects our experiences of the configuration and reconfiguration of our communities of practice over seven years.

In our experience, our communities of practice matured over the years and became more capable and more distinct in their identities. The latter, however, caused complications on different levels; for example, it made it difficult for new staff to choose and join a group, especially if the person's research interest did not fit squarely into any one of the groups. It also meant that staff members in the same academic department were boxed into a group, and cross-boundary work became a challenge. On another level, members of the communities of practice experienced role conflict and had to negotiate their institutional job demands and academic schedules with their involvement in the communities.

By 2015, the remaining communities of practice had evolved into communities of *purpose*, which can be described as a *community* of people who are going through the same process or are trying to achieve a similar objective. In the case of our communities of practice, the common purpose was a shared goal and we monitored outputs and performance, such as the number of articles published in refereed journals. Further developments were noted within the existing communities of purpose, which could be described as the emergence of communities of *interest*. This pattern is consistent with what Huberman and Hogg (1995) describe as the evolving nature of communities of practice while remaining sustainable structures. According to Huberman and Hogg (1995), a community of practice may undergo several adaptations during its existence. In our experience, we observed how our communities of practice evolved into communities of *purpose*, such as publication groups, and communities of *interest*. The HIV, AIDS and Malnutrition Community of Practice, for example, annually adopted a different area of interest to accommodate the diverse spectrum of interests of the group members. Indigenous knowledge in healthcare practice is an example of a shared area of interest that directs much of the research of this community of practice.

What Lessons Were Learned from our Experiences?

The main challenges that we observed in our communities of practice related to group dynamics and balancing diverse priorities.

We observed three different ways in which our communities of practice managed internal and external challenges. In the first example, we describe a strategy that was employed to balance diverse interests; in the second example, we describe a strategy for explicating the value of research for the benefit of health practice and service delivery in a community; and in the third example, we describe a strategy that was employed to transfer collective capacity to stakeholders.

Accommodate diverse interests

Experiences of power imbalances were observed on different levels in our communities of practice. Our groups involved a range of

partners from practice, the academy, communities, and different organisations and contexts. In university-community engagement, academic and professional titles create hierarchies and perceptions of whose views and knowledge are more important and valued than others. Some members felt excluded in research meetings and not everyone was familiar with research terminology, academic language and theory, and so could not participate in the discourse.

As an example of how this challenge was managed, we developed a work plan that covered the interests of all the members, while retaining the research focus. This was an effective strategy, based on diverse interests within the group, for resolving tensions. In the case of the HIV, AIDS and Malnutrition Community of Practice, the group annually adopted a thematic area to direct their research. Over the past few years, thematic areas have been extended to include convergence of Indigenous and Western healthcare systems (see, for example, Ngunyulu, Mulaudzi and Peu 2015).

Managing external stakeholder relations is closely associated with managing intragroup dynamics, and may stem from power imbalances and contested priorities.

Build stakeholder collaboration and converge interests

As indicated previously, university and non-university members of our communities of practice had to balance personal, group and institutional expectations and mandates, which gave rise to tensions within the communities of practice. For community organisations, performance targets are driven by service delivery targets, which overlap only marginally with the priorities and mandate of the universities.

Example of how this challenge was managed: This example illustrates how a community of practice resolved tensions by *building stakeholder relations in university and community engagement* in a way that connected diverse interests. In this example, the university-based research was used to inform community engagement, thereby converging the interests of the stakeholder groups in the collective. The research was conducted on the distribution and use of female condoms, introduced in South Africa in 1998. The community of practice conducted the research with the purpose of exploring, identifying and describing the factors that affect utilisation of female condoms among the practising health-care providers in Tshwane. Various publications resulted from this study (for example, Mataboge et al. 2014 and Phiri et al. 2015).

