Contributing to the agenda for sustainable development through North–South educational partnerships: An analysis of two Linnaeus-Palme staff–student exchanges between Sweden and South Africa

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THE GEOGRAPHY DEPARTMENT AT RHODES UNIVERSITY in Grahamstown, South Africa, has participated in three Linnaeus-Palme exchange programmes with Swedish universities, two with Högskolan Väst, from 2003 to 2010, and one with Linköping University, from 2013 to 2015. All three programmes involved student and staff exchanges between the participating universities. As participating staff from Rhodes University are now retired and will not take part in any future exchanges, this is an appropriate moment to draw together our experiences. We do this in a number of ways. First, we evaluate our exchanges within the context of the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs), and international and institutional policies relating to internationalisation, sustainable development and the environment. We then present reflections from students who participated in the exchanges to show the extent to which the programmes have heightened their awareness of their own and partner cultures, and might have contributed to the achievement of the MDGs and SDGs. We also discuss the curriculum of the last exchange, in which we used a range of active learning methods to promote deep learning about sustainable water resource management in Africa. We conclude by relating our experience of designing, developing and participating in these exchange programmes to the broader context of North-South collaboration and consider how aspects of what we have learned might be applied to future programmes of this nature.

The Millennium Declaration of 2000, the Millennium Development Goals and the Sustainable Development Goals

The frameworks and protocols established by the United Nations Millennium Declaration of 2000 were developed and promoted as we began planning for

our first exchange with Högskolan Väst. Thus, they are a useful starting point for this paper. The Millennium Declaration was subsequently encapsulated as the eight MDGs that nations were to meet by 2015. In September 2015, our last Linnaeus-Palme exchange programme ended just as the MDGs were superseded by the SDGs. The 17 SDGs, to be met by 2030, have set an ambitious agenda for people, the planet, prosperity, peace and partnership. Two of these in particular, the planet and partnership, are arguably common threads running through global obligations since 2000.

The Millennium Declaration starts by spelling out its core values and principles. Article I.6 details the six values that are fundamental to international relations: freedom, equality, solidarity, tolerance, respect for nature and shared responsibility. It is fair to say that two of these, in particular, have been especially important to our curriculum and exchange activities. They are quoted below (UN 2000: 2):

Solidarity. Global challenges must be managed in a way that distributes the costs and burdens fairly in accordance with basic principles of equity and social justice. Those who suffer or benefit least deserve help from those who benefit most...

Respect for nature. Prudence must be shown in the management of all living species and natural resources, in accordance with the precepts of sustainable development. Only in this way can the immeasurable riches provided to us by nature be preserved and passed on to our descendants. The current unsustainable patterns of production and consumption must be changed in the interests of our future welfare and that of our descendants.

These values were subsequently translated into MDG 7 (Ensure environmental sustainability) and MDG 8 (Develop a global partnership for development). None of the MDGs were directed specifically towards higher education or sustainability in education; MDGs 2 and 3 promote universal primary education and the elimination of gender disparity from primary and secondary education.

Arguably, higher education can be said to feature in the solidarity principle that underpinned MDGs 7 and 8. In our case, the Swedish International Development Cooperation Agency's Linnaeus-Palme programme fully funded reciprocal exchanges of staff and students between higher education institutions in Sweden and countries in the South. SANORD member institutions, such as Rhodes University, Högskolan Väst and Linköping University, therefore benefitted from this funding vehicle.

The seven aims of the Linnaeus-Palme exchange programme remain strongly related to the Millennium Declaration and MDGs described above (Boman et al. 2012), and to MDG 8 in particular:

- The programme aims to raise the quality of higher education by integrating global perspectives into the learning process.
- Teachers and students participating in the exchange should gain increased competence in global issues and an enlarged contact network.
- On a departmental level, the aim is to integrate global perspectives into teaching, which will also benefit those who have not taken part in an exchange.
- Students who participate in exchanges should be better prepared for work in a global context. Teachers who participate in exchanges are expected to use and spread both their own global knowledge as well as that of their students, inside and outside of the classroom.
- Partners should be able to participate in equal collaboration that leads to mutual benefits, even if the resources may be very different.
- The programme, financed by the Swedish International Development Cooperation Agency, aims to contribute to the fulfilment of the goals set out in its strategy for capacity development and collaboration, through providing good competence and capacity both with Swedish participants and participants from developing countries.
- A longer-term aim is to contribute to the sustainable reduction of poverty.
 An important part of this project is to stimulate Swedish higher education institutes into increasing their internationalisation, by contributing to the strengthening of relations with countries outside Europe and North America.

