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Creating a world class program: reciprocity and constraint in global study

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Creating a world class program: reciprocity and constraint in global study

Introduction

What kinds of programs are needed to address the challenges of learning in globalising societies? How can they be developed without perpetuating previously oppressive relationships? How should they be created and conducted? While the notion of globalisation is much discussed and analysed in higher education and its traces are to be found in courses at every level, the implications for educational practice as distinct from educational content are often unclear. Globalisation is often considered in the abstract rather than experienced directly by those involved.

This paper considers how the experience of a group of adult educators working cooperatively across different countries illuminates issues of global learning. It focuses on the conception and development of a innovative master's-level program of study developed by universities located on four different continents. The program involves a common set of courses for students who learn together in a single 'world class.' The focus of the program is adult learning and global change. Teaching is provided from each participating university in turn while students remain enrolled in their own 'home' university.

The paper draws on the documented experience of the principal developers in struggling to create a new kind of program that avoids some of the hegemonic features of programs developed in one country for students of another. The aim is to make sense of the complex interaction between program developers across four continents to construct a program that meets the needs of an international population at a time of rapid global change.

Discussion focuses on an analysis of the developments that led to the program rather than on the program itself. It is about the emergence of a new form of program rather than the particular content and features of the courses. The reason for this is that the act of creation raised fundamental issues about international cooperation, the challenges of offering programs of study simultaneously through different institutions and the role of global teaching relationships. The argument presented here is that the formation of such a program demonstrates the challenges of working in global learning contexts and that an analysis of the issues involved provides a basis for appreciating the learning challenges students face when operating in a global context. It moves beyond the structuralist framework used in a previous paper about the planning process for the program (Larsson et al, 2005) to illuminate other features.

The analysis uses ideas from actor-network theory to explore issues involved in the development. Actor-network theory points to issues which have been neglected in other kinds of analysis, for example, the importance of non-human factors in the planning dynamic and examining the ways in which actors network to create more complex forms of organisation. Nesper (1994) point out how social practices are shaped by networks that connect nodes and knots together: "Practice is distributed across the spaces and times it produces so that 'social interactions', settings, and events, are intersections of trajectories that tie together distant times and spaces and give them form as social space" (p. 16). Drawing on actor-network theory, the analysis suggests that it is the movements of actors' trajectories in space and time that create and reproduce networks that in ordinary language are called learning or knowledge.

This perspective relies heavily on geographical metaphors, which may produce an alienating language. However, those familiar with Lave and Wenger's (1991) work can think of their view of learning as a movement from the periphery to the centre. Our empirical case is

interesting in this theoretical context because it is a story of intersecting trajectories that have produced networks that are unusual in several ways within the world of academic teaching. Our case also illustrates how the emergence of a network knitted together practices globally. It also illustrates the contingent nature of trajectories crossing in space and time that eventually produced an actor-network that has so far been very stable. It is the story of professors who happened to cross each others paths at a specific time, which created a network that eventually was expanded to include students. One way of viewing the program that was produced is to see it as one that is different from others that operate on a global scale by being a network with several nodes of equal power. Often international education is seen as an export enterprise, i.e. there is a network of teachers and students, where there is only one powerful node – the university that is running the program for students spread out over the globe. In our empirical case there are four universities involved each of which has an equal voice and ‘stake’ in the program..

In a previous paper (Larsson et al, 2005) we used Giddens’ (1984) concepts of ‘structure’ and ‘agency’ and Dahlöf’s frame-factor theory, as articulated by Lundgren (1985), to focus on structural relations between the various players and the ways in which they construed what was possible for the program. Our focus was on how the perceptions of the various factors influencing development both permitted and constrained the shape and substance of the program. While this was helpful in appreciating some of the main structural obstacles encountered and how these were surmounted it did not sufficiently capture the complex interactions of human, physical and geographical conditions we faced. This has led to a search for theoretical resources that can further illuminate the development of the program and deal more fully with the conditions and possibilities of the collaboration we created. While not engaging with all aspects of what is a complex, multifaceted and sometimes contradictory set of ideas, we have taken some features of actor-network theory to conduct a deeper and more critical analysis of our practice.

