

A networked pathway to the PhD: The African-Norwegian case of Productive Learning Cultures

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How do PhD students become socialised into the professional world of academic work? This article pays attention to a 'networked' support pathway towards a PhD. The network constitutes an international research collaboration through a programme called Productive Learning Cultures (PLC) (2002-2011) between Norway and seven countries, developing or in transition, in sub-Saharan Africa. The purpose of this article is to describe how researchers within PLC have over the years developed a support structure for PhD students. PLC has had intended and unintended outcomes. While the education of PhD students was an intended outcome, unintended outcomes include the establishment of a peer-reviewed journal, and the development of a networked doctoral school. Special attention will also be paid to the programme design structures that assist female PhD students from partner universities and promote sustainability once PLC donor funding terminates.

Keywords: Doctoral learning, international cooperation, network, Community of Practice, academic writing, female student support.

Introduction

Higher education systems in most countries call for innovative educational programmes in all discipline areas that can serve the knowledge society of the 21st century (Symonds & Miller, 2002). One of the many interpretations of 'innovation' revolves around the notion of increased international cooperation in research and development. While universities are fundamentally international institutions, educational policy tends to be national and inward looking (Kruss & Kraak, 2002). University collaboration across borders therefore may balance these two aspects of academic work.

Currently there are many arguments for international cooperation, especially at the postgraduate levels. According to Ortiz (2003), ongoing processes of globalisation result in shifting political, social, legal, economic and technological conditions that pose various challenges to university systems worldwide. The globalisation process shapes the scope of activities undertaken by people and organisations across geographical divides, as well as existing power relationships. In this context, it is not surprising that international learning and research cooperation are priorities in many political agendas (Ortiz, 2003). A second reason for increased international cooperation in higher education is the belief that learning with and about other countries and cultures increases tolerance and leads to further human and sociocultural appreciation and understanding among nations (Woolf, 2002). A third reason, we would like to add, is that, increasingly, groups of expertise and resources for doctoral education are being distributed across multiple universities and geographical divides and seeds of innovation may well be found in the synergy between local and global communities of practice (Hattingh & Lillejord, 2005). A recent study by the Academy of Science of South Africa (ASSAf) (2010:17), which investigated key actions to escalate the quantity and quality of PhD students in the country, found a promising practice as "ensuring international exposure for doctoral students through national initiatives". This is also reflected in a clear message sent by the Department of Science and Technology (2002:59) relating to

... the need for greater collaboration globally and across Africa ... apparently supporting the development of sandwich and exchange arrangements for postgraduate study.

The purpose of this article is to respond to the third reason by reflectively describing a programme called *Productive Learning Cultures (PLC)* that, through multi-country cooperation over the years, developed into a pathway to the doctorate. PLC is a higher education collaboration between Norway and seven developing or emerging countries, in sub-Saharan Africa and has unfolded in two phases, namely from 2002 to 2006 and from 2007 to 2011. PLC was funded by NUFU (this is not an acronym) which is a programme emphasising sustainability through academic research and education cooperation based on equal partnerships between institutions in Norway and the South.

In the reflective description of PLC we will foreground design features, participatory values, implementation challenges, future sustainability and some of the intended and unintended outcomes. Special attention will be paid to the programme structure that was designed to assist female PhD students from partner universities.

An overview of the programme will be given in the following section, as well as a theoretical framework situating PLC in the literature relating to Communities of Practice.