Following this research, HIV and AIDS awareness campaigns were conducted at taxi ranks under the auspices of the HIV, AIDS and Malnutrition Community of Practice. In the first year, the university members of this community of practice played a leading role in coordinating the event, following their research on condom use among healthcare providers. In addition, female condoms were distributed – a device seen as a viable option for women to take control of their sexual life in terms of safe sexual practices and preventing unwanted pregnancy.

The university staff took the lead in making logistical arrangements, including liaising with local businesses for sponsorship of the event and obtaining permission from the local authorities for the event. In the following year, community partners took the lead and the university played an ancillary role. The scale of the event was elevated to include not only HIV and AIDS awareness amongst healthcare workers but also a range of community workers and local organisations. The event included voluntary testing and counselling on HIV and AIDS, as well as a range of health and wellness services. This has now become an annual event on the calendar of this community of practice and of the community partners.

Transfer collective knowledge and capacity

Example of how this challenge was managed: In the third example, a strategy that was observed in the Gender Related Violence Community of Practice illustrates how different spaces were used to *transfer collective knowledge and capacity through university and community engagement*.

The Gender Related Violence Community of Practice designed and piloted an audit instrument to assess quality of care of cases of sexual assault at three medico-legal centres in Tshwane District, South Africa, against international standards. These standards related to counselling and referral of victims, HIV prevention through provision of HIV prophylaxis, treatment of sexually transmitted infections (STIs), emergency contraception, care of injuries, medico-legal advice and documentation of evidence.

The results of the clinical audit highlighted best practices and areas that needed improvement. Best practices were shared between the centres, and collaborative interventions were designed to address some of the gaps identified (Van der Wath 2013). After refining the audit tool, a follow-up audit was conducted which showed improved adherence to the minimum standards for cases of sexual assault.

RECOMMENDATIONS FOR SUPPORTING COMMUNITIES OF PRACTICE

USAID (2006) maintains that the strength and resilience of communities of practice lies in the multiplier effects they trigger in the collective skills and knowledge of the group. In our experience, social learning within our communities of practice, supported by our capacity-building strategy of empowerment, played a vital role in sustaining our communities of practice. Individual and group learning was encouraged, and this culminated in collective capacity and transfer of knowledge and skills.

For communities of practice, as learning communities, where members come from organisations that value knowledge (Wenger & Snyder 2000), it is important for the members to realise that collective intelligence must be brought to bear in solving important problems in their areas of interest and workplaces.

We did experience a challenge in regard to group boundaries. For example, HIV and AIDS as well as gender violence cut across the work of all the communities of practice, and yet the groups maintained their group identities and did not encourage their members to work across communities of practice.

Our groups also seemed not to have been aware of the strength of their collective capacity. According to Peu et al. (2014), in a self-evaluation of their community of practice, there was a lack of acknowledgement of collective competencies. An important lesson is to be learned from this experience. The World Bank (2005) notes that the value of communities of practice lies in their ability to share specific insights that contribute to problem solving in the context of a community's particular knowledge base without the adverse effect of information overload (World Bank 2005).

The type of learning that occurs in a community of practice is characterised by the social as opposed to the individual (Barab & Duffy 2000). Furthermore, the learning is considered to be situated in the social context, with the identities of members emerging from their wider social experiences (Edwards, Gallacher & Whittaker 2006). Addressing gaps in management of the collective learning and knowledge generated by the groups for wider dissemination and ease of access remains a challenge.

The following recommendations are offered based on a review of literature relevant to the lessons that we have drawn from our own experiences.

Establish the Identity of the Group as a Knowledge Community

Communities of practice have become associated with finding, sharing, transferring and archiving knowledge, as well as making explicit 'expertise', or tacit knowledge. Tacit knowledge is considered to be those valuable context-based experiences that cannot easily be captured, codified and stored (Davenport & Prusak 2000; Kimble & Hildreth 2005). In our experience, as knowledge development accrued over time, the need for a knowledge repository system and an accessible knowledge bank became critical to the effectiveness of the community of practice. The community of practice should develop a strategy and plan for managing the knowledge and products created by the community so that they can be shared beyond the community. It is also important that procedures, practices and the technology used support structured data sharing. The purpose of knowledge management as a field of research and practice is how to better utilise the knowledge or 'intellectual capital' contained in an organisation's network (Dingwall 2008). It is therefore necessary to design outcomes-driven capacity building strategies and interventions to develop a culture of learning in the communities of practice to support collective knowledge generation and dissemination.