Building on from the MDGs, the SDGs (UNDP 2016) focus on similar themes. Two areas of critical importance noted by signatories to the post-2015 Agenda who helped formulate the SDGs were that (UN 2015: 2–3):

We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations...

We are determined to mobilise the means required to implement this Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

Sustainability is a key component of Rhodes University's own environmental policy. Thus, by focusing on sustainable water resource management in an African context in our latest exchange with Linköping University, our programmes and exchanges were directly aligned to the global initiatives outlined above and in the policy of our own university. An important aim of the Linnaeus-Palme programme is that the partners involved share collaboration and benefits despite their different resource levels. In our view, Sweden benefitted from the pedagogical developments in South Africa's higher education sector and the innovations that our African context has prompted us to develop (Fox and Assmo 2004; Fox et al. 2008). It is therefore appropriate to consider the institutional context in which Rhodes University staff contributed to the exchange. Before examining our curriculum and the exchanges themselves, however, it is useful to outline Rhodes University's institutional response to the Millennium Declaration, MDGs and SDGs. We argue that two policies, in particular, informed the success of the exchanges and the degree to which they supported the SDGs in terms of environmental policy and internationalisation. These are explained through our institutional memories, as we were role players in the development of the environmental policy.

Institutional policies at Rhodes University

It is fair to say that by mid-2017, there had been no debate at an institutional level concerning a response to the MDGs or SDGs. The university's environmental sustainability policy (Rhodes University 2015), however, predates the MDGs, and is one of a number of initiatives championed by concerned and motivated academic staff. It was adopted in 1998 at the same time as the university's cross-disciplinary environmental science programme began. It was revised again in 2015. The policy's first principle is:

To promote, support and expand initiatives and programmes that lead to improved understanding, development and implementation of sustainability education and research across all faculties and all disciplines.

We were directly involved in both the establishment of the environmental science programme and the first environmental science committee that drew up this policy. Unsurprisingly, therefore, the geography curriculum and associated international activities support the policy, and subsequently MDGs 7 and 8.

Rhodes University formally adopted a policy that supports internationalisation in 2005. Following on from Knight's (2004) work, Rhodes University (2005a: 3) defines 'internationalisation' as:

The process of developing, implementing and integrating an international, intercultural and global dimension into the purpose, functions and delivery of higher education.

Knight focused on unravelling what internationalisation means at the institutional or sectoral level; in this chapter, we are concerned with the disciplinary and academic levels. It is clear, however, that the exchange programmes discussed below are good examples of internationalisation and, although pre-dating the university's policy, were well aligned to it. Thus, our curriculum supports both the environmental and internationalisation policies, and these, in turn, relate directly to the principles of solidarity and respect for nature expressed in the Millennium Declaration and its subsequent formulations as the MDGs and SDGs.

Internationalisation and the geography curriculum at Rhodes

Since the early 2000s, internationalisation through participation in exchange programmes has played a significant role in the curriculum development of the geography department at Rhodes University. From 2003 onwards, one of the spin-offs from the university's innovative post-graduate diploma in higher education and training, completed by Fox, was a new awareness of international academic credit systems, and opportunities available for us to design post-graduate courses in collaboration with external, non-South African partners. This meant, for example, that students at Rhodes and Högskolan Väst could complete modules of their honours (fourth-year) level courses, and undertake research projects in each others' countries, while gaining transferrable credits along the way (Fox and Assmo 2004).