The programme overview and its underpinning philosophy

The overarching aim of the *Productive Learning Cultures* programme was to develop an understanding of academic work and strengthen research capability as well as student supervision and mentoring competence at a doctoral level in the field of learning and instruction and teacher education. All the universities involved in the project are facing similar challenges when it comes to meeting international expectations on academic standards of excellence. Sharing knowledge through collaborative networking across borders is one way of dealing with global changes in higher education (CHE, 2000; Backhouse, 2009). The sub-Saharan partners for Phase I were the Universities of Pretoria, Zululand (both in South Africa), Namibia, Botswana, Zimbabwe and Universidad Pedagógica in Mozambique. The programme was led by two coordinators, the authors of this article, one from Norway, and one from South Africa. For the second phase, the African countries that became involved were Malawi and Zambia. Relevant knowledge produced during Phase I was transferred to the second phase's activities, while supervisors and some PhD students who graduated from the first phase remained as resource persons and constituted a supervision 'team' for the new PhD-supervisor dyads. The programme coordinators, together with one senior academic who acted as a PhD supervisor at each of the universities (six in Phase I; three in Phase II), were responsible for the implementation of various planned scholarly activities, strategic reflections, detecting emerging innovative ideas, overseeing the budget and bi-annually reporting on activities, outcomes delivery and budget expenditure.

The PLC philosophy was grounded in *trust* which is the cornerstone of any cooperation between persons and institutions and honoured the fact that it takes time to build up mutual trust, in particular in perceived asymmetric relations (Bundy, 2006). Moreover, the PLC philosophy was rooted in research indicating that changes must come from within, and that without ownership, no genuine engagement and long-term sustainability are feasible (Önnerfors, 2007). Therefore, in NUFU projects, the responsibility for defining the educational challenges and how to respond to them ideally lies with the Southern partners, as they are the ones who will be living with the results of their efforts (Strand, 2002). With a philosophy based on values such as trust, equality and ownership, the donors allow for freedom and flexibility in conceptualising and implementing the programme. Hence the initiative lies with South partners.

A theoretical framework situating PLC as a Community of Practice

Communities of Practice (CoP) was first introduced by Lave and Wenger (1991), originally described as a set of relations among acting and interacting persons. For the purposes of the present discussion, a CoP is a group of people informally bound together, with a shared set of interests, passion and expertise who share their experiences and knowledge in ways that foster new approaches to problems (Wenger, McDermott & Snyder, 2002; Lillejord & Dysthe 2008). Lave and Wenger (1991) and Hord (1997), theorising about Professional Learning Communities, view the acquisition of knowledge as a social process where individuals take part in communal learning at different levels, depending on their level of authority and/or

time. Central to the notion of communal learning is a process called ‘Legitimate Peripheral Participation’ within a context of situated learning, where a newcomer moves from peripheral to full participation in the community as the members learn collectively from one another (Lave & Wenger 1991). Members in the CoP may be geographically distributed, as was the situation in PLC. Communities of Practice can therefore arrange for virtual or face-to-face meetings in blended complementary ways. While CoPs and their potentials for learning and support are well established in business and commerce fields, few studies have examined the benefits of working in Communities of Practice at the doctoral level (Leshem, 2007).