Institutionalise Performance Management of the Communities of Practice

Develop performance indicators for the group: In our experience, the performance appraisal of individuals in the community of practice is closely connected to the consistent participation of individual members, effectiveness of the group as a whole and achievement of the institution's mandate. Despite demands on the individual's time, members remained committed because it was an agreed upon key performance area that provided a platform for participation in all aspects of the university's mandate: teaching, research and community engagement. In the context of university-community engagement through communities of practice, indicators for monitoring and evaluation should be developed to explicate the value of the community as well as guide achievement of its outputs, outcomes and desired impact at individual, group, beneficiary and institutional levels.

Develop group codes of conduct: Communities of practice provide a platform for re-socialising and enacting our highest ideals. Communities of practice can play an important role in revitalising the ideals of ethical organisations and institutions in both the academic and the practice environment (Wenger 1998). However, members of these communities sometimes experience inequity, and junior members especially feel that their contributions are not recognised. A code of conduct could address power issues related to privileging of homogeneity and knowledge, which may keep newcomers to the community on the periphery (Imel & Ross-Gordon 2006).

Develop the capacity of individual researchers and teams: Via inter-professional training and scholarships, design and undertake individual and collaborative research and write up and publish the research findings. In addition, develop the capacity of communities of practice as work units within universities and health-care settings as a means of enhancing evidence-based decision-making.

Use Different Platforms to Explicate the Value of Communities of Practice

Communities of practice thrive when they become conscious of their value to the organisation, to the teams in which community members serve, and to the community members themselves. Value is key to community life, because participation in most communities is voluntary. But the full value of a community is often not apparent when it is first formed. Moreover, the sources of value often change over the life of the community. Frequently, early value mostly comes from focusing on the current problems and needs of the community members. As the community grows, developing a systematic body of knowledge that can be easily accessed becomes more important (Wenger, McDermott & Snyder 2002).

Communities of practice should create opportunities for participants to explicitly discuss the value and productivity of their

participation in the group for the individual (micro level) and for the group (meso level), and explicate the strategic importance of the community for the member organisations (macro level).

A key element of sustaining communities of practice over time is to encourage community members to be explicit about the value of the community throughout its lifetime. Initially, the purpose of such discussion is more to raise awareness than collect data, since the impact of the community typically takes some time to be felt. Later, assessments of value can become more rigorous, as suggested by Wenger, McDermott and Snyder (2002).

CONCLUSION

What worked best for us in this context where we had multiple communities of practice to support with limited resources was the development and implementation of a standard performance support plan, methodology and system for all our communities of practice.

The communities of practice in our program offered opportunities for individual learning, growth and development, as well as practice development and organisational systems development. This had direct and indirect benefits for the individual group members, their organisations and the beneficiaries of their practices, notably women and children who were the main targets of our program. Through the projects of our communities of practice, we achieved the goals of our funded program to institute a research initiative with the focus on improving the quality of nursing care, and to manage research groups to generate and disseminate knowledge relating to woman and child health.

Our communities of practice strategies to overcome challenges and to sustain themselves were quite diverse. Each community of practice evolved and matured at its own pace and on its own terms. The strategy to form communities of *purpose* and communities of *interest* ensured that members could participate in their community of practice in different ways that best suited their personal and institutional needs, as well as that of their stakeholders, in addition to contributing to the development and practice of their domain of work. We learned that diversification of activities and thematic areas, as well as transfer of collective capacity, were found to be the main vehicles for relieving tensions within the communities of practice and between university and community stakeholders.