Pedagogical innovations followed; some teaching was delivered online, and video conferencing took place from as early as 2003 (Fox and Assmo 2004). Furthermore, role-playing simulations such as the African Catchment Game, African Development Game and Swampfire were integrated into these exchanges (Fox et al. 2008; Rowntree and Fox 2008), facilitating deeper understandings of the African context for participants.

The undergraduate geography curriculum at Rhodes University was refocused in the early 2000s with an explicitly international and African element throughout (Rhodes University 2005b). It might seem tautological that geography as a discipline would be place specific and context dependent, but this is not necessarily the case (Fox 2005). The African continent had always featured in the Rhodes geography courses, but from the early 2000s, this was made an explicit part of the curriculum. First-year courses focused on global dimensions, the second year focused on southern Africa, and in

the third year, the first semester core course examined developmental and environmental issues in Africa. Indeed, the strong African content in the curriculum, and the lack of understanding of Africa in the Nordic countries, has been one of the benefits that Rhodes geography department brought to its internationalisation activities. The section on the Linköping curriculum below shows how this played out in our last exchange programme.

By 2001, the department had packaged its honours options into four marketable streams: geography honours, spatial development honours, environmental water management honours, and landscape process and management honours (Rhodes University 2005b). None of the four streams explicitly targeted the MDGs, but sustainability was a key thread running through all of them. Significantly, the Linnaeus-Palme exchange with Högskolan Väst (in economic or human geography) helped support the viability of the honours programme by attracting students who were interested in human geography. The environmental water management programme provided an honours level option that was attractive to geographers with a scientific background. The second exchange with Linköping University targeted this group.

The exchange programmes

External funding was found for staff and student exchanges through Sweden's Linnaeus-Palme programme from 2002 to 2015. From 2003 to 2010, the exchange was with Högskolan Väst; a second initiative began in 2012 with Linköping University.

The exchange programme with Högskolan Väst ran in two phases. The first ran from 2003 to 2006, and involved fourth-year students from Rhodes University and what was then known as Högskolan Trollhättan-Uddevalla. All students undertook a common online course in research methodology and philosophy that was worth 7.5 credits in the European Credit Transfer System (ECTS). This was followed by a minor research project (15 ECTS credits) conducted in each other's country. When Högskolan Trollhättan-Uddevalla became Högskolan Väst in 2006/2007, the economic geography programme was discontinued and a new international undergraduate programme in politics and economics (IPPE) was designed with our input. From 2007 to 2010, Rhodes students went on exchanges built around research projects in Sweden, while Swedish students could obtain undergraduate coursework credits at Rhodes by taking courses with a strongly African focus. These credits counted towards the international component of their IPPE curriculum.

As mentioned, the exchange with Linköping University ran from 2012 to

2015. South African master's and honours students who went to Sweden all participated in master's courses. For honours students, the courses counted towards their Rhodes degree. For master's students, however, the courses were seen as supplementary to their required research activities, which started only after they had returned to South Africa. The benefit of the exchanges for master's students was to experience a different country and academic culture in addition to scholarly networking, but they did not accrue any credits towards their degree from Rhodes University. The courses taken at Linköping were: climate science and policy (15 ECTS credits), sustainable resource management (15 ECTS credits) and Nordic culture (15 ECTS credits).

The Swedish master's students who came to Rhodes University gained credits towards their Linköping degrees by attending fourth-year courses in geographic information systems, and environment and development in Africa. These were compatible with their curriculum on science for sustainable development.

In 2013 and 2015, staff from Rhodes visited Linköping's thematic studies department and taught a three-week course component on environmental change (worth 15 ECTS credits). This was a contribution to a course on sustainable resource management, which was part of their master's programme in science for sustainable development. We focused on water resource management for sustainable development in Africa. In 2014, another staff member from Rhodes contributed to an introductory course on sustainable development (7.5 ECTS credits) linked to this same degree.