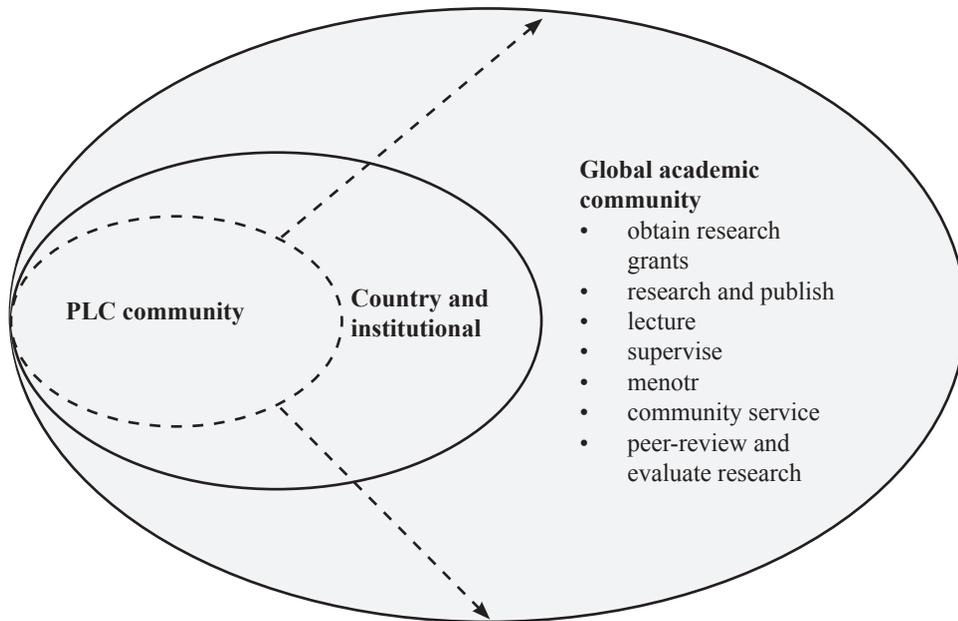


Figure 1: Academic Communities of Practice

The original intention with PLC was to strengthen existing or to establish new PhD programmes. In this respect, PLC functioned as a ‘booster’ support mechanism complementing local postgraduate work, and required graduation from PhD students’ own local universities in their home countries. While the PLC community (shown in the smallest oval in Figure 1) supported student-and-supervisor dyads for academic citizenship in their home countries (shown in the middle oval of Figure 1), it was designed, in particular for the second phase, to socialise its members into the world of work of a global Community of Academics, shown in the outer oval of Figure 1.

Macro design features of the Productive Learning Cultures programme

Within a flexible framework based on support rather than prescriptive checklists of criteria, PLC was conceptualised and designed by the coordinators around the following two pillars:

- Strengthening South-South inter-University networks with Northern collaboration.
- Intentional focus on the PhD student-and-supervisor as a dyadic mentoring process.

Strengthening South-South University networks through Northern collaboration

Often substantial funding available from various sources for postgraduate studies are organised around scholarships for individual deserving students to study abroad full-time. This model offers many attractive intellectual, professional and personal benefits to prospective PhD students, especially to individuals coming from resource-constrained universities (ASSAf, 2010). However, it often has a ‘downside’ in that many of these students *never* return to their home countries which need to benefit from the valuable knowledge of a highly qualified individual and much-needed national resource (Backhouse, 2009; ASSAf, 2010). Furthermore, all the PhD students in PLC had full-time day career commitments and had to undertake a PhD part-time. In addition, female students who aspire to a doctorate degree are faced with domestic challenges. Especially in Africa, women are often the main caregivers and sole breadwinners of a family, and cannot pursue the attractive scholarships designated for ‘women only’. In the ASSAf (2010:76) study PhD it was reported that

... balancing work, study and family was often viewed as a priority issue. Yet when choices had to be made, the PhD studies often took last place.

With this reality in the doctoral journey, it made sense to design a programme where full-time working PhD students, especially mothers, could draw on international mindsets and expertise, while remaining at their own institutions, capacitating their own faculties, graduating from their local universities, and serving as inspirational role models to fellow students and staff.

Strategically planned PLC activities allowed North-South and South-South exchanges of academics and PhD students. Students went on short study visits to one another’s institutions if they needed to. The exchange fluidity occurred in time spaces in between the bi-annual workshops. In the South, the University of Pretoria enacted the role of a resource engine university where many PhD students from the South benefited from the international postgraduate centre and its scholarly ethos, where state-of-the-art facilities and learning resources are hosted.

The PhD student-and-supervisor: A dyadic mentoring process

In Phase I of PLC, doctorate programmes did not exist at all partner institutions. However, all partner universities aspired to develop or strengthen a doctoral programme where it already existed through building supervisory capacity. PhD supervision is a complex scholarly practice requiring higher order thinking and deep approaches to learning, as well as skilful interpersonal relationships (Nsibande 2007). In her study Backhouse (2009) elaborates extensively on widely varying supervisory models and pedagogies that exist for doctoral education. The Report by ASSAf (2010:40) found that “supervisory modes are often limited to a ‘master/apprentice’ relationship” which is the traditional model where it is the role of a supervisor to ensure quality and accountability to the local university” (Huisman & Bartelse, 2001). Even for experienced supervisors, this is a responsibility that can be very stressful, because it is the pivotal point “at which scholarship gives birth to scholarship ... (when) scholarship renews itself among the present generation of scholars” (Andresen, 1999:30).