By deliberately focusing on developing the identity of the group and institutionalising the communities of practice, as well as explicating the value of these communities of practice, and by building, acknowledging and sharing collective competencies of members of the communities of practice, our communities of practice became resilient and evolved into adaptive and self-sustaining purpose-driven and interest-driven groups.

We believe that our communities of practice provide a good practice example, or model, which could be replicated in similar contexts of professional development in healthcare disciplines.

REFERENCES

Abecker, A & Van Elst, L 2009, 'Ontologies for knowledge management', in S Staab & R Struder (eds), *Handbook on Ontologies*, Springer, New York, pp. 713–34.

Andrew, A, Tolson, D & Ferguson, D 2008, 'Building on Wenger: Communities of practice in nursing', *Nurse Education Today*, vol. 28, pp. 246–52. doi: <http://dx.doi.org/10.1016/j.nedt.2007.05.002>
[PMid:17599697](https://pubmed.ncbi.nlm.nih.gov/17599697/)

Barab, S & Duffy, T 2000, 'From practice fields to communities of practice', *Theoretical Foundations of Learning Environments*, vol. 1, no. 1, pp. 25–55.

Davenport, T & Prusak, L 2000, *Working knowledge: How organizations manage what they know*, Harvard Business School Press, Boston, MA.

Department of Health, Republic of South Africa 2013, 'The National Strategic Plan for Nurse Education, Training and Practice 2012/13–2016/17'.

Department of Health, Republic of South Africa 2014, 'Strategic Plan 2014/15–2018/19'.

Dingwall, R 2008, *Fundamentals of applied research: Qualitative health research*, vol. 3, Sage Publications.

Edwards, R, Gallacher, J & Whittaker, S (eds) 2006, *Learning outside the Academy: International research perspectives on lifelong learning*, Routledge, New York.

Ellis, C 2004, *The ethnographic I*, AltaMira, Walnut Creek, CA.

Ellis, C, Adams, T & Bochner, A 2011, 'Autoethnography: An overview', *Forum: Qualitative Social Research*, vol. 12, no. 1, <http://nbn-resolving.de/urn:nbn:de:0114-fqs1101108>.

Global Health Workforce Alliance and World Health Organization 2013, *A Universal Truth: No Health Without a Workforce: Third Global Forum on Human Resources for Health Report*.

Gongla, P & Rizzuto, C 2001, 'Evolving communities of practice: IBM Global Services experience', *IBM Systems Journal*, vol. 40, no. 4.

Hoadley, C 2012, 'What is a community of practice and how can we support it?', in D Jonassen & S Lund (eds), *Theoretical foundations of learning environments*, 2nd edn, Routledge, New York, pp. 286–300.

Huberman, B & Hogg, T 1995, 'Communities of practice: Performance and evolution', *Computational and Mathematical Organization Theory*, vol. 1, pp. 73–92.

Imel, S & Ross-Gordon, J 2006, 'New directions for adult and continuing education', in S Johnson & K Taylor (eds), *The neuroscience of adult learning*, Wiley, San Francisco, CA.

Kimble, C & Hildreth, P 2005, 'Dualities, distributed communities of practice and knowledge management', *Journal of Knowledge Management*, vol. 9, no. 4, pp. 102–13.

Kinsella, E 2010, 'Professional knowledge and the epistemology of reflective practice', *Nursing Philosophy*, vol. 11, no. 1, pp. 3–14, viewed 29 July 2016, www.ncbi.nlm.nih.gov/pubmed. doi: <http://dx.doi.org/10.1111/j.1466-769X.2009.00428.x> PMID:20017878

Li, L, Grimshaw, J, Nielsen, C, Judd, M, Coyte, P & Graham, I 2009, 'Use of communities of practice in business and health care sectors: A systematic review', *Implementation Science*, vol. 4, p. 27. <http://dx.doi.org/10.1186/1748-5908-4-27>

Luhmann, N 1995, *Social systems*, Stanford University Press, Oakland, VA.