Clearly, the two exchange schemes operated in different ways. The Högskolan Väst–Rhodes University exchange was research focused, while the Linköping–Rhodes University exchange was coursework focused. Participating students therefore had quite different experiences in the two programmes, and this is reflected in some of their responses as detailed below. Students who did their research through the Högskolan Väst exchange had less contact with the university departments but more with people and structures outside of the university, such as homeowners and municipal officers. The Linköping exchange integrated students more into the university environment and, in the case of South African students, gave them opportunities to interact with a wide range of international and Swedish students. They had less engagement outside the university.

The impact of the exchanges on participating students

In 2015, we asked the 61 students who participated in the exchanges about their experiences. We mailed a questionnaire to the different groups, and engaged in face-to-face and email follow-up reminders with those who responded. Some were difficult to trace, as by then it had been many years since they had completed their studies and left the university. We managed to find most of them, however, via social media. Of the 54 students who went on the Högskolan Väst exchange from 2003 to 2010, we received responses from only 16. Significantly those who responded either had gone on exchange relatively recently or had made lasting friendships while away. From the Linköping exchange, five of the total of seven students responded, four of these from South Africa. Of the 61 students who participated in the exchanges, the majority (44) were female, which was a small, and deliberate, over-representation of the gender distribution of our students.

The questionnaire consisted of three sections with three or four questions in each. The preliminary questions regarding personal details of age, sex and year of exchange were followed by: first, a section on their personal and social connections; second, their spatial and place-based connections; and lastly, their experience of the exchange and research or learning experience. The questions we asked were relevant to the seven aims of the Linnaeus-Palme programme mentioned above (Boman et al. 2012), and while it was not our intention to evaluate the programmes against each of the seven aims, the responses we had certainly show that our exchange had fulfilled many of them. In addition, as geographers involved in internationalisation, it was also important for us to understand the spatial, geographical context of the students, and the questions were designed to help us obtain some insight into this.

Fifteen of the respondents were from Rhodes University, and six were from Högskolan Väst and Linköping. All 21 respondents indicated that they had made social connections or friends during the exchange. Ten said that they had made work-related connections, and half of these reported that they had maintained these connections since their exchange.

Three of the students from Högskolan Väst had already been to Africa before their exchange. All those from Sweden visited places other than Grahamstown during their exchange, and two have returned to South Africa since. Two Rhodes students and one Swedish student had returned to visit the friends and connections they had made in their host countries. All respondents reported that they had benefitted from the exchange, and all but one indicated that the exchange had influenced their life and work. The open-ended responses showed that the exchange had a major impact on most of the students. The quotes below have been selected to exemplify the main recurring themes.

Increased global awareness and preparation for work in a global context are pre-requisites for the global partnerships envisaged in the MDGs and

the SDGs. They also relate to aims two and four of the Linnaeus-Palme programme. Typical responses from former students included, 'There is a large cultural difference between South Africa and Sweden,' and 'International studies benefitted my employability'.

Many of the responses highlighted an appreciation for differences, learning opportunities, confidence gained, skills mastered and people encountered: 'I came back a different person so it has influenced everything' said one. 'I learned a lot about differing views, social, economic and environmental with many students from all over Europe' said another.

It is clear that the students experienced new cultures and geographical settings and broke down some stereotypes. As one respondent noted, 'Sweden does have social issues, largely drug related, I was expecting the "perfect" country...people were a lot friendlier than I had imagined.'

Geographically, the survey responses reveal an enhanced appreciation of space and place. They also show that the Linnaeus-Palme exchanges supported the aims of both the Linnaeus-Palme programme and Rhodes University's internationalisation policy. It can also be argued that the exchanges offered an effective way of upholding the principle of mutuality in North–South partnerships and supporting the Millennium Declaration's call for international solidarity.

Raising awareness about sustainable development in Africa

In 2013 and 2015, we taught a three-week component at Linköping University that focused on water resource management for sustainable development in Africa, as a contribution to a course in sustainable resource management. Our aim was to raise awareness among Linköping students of the role of water in sustainable development, using Africa as a case study. Some outcomes of the 2015 course are highlighted below.