Responses to the concerns with individual supervision have been to make use of a ‘collaborative-cohort model’ (Burnett, 1999) which is organised around teams or committees of mentors and involves a substantial formal coursework component followed by a thesis.

Szanton and Manyika (2002) published an overview of PhD models in sub-Saharan Africa and found that they are based almost entirely on a master-apprentice model which was indeed the case with all the African partners in PLC. Through the PLC community, the two types of models of doctoral research supervision were blended. Although one supervisor was primarily responsible for a doctoral student’s progress in PLC, a student also benefited from the research expertise of a team of supervisors from the various partner institutions. In other words, the doctoral research endeavour was viewed as a *team effort* consisting of the PhD students, all the supervisors, the project coordinators, and other research experts

who were invited to the bi-annual workshops. These benefits were made available to doctoral students through strategic activities which will be discussed in the next section.

Implementing the design pillars through strategic activities in Phase I

In the first phase there were five male students and one female student of whom the female and one male dropped out halfway through PLC I. They were replaced by two males by their local universities. Except for one student, all of them were university staff members at lecturer level aiming at further qualifications through a PhD. During Phase I of PLC one student from each of the universities previously mentioned was enrolled at his/her home institution and had local supervisors.

Research projects in Phase I were mainly, but not exclusively, organised around two themes. The first was *indigenous knowledge systems*. The rationale for developing a research focus around indigenous knowledge systems was a reaction to the requests by Southern partners' Faculties of Education who had to prepare pre- and in-service teachers while the public school curricula in Botswana, Mozambique and South Africa at the time included sections on 'local' or 'indigenous' knowledge (Mosimege, 2003; Gerdes, 1994; DoE, 2002). One of the focus areas of the National Research Foundation (NRF) in South Africa also included indigenous knowledge systems (2004), and potential funding could be sourced for initiatives in this focus area. A vision for a scholarly journal in this focus area emerged from one of the woman academics who currently is the editor-in-chief. The PLC community cultivated the peer-reviewed journal called *INDILINGA: African Journal of Indigenous Knowledge Systems* to full accreditation. Additional funding from the NRF facilitated the initial paper-based version and an e-version is also currently available.

The other theme relates to the pedagogical implications of flexible learning through *Information Communication Technologies (ICT)*. Digital information presents each individual and institution with new challenges to survive and thrive. The rationale with the strong focus on ICT in this programme aims at narrowing the digital divide that not only exists between the North and the South, but also in nation states in sub-Saharan partners. The PLC programme conceptualisation originated from the assumption that to give more South partners access to e-knowledge and to learn through and about ICTs in the knowledge society is extremely important in any academic environment as emerging technologies change instructional practices.

Apart from organising themes, activities were implemented that facilitated the PLC community's operations. First, *bi-annual workshops* were held at one of the partner institutions for a week of scholarly engagement and training in areas identified jointly by the students and supervisors. At the workshops, the students presented their research progress to the team of supervisors. Through week-long deliberations, the doctoral students received advice and feedback from their peers and the rest of the team. The contact workshop sessions did not follow a structured curriculum, but would typically introduce the stages in the research process on a need-to-know, just-in-time basis, while demonstrating to the PhDs, through their own research complexities, that research is not necessarily a linear lock-step process.

Secondly, an *electronic web-based platform* was created through which the academic discourse and training that were given at the workshops could continue *virtually*. The supervisor team argued that such a platform could facilitate internalisation of learning that had taken place at the workshops and could contribute to ensuring sustainability after the project period (Meerkotter, Fataar, Fuglestad & Lillejord, 2001). In this way, the productive academic debates that were stimulated during workshops continued across the geographical and cultural divides of the partner universities. A research project by Blijnaut and Lillejord (2006) was conducted with regards to pedagogical implications of flexible learning, especially as it pertains to e-learning of doctoral students across geographical and cultural boundaries.

Thirdly, an *interactive web-based module* on qualitative research methods was developed within the programme. All the PhD projects in PLC I utilised a qualitative research approach. This module was available to all the partner institutions for use in any postgraduate programme.