Mataboge, M, Peu, M, Chinuoya, M, Rikhotso R, Ngunyulu, R & Mulaudzi, F 2014, 'Healthcare workers' experiences of HIV testing in Tshwane, South Africa', *Curationis*, vol. 37, no. 1. doi: <http://dx.doi.org/10.4102/curationis.v37i1.1170>

McDermott, R 2000, 'Community development as a natural step: Five stages of community development', *Knowledge Management Review*, vol. 3, no. 5, pp. 16–19.

Ngunyulu, R, Mulaudzi, F & Peu, M 2015, 'Comparison between indigenous and Western postnatal care practices in Mopani District, Limpopo Province, South Africa', *Curationis*, vol. 38, no. 1. doi: <http://dx.doi.org/10.4102/curationis.v38i1.1252>

Peu, M, Mataboge, S, Chinouya, M, Jiyane, P, Rikhotso, R, Ngwenya, T & Mulaudzi, F 2014, 'Experiences and challenges of an interprofessional community of practice in HIV and AIDS in Tshwane district, South Africa', *Journal of Interprofessional Care*, vol. 28, no. 6, pp. 547–52. doi: <http://dx.doi.org/10.3109/13561820.2014.917402>

Phiri, S, Rikhotso, R, Moagi, M, Bhana, V & Jiyane, P 2015, 'Accessibility and availability of the Female Condom: Healthcare provider's perspective', *Curationis*, vol. 38, no. 2. doi: <http://dx.doi.org/10.4102/curationis.v38i2.1533>

UNEDSA 2013, 'CONEWCH final report', University of Pretoria, Pretoria, South Africa.

United Nations 2015, 'Transforming our world: The 2030 Agenda for Sustainable Development', Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1.

USAID 2006, 'Communities@USAID: Technical guidance', Washington, DC.

Van der Wath, A 2013, 'Results of an audit of medico-legal services in Tshwane', paper presented at the University of Pretoria Women and Child Health Symposium: Consolidating and Connecting Communities of Practice, 3–4 December 2013.

Verburg, R, Andriessen, E 2011, 'A typology of knowledge sharing networks in practice', *Knowledge and Process Management*, vol. 18, no. 1, pp. 34–44.

Wenger, E 1998, 'Communities of practice: Learning as a social system', *Systems Thinker*, vol. 9, no. 5, pp. 2–3.

Wenger, E 2000, 'Communities of practice and social learning systems',

Organization, vol. 7, pp. 225–46, viewed 29 July 2016, <http://wenger-trayner.com/wp-content/uploads/2012/01/09-10-27-CoPs-and-systems-v2.01.pdf>.

Wenger, E 2006, 'Communities of practice: A brief introduction', www.ewenger.com/theory/

Wenger, E, McDermott, R & Snyder, W 2002, *Cultivating communities of practice*, Harvard Business Press, Boston, MA.

Wenger, E & Snyder, V 2000, 'Communities of practice: The organizational frontier', *Harvard Business Review*, January–February 2000.

Wenger-Trayner, E 2013, 'The practice of theory', in V Farnsworth & Y Solomon (eds), *Reframing educational research: Resisting the 'what works' agenda*, Routledge, London, pp. 105–10.

Wittmann-Price, R & Bhattacharya, A 2008, 'Reexploring the subconcepts of the Wittmann-Price Theory of Emancipated Decision Making in women's healthcare', *Advances in Nursing Science*, vol. 31, no. 3, pp. 225–36.

World Bank 2005, 'Communities of practice: Questions and answers', http://siteresources.worldbank.org/WBI/Resources/CoP_QA.pdf

World Health Organization 2015, *Towards a monitoring framework with targets and indicators for the health goals of the post-2015 Sustainable Development Goals*.