Twenty-one students attended the 2015 course. They comprised an international group, with six students from Sweden, nine from other European countries, three from Africa (including the two students from Rhodes), and one each from China, Mexico and Bangladesh. The course was taught in English, a second language for the majority of students. Their academic background was also highly variable.

Our course examined the distribution and development of water resources in Africa in relation to more general development issues on the continent. The principles of integrated water resource management provided the theoretical context. Our aim was to help students gain a better understanding of the complex issues around water and the key role it plays in the environment, social welfare and economic growth. We used a range of different learning

activities that we have developed in a number of different curriculum contexts (see Assmo and Fox 2015; Fox et al. 2008; Fox et al. 2013a; Fox et al. 2013b; Rowntree and Fox 2008; Rowntree et al. 2009). These included:

- Formal lectures and seminars on readings.
- A geographic information systems exercise using Fusion Tables (an open-access platform) in Google Drive to map water use in Africa.
- Two self-guided exercises on climate change and water use in Africa using the online learning platform MetEd.
- A water futures workshop, drawing on experience gained from working with colleagues from Turku University as part of a Finnish North–South– South exchange programme.
- A seminar on water for development based on the themes of World Water Week organised by the Swedish International Water Institute.

Key learning outcomes were that Africa is a diverse continent and that there is no one-size-fits-all solution. More specific knowledge outcomes included:

- Drier countries are often the best developed.
- Vulnerability to climatic hazards such as floods and drought is increased in poor countries through the lack of investment in infrastructure.
- The widely promoted integrated water resource management (IWRM) is a useful theoretical concept but hard to apply in practice, especially in a developing country.

Awareness of the SDGs was developed through a mini-conference at the end of the course in which students presented on four perspectives: global to local; growth and development; human and social; and ecosystem and pollution. The presentations, which covered a range of issues relating to water management in eight African countries, clearly showed how the four perspectives intersect, highlighting again the diversity of water management issues in Africa.

Two questionnaires were sent to students involved in the two exchanges between Linköping and Rhodes. That is, students who took part in exchanges were asked whether their participation in the courses had added to their learning experience and how they viewed their fellow students' knowledge of their own continent. All four South African students and one Swedish student responded. Then, all students who participated in the course we taught were sent a different questionnaire. Seven of the 21 students who attended the course responded.

Our first question to the exchange students asked whether living in Sweden helped South African students to understand their own country better. All agreed that it did. It helped them to reflect on their own circumstances and to compare countries. The significance of a colonial history was brought home to one South African student; another said she had met people from several African countries in her Swedish university residence in Linköping and on public transport and had learned about other African countries in this way.

When asked whether people from the developed world understand what it is like to live in Africa, all the exchange students, irrespective of whether they were from South Africa or Sweden, responded negatively. One South African student said that she found that, while many people were able to sympathise with issues such as poverty or food availability, subtler issues such as racial sensitivity and the importance of cultural heritage were things they had never been exposed to. Other non-Africans found it hard to grasp the widespread nature of poor service delivery that resulted in electricity outages and water shortages in South Africa. Some had started out with a simplistic view of life in different African countries. The Swedish student who had come to South Africa commented on the vast diversity within the continent, noting that even within South Africa, big differences exist.

In a follow-up question we asked whether the presence of South African exchange students in the class had helped other students to understand Africa better. There was general agreement that they were able to help other students understand the nuances of Africa. South Africans noted that, during the course, European students tended to apply a 'first-world mindset' and had little understanding of the political or cultural context of development issues in Africa. Two examples mentioned were the impact of apartheid and the cultural value of natural resources. Non-African students also tended to assume that all African countries were the same. The teaching activities described above helped to dispel these notions.

By participating in the exchange, the South African students' awareness of African issues was typically heightened, and they were also able to share some of their insights with other students in the class. The exchange was thus seen to benefit all students to some extent and had increased their competence to address global issues.

Discussion

The two Linnaeus-Palme exchange programmes spanned the period in which the MDGs were implemented; they ended as the SDGs were published. In this section, we consider the extent to which the exchange programmes promoted these goals.