To conclude the discussion on Phase I activities, we need to foreground the non-academic support mechanisms. *Administrative support* was crucial for effective functioning across many countries and universities. Both the Northern and Southern coordinators were able to hire part-time administrative staff

to manage the network. They facilitated student and staff exchanges between the different institutions, annual financial reporting, as well as the administration that was involved in attending and organising workshops and conferences. This ensured regular and open communication flow to the many participants in the network.

The *financial support* given to the PhD students was broad in scope and supported a student to engage in a range of scholarly activities such as registering for a PhD at their respective universities, covering the running costs that are instrumental in conducting research, such as digital data recorders, transcribers' fees, editors' fees and appropriate books, and c) attendance and presentation of their work at workshops and at least at one national or international conference, as well as inter-university short stays.

An overview of outcomes generated during Phase I

All six PhD students completed their studies in a five to six-year period and graduated from their local universities. At one of the universities the PhD students and supervisor established their university's first doctoral programme, utilising the web-based module on qualitative research methods in their new doctoral programme. One unintended outcome was the establishment of the journal, *INDILINGA: African Journal of Indigenous Knowledge Systems* mentioned earlier. Nineteen articles were published by the PLC I community (students and supervisors), of which 12 were in South African accredited journals. Twenty-two conference papers were presented. Four of the supervisors and three of the PhD students who graduated were promoted by their universities and one now holds an executive advisory position in the South African Government. Another supervisor is the Director of the Research Unit at his university. PLC I received awards for innovation in higher education by the Universities of Zululand and Pretoria, foregrounding 'networked collaboration' and 'multi-institutional team supervision' as innovative elements (Mogotlane, 2003). The Norwegian Minister of Higher Education and Research commended the sub-Saharan network of universities design of PLC I that has the potential to make future sustainability of efforts with foreign funding more feasible. Drawing on the PLC I design, a new category for NUFU funding was established entitled 'networked-projects'.

North-South collaboration: Reflections on Phase I of Productive Learning Cultures

Despite the outcomes produced, some programme design elements and activities worked well and others did not and required change before applying for another round of NUFU funding. Experiences from the first five years of the PLC I project were the following:

- In the beginning years, there was confusion and some frustration concerning North-South expectations, especially in a type of project such as PLC that allowed space for emerging ideas and initiatives. In the case when the North partner expects initiative and the South partner is not used to showing this kind of activity, but rather expects someone else to take the lead, problems may arise. Since it was not prescribed to Southern partners what to spend money on to 'produce outcomes', South partners underspent Northern funding, which was perceived as a lack of activity and initiative on the part of the South. South partners often struggle with the colonial heritage and are afraid of being criticised or punished, especially when working with foreign funding. The Scandinavian approach to North-South collaboration is (ideally) dialogic and participatory and not to move in with money and manpower "telling" local people what to do (Önnerfors, 2007).
- Even though PhD students did oral presentations at the workshops, written texts (chapters) were not forthcoming as expected by the project coordinators. Hence, it was difficult for project coordinators to ascertain where in the process PhD students were, what the level of their academic writing was and to estimate: Would they finish or not? Within time or not? In general, it was not easy to obtain information on student progress. Student evaluations of PLC I later indicated that students, who have to author a thesis in a language other than their mother tongue, were not sufficiently confident with the academic writing genre.

- ICT was from the outset planned to be a central asset in this network collaboration, but turned out during Phase I to be more of a hindrance than a help. First, students were reluctant to share texts (chapters) with one another – the Norwegians came from a culture where the writing process and the sharing of texts was a central part of postgraduate learning and tried to introduce this as a productive way of working. This was not achieved in Phase I. Secondly, the problem of bandwidth, few computers and viruses at the South institutions also excluded the use of ICT as integral to the doctoral studies.
- Regular communication, project coordination and meeting external reporting deadlines across academic, financial and administration departments of six universities in five different sub-Saharan countries were logistically overwhelming despite the efficient functioning of the two part-time project administration offices.
- The bi-annual workshops and the multi-university team supervision during workshops proved a productive factor in many ways. Possibly the most important function of the workshops was to stimulate scholarly debate on the quality of the research questions, theoretical frameworks, research design and methodology. This process not only enhanced the academic rigour of a student's research, but also supported the *supervisor* with the enormous responsibility of ensuring the intellectual quality of his/her student's work. In brief, this approach allowed students and supervisors alike to learn from a diverse pool of expertise, and ultimately to take their insights back to build capacity in their own institutions, thereby strengthening the potential for future sustainability once the project terminated. The team's exposure to a variety of educational backgrounds, schools of thought, methodological paradigms that scholars from different countries bring, was extremely enriching, and allowed critical thinking and knowledge production to emerge.