The teaching exchanges benefitted from the in-depth knowledge of Africa gained over many years by the Rhodes geography department. We were able to offer insights into development problems that someone not resident

in Africa would be less able to do. The curricula we developed at Rhodes have all been closely aligned to the principles and values underpinning the Millennium Declaration, MDGs and SDGs, taking cognisance of global and local priorities, challenges and mechanisms. For example, the first-year course on global development considered sustainable development both as a concept and in practice. In the second year, an analysis of natural resources in southern Africa necessitated examining the reasons for the degradation of soils and water through unsustainable practices. At Linköping our offering encouraged students to appraise the opportunities for and constraints on the sustainable management of African water resources. Thus, it can be argued that the exchanges enhanced and expanded participants' capacities to address the key challenges of MDG 7 (ensure environmental sustainability) and SDG 6 (clean water and sanitation).

Obviously, appropriate curriculum design and content can promote awareness about the need for sustainability, but can an exchange scheme contribute directly to the SDGs? We believe the Linnaeus-Palme programme has done so through promoting a global partnership for sustainable development and contributing to strengthened global solidarity. Both South African and Swedish exchange students came away with more nuanced understandings of the issues underlying poverty and vulnerability that are likely to enhance their capacity to contribute to the achievement of the SDGs in future. The Linnaeus-Palme exchanges also clearly addressed MDG 8 (develop a global partnership for development) and SDG 17 (partnerships for the goals).

The SANORD network is a good example of an organisation based on the principle of global solidarity. Our exchange programmes certainly promoted awareness of SANORD and, as Rhodes was an early member of the network, this led to our Linnaeus-Palme partners (Högskolan Väst and Linköping University) also joining. The exchanges are good examples of the mutuality that underpins the network and of the high regard that has developed between Nordic and southern African universities.

Promoting internationalisation

The teacher and student-exchange programmes have played a valuable role in curriculum development at Rhodes, helping to sustain internationalisation over a long period of time. In this section, we assess the level to which we attained internationalisation through the framework developed by Bell (2004).

Bell proposed that academics could be categorised with respect to four levels of acceptance of an international curriculum. Level one, where internationalisation is seen as having a negative impact, and level two, where it is deemed to be inappropriate, lie on one side of what she refers to as Ellingboe's Great Divide. On the other side of the divide is level three, where internationalisation is viewed as possible, through to level four where internationalisation is integral to the curriculum. The two dimensions through which she allocates academics and their programmes to this spectrum are the pedagogical approaches they adopt and the way they view disciplinary content (Bell 2004).

Using Bell's classification system, internationalisation was clearly integral to our exchange curricula. Pedagogically, these were learning-focused, interactive, dialogic, inclusive and critical, all keywords that Bell uses to exemplify level-four acceptors. The curricula were also contextual, experiential and international; that is, we developed disciplinary content that was intrinsically international.

The range of pedagogic activities embraced in the Linköping course clearly positioned the curriculum in level four of Bell's (2004) typology. Although the course had a specific African focus, students completing the learning activities would have been well equipped to apply the underlying principles to other regions of the world. As teachers, we met the first aim of the Linnaeus-Palme programme: to integrate global perspectives into the learning process, and our students were asked to apply their learning to global issues.

Opportunities and challenges for future exchange programmes

One reason for the longevity of the first exchange programme was the concurrent development of our knowledge of curriculum design, international best practice in quality assurance, assessment and web-based learning. This was, in part, a consequence of the post-graduate diploma in higher education that Rhodes University launched in 2002. This enabled us to readily harmonise our marking schemes and credit values to suit not only the old Swedish system, but also the new ECTS and Rhodes's own grading and credit value systems. We managed to do this in ways that had little impact on our colleagues at Rhodes, so that they implicitly became typical of Bell's (2004) level three – in that they realised that internationalisation is possible. We strongly recommend that other southern African institutions intending similar exchanges make themselves familiar with the European credit systems.