The planning of Phase II was based on these experiences from the first cohort.

Implementing changes in Phase II

We decided to make the following changes when we applied for further funding for a second round of PLC (PLCII).

- We reduced the number of institutions from 6 to 3 to address the logistical concerns. The Universities of Malawi and Zambia became Southern partners while the University of Pretoria remained the coordinating university. The University of Malawi had an interest in teacher education, while the University of Zambia focused on medical education.
- Each of the three institutions was granted financial support for two PhD students and we particularly invited female students. Four of the six students were females and all students were faculty members at their respective universities.
- We decided to make the University of Pretoria the South "hub". This university catered for all the six doctoral students in terms of access to library, the postgraduate centre, accommodation, travel, etc.
- We kept most of the seniors from the first round (PLC I) as they were familiar with the NUFU "idea" and expectations and realised that there is, within the NUFU paradigm, substantial room to manoeuvre (previously referred to as a North expectation on initiative).
- In order for the students not to feel isolated and lonely (even if they were two at each institution), we decided to transform the workshops from Phase I into a more structured doctoral school in Phase II. This decision proved successful, and addressed several of the problems we were facing during the first phase of the programme.

The doctoral school needed a headmaster, and one of the senior partners from Phase I was ascribed the responsibility to maintain contact with the students and act as a "link", but with his loyalty to the students

and their supervisors. Hence, the two coordinators received more and broader information on the progress of the students and their problems.

A doctoral school needs a program, and we targeted the following themes: methods and research ethics; philosophy of science, and academic writing, research publishing and plagiarism. These topics were addressed annually – from various angles.

While reporting used to be annually in Phase I, it was conducted bi-annually in Phase II by the student-supervisor dyad. With two annual doctoral schools, the students received more feedback and it was easier to oversee their progress.

At the doctoral schools sessions we also experimented with various forms of presentations. Poster presentation was, for instance, introduced at a stage when the students really needed to focus and benefited from being forced to present their thesis in the “one-page format”. This provided clearer goals to their projects. Parallel with writing the thesis, they were persuaded to write an article. Progress on the article was also reported regularly in the doctoral school, but in a smaller forum. An experienced journal editor supervised the students on how to (step-by-step) write an article. In this process, the students also used each other extensively for feedback and comments.

The ICT requirements were adapted in order to provide each student with a laptop and e-mail contact at his/her home. It was necessary for the doctoral mothers to work at home while attending to their parenting responsibilities.

During the last stages of PLC II, the themes turned more towards socialising the students, all of whom were university faculty, into the world of academic work, with sessions entitled, for example ‘From PhD student to PhD supervisor’, ‘Writing for Research Grants’, and ‘Applying for Funding at Research Foundations’.

PhD students and supervisors’ experiences from the PLC collaboration

After each workshop, PLC participants completed reflective comments on open-ended questions, followed by an open session where each shared his/her learning, personal growth, challenges, ‘what worked well’ and ‘what did not work well’. We will foreground two recurring themes: the first has the highest occurrence, and the second resonates with an intentional design element of PLC.