In addition, our international partners were willing to adapt their course scheduling to suit both the sending and receiving institutions. This was imperative, as South Africa and Sweden have markedly different semester dates and durations. Being able to give the correct credit weights to Rhodes undergraduate courses, which are typically of six- and seven-week term

length, was also important, and we frequently had to develop separate and extra assessment tasks to facilitate this. We also had to be willing to take on the end-of-semester undergraduate-examination marking for teaching undertaken by exchange colleagues who had returned to Sweden, an additional burden on our own time.

One advantage of the early Linnaeus-Palme exchanges with Högskolan Väst was that the same lecturers were able to participate and collaborate over several years. This provided opportunities for those involved to develop a good understanding of the different learning environments and to develop our teaching styles appropriately. Conversely, a pedagogic challenge related to the Linköping exchange was the short contact period (of only three weeks) together with the limited two-year period over which the exchange took place. The short contact period in particular did not allow time to develop a common knowledge base with the students on which to build more critical concepts. Moreover, for personal reasons, we ourselves were only able to participate in two years of the three-year Linköping programme. A more sustained programme over several years, as was the case for the Högskolan Väst exchange, allowed both institutions to achieve maximum benefit and also allowed for a closer harmonisation of our activities with the goals of the donor organisation.

A number of factors tend to mitigate against exchange programmes lasting for long periods. Staffing is one issue: for example, the continuation of our second exchange was jeopardised when the Swedish programme leader's contract was not renewed. A commitment from all staff involved in an exchange, and a personal interest in travelling to and maintaining links with the reciprocating country, is required to ensure its longevity.

Many higher education institutions and academic networks aim to promote opportunities for student mobility and staff exchanges in relation to research and educational collaboration. Our experience shows that this can be sustained *only* if participating universities embrace internationalisation in a meaningful way, ensuring that participants receive accreditation appropriate to their institution.

In addition, the funding we received was for mobility and subsistence only; staff and students were exchanged on a quid pro quo basis. No additional income accrued to either of the universities through student registration fees or payment for staff time. The additional administrative costs were borne by the hosts in each case. This kind of arrangement means that strong institutional support will only be forthcoming if institutions recognise the intangible benefits of internationalisation and the sharing of best practices for teaching and learning.

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Academic networks like SANORD could play a vital role by encouraging the development of institutional structures that support such exchanges. Without these, institutions can so easily obstruct such programmes. For example, at Linköping University, a research levy meant that funding for exchange programmes was 'top-slicing' by as much as 40 per cent or 50 per cent. This meant that money intended for staff and student movement – the very rationale for the exchange – instead went towards the host university's administrative costs. Ultimately, this made the exchange unsustainable. Higher education institutions also tend to frequently restructure and rationalise in ways that impact on exchange activities. Högskolan Väst, for example, centralised onto one campus and revised its curriculum so that our first exchange had to be rapidly re-organised in order to continue.

University-based academics are under much pressure to conduct research, supervise post-graduate students and publish — activities that often take precedence over undergraduate teaching. Being strictly a teaching exchange, the Linnaeus-Palme programme did not allocate time for research and publications, nor did it free up time spent in the lecture room. In terms of research output, none of the 40 minor field studies completed under the exchange with Högskolan Väst resulted in publications due to time constraints and other pressures on participating staff. Eight of the Rhodes students, however, went on to pursue master's degrees (by research) at their home university, which also elicited significant income for the university by way of government funding. However, such programmes open up vast potential for research collaboration where alternative funding can be accessed (see, for example, Assmo and Fox 2015).

Despite the problems referred to above, our experiences with internationalisation and teaching sustainability have left a rich legacy. Over 90 student and staff exchanges have taken place and, as we have argued, they have likely succeeded in building capacity to address key challenges raised in the SDGs. On a theoretical pedagogical level, our analysis and reflections indicate that meaningful exchange of staff and students combined with curriculum innovations facilitated by the exchanges enhanced deep learning about sustainable development, enhanced North–South understanding and strengthened global solidarity.

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