The theme that emerged most frequently was ‘*We are a family*’. The notion of a prolonged engagement through network collaboration is aptly captured by the metaphor of ‘family’. The ‘family’ metaphor perhaps describes the nature of the relationships that were fostered between South-South and North-South institutions as well as between individuals. The doctoral school principal mentioned that PLC members had entered into ‘relationships for life that we can count on in our personal and scholarly lives’. The value of ‘trust in all members of the family’ was highly valued by all, because often the perception exists that funders have their own research agendas which may negatively affect working relationships. One female student mentioned that the authenticity of the trust allowed her to ‘crawl out of her shell because no one looked down on one another’. The existence of a trusting, safe environment allowed for the rigour of the intellectual project to be pushed to a higher level among students themselves. One female student stated that she had never expected that her peers could ‘grill me so much and push me until they were satisfied with a clarified well-structured academic argument. Some definitely did not have the discretion of the professors, but nevertheless, that was good for sharpening my own thinking’.

The majority of the supervisors declared that the Community of Practice was revitalising their professional lives as much, if not more than, those of the students in PLC. One male academic noted that the variety of research lenses and orientations brought together resulted in some heated debating and scrutinising of dispositions, which pushed forward his own professional growth. Another remarked that the PhD students had benefited greatly from observing supervisors arguing and validating their theoretical perspectives among each other, which is ‘knowledge production in action’. This could not be demonstrated in one-on-one master-apprentice supervisor models. Two of the supervisors mentioned the fact that PLC funding also allowed them to present at conferences, resulting in one article output for each of them which otherwise might not have realised.

Another theme that emerged related to '*Being a woman PhD in PLC*'. It is significant that this particular theme emerged, because PLC was trying to attract and retain female PhDs. When Phase II was launched, NUFU decided to financially reward projects with more than 40% female student participation which PLC II had. The coordinators decided to accommodate specific female needs on a very practical level through technical support, e.g. laptops and internet connectivity in their homes. The male PhDs also benefited from this arrangement. As one woman stated, 'I could spend way more time-on-task. I could settle into long hours of writing on my laptop or searching for literature when all had quieted down in the evenings'. One mother mentioned that she could never have pursued a PhD at the time she actually did, because she already had a young child before PLC and during PLC she fell pregnant with her second. Owing to the nature and structure of PLC, she could continue, although she found herself in a typical guilt consciousness of living a life she says 'that became split between doing a PhD, which I desperately wanted, being a lecturer, a wife and mother'. Never in the public reflective sessions did the women talk about their academic mothering challenges. Those comments were reserved for the written reflective journals. One female PhD student stated: 'At least I could talk about my challenges of being a studying mother, because there were enough females as students and coordinators who understood the feminist perspectives and opened up a safe emotional space to talk about these realities'.

Conclusion

This article reflected on a 'networked' support pathway towards a PhD. We have argued that PLC brought together two dominant traditions of PhD education, namely that of the master-apprentice model and that of a team doctoral committee approach, while drawing on the strengths of both. PLC provided the safety, trust, connection and 'family feel' that students need in order to achieve their doctoral goals. Through PLC students participated in a Community of Practice which nurtured the conceptual and technical aspects of research while simultaneously attending to the emotional aspects of this rather demanding journey filled with obstacles, breakdowns, reversals and yet growth and progression.

PLC provided a doctoral education model to be critiqued, transferred or adapted at local participating universities, which, as described by one senior academic, 'is now running at an institutional level in the Faculty of Education at my university'.

Now, after 10 years, the PLC Community of Practice will dissolve (shown by the smallest oval in Figure 2) as it comes to the end of its funding period, but the sustainability designed into PLC could exist in other organisational formats, as shown in the adapted Figure 2. Both the supervisors and the PhD students who have graduated in their home countries will continue to work at their local universities (as shown by the inside oval in Figure 2) while also participating and contributing to the global academic community.



Figure 2: A sustainable academic community

Amongst the individuals new networks may be fostered and on existing ones can be built for the formation of new or different supporting Communities of Practice. When the PhD students continue their academic careers, they have learned an academic practice that they will implement in their home institutions. Based on the principle that we learn from each other and that the quality of academic work relies on peer criticism and feedback, PLC has succeeded in enculturating its PhD students and senior participants into this essential academic competence required by a global academic community (as shown by the largest oval in Figure 2). This has, from our perspective, been one potential answer to the call for *sustainability* of donor projects in Africa.

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