Actor-network theory originally arose from the sociology of science and technology as a way of dealing with the creation of knowledge in complex systems. It has been used to analyse research networks and examine the complex processes involved in scientific and technological innovations (Latour, 1987). In more recent years it has been used as a framework to examine undergraduate education in physics and business (Nespor, 1994), in medical education (Busch, 1997) and flexible learning more generally (Edwards & Clarke, 2002).

We were drawn to it for a number of reasons. Firstly, it deals with both people and things, what it terms human and non-human actors. Secondly, it focuses on the associations between human and non-human actors as they build networks and, as Miettinen (1999, p. 172) expresses it, ‘the more actors mobilise, the stronger and more durable the networks’. Thirdly, it is directed towards networks that are dynamic. As Nespor (1994, p. 12) puts it, these networks ‘expand, contract and shift configuration over time, and even the most stable and predictable of them are constantly being reappropriated and redefined by the nature of the flows that animate them...’. It enables us to simultaneously acknowledge the localised and the distributed as well as the human players and technologies that gave rise to and sustained our project.

Actor-network theory moves beyond the dualism of ‘structure’ and ‘agency’ (Law, 1997) and embodies a tension between the centred ‘actor’ on the one hand and the decentred ‘network’ on the other. Actor-network theory epistemologically challenges conventional distinctions between subject and object, structure and agency, and culture and nature. It views both subjects and objects as ‘quasi-objects’ to be examined through the networks that constitute them. (Edwards & Clarke, 2002) [

The use of actor-network theory itself is, however, not unproblematic. It is a theory that is evolving and it does not have a definitive articulation. Its current form has been criticised by

some of its key originators (such as Latour and Law) so what is referred to today as actor-network theory is a coalition of interests rather than a well-defined theory. Ironically, Latour himself identifies ‘four things that do not work with actor-network theory; the word actor, the word network, the word theory and the hyphen!’ (1999, p. 16). He suggests (1999, p. 20) that it is a method not a theory as it is not a coherent set of concepts explaining or claiming to predict a phenomenon in the world. It has also been criticised by Engström as turning all the actors into ‘black boxes without identifiable internal systemic properties and contradictions’ (2001, p. 140) thus occluding the learning in which they engage as part of the network.

Notwithstanding these concerns, many of the features of actor-network theory are sufficiently suggestive of new avenues of thinking to warrant the use of some of its elements here. We have found that it prompts us to consider issues not foregrounded in the ways we originally thought about the development, but which have emerged as important to our current thinking and the ways in which programs of this kind grow and change.

Empirical data

The data drawn on here are of three kinds. Firstly, there is a contemporaneous record of face-to-face meetings and decisions made at each stage of development. Secondly, there is the documentation submitted to each university for accreditation/approval purposes. This provides an educational rationale and full details of what was accepted. Thirdly, there are personal accounts collected from the principals by e-mail during 2002. These record personal and institutional motivations, perceptions of key issues and a view of what has been achieved to date. It also gives a picture of the trajectories and how the network emerged and expanded.

The first section consists of a narrative drawing from the accounts of the principal developers describing what they saw as the key steps in the emergence of the program and what they perceived to influence the decisions that were made. It illustrates how the constraints of each context shaped the nature and form of what was produced. The second section analyses this development using some perspectives from actor-network theory. This

aims to identify influences and potentialities and demonstrate ways in which the complex interplay between relationships, resources and technologies shaped decisions. The paper concludes with a section in which the developers reflect on their experience and the analysis and draw conclusions about the creation of new kinds of global programs. It locates the type of program developed within a spectrum of program forms designed to accommodate international students.

Part 1. Emergence of the program

The idea that led to the program germinated in 1998. It was fostered by personal contacts between principal players in each institution all of whom held chairs in adult education in their respective countries. The world of scholarship in adult education is not a large one and all had had some contact with one another before discussions about this program began. Shirley Walters from South Africa visited Linköping, Sweden after a proposal for a distance learning program in adult education at the University of the Western Cape failed to attract funding. She discussed possible joint programs with Staffan Larsson. He was receptive to this as it was at a time when there was a move at Linköping to establish, for the first time, master's programs for international students. Shortly after Shirley had returned to Cape Town, David Boud from Australia visited Linköping as part of a sabbatical leave. The University of Technology, Sydney had been offering part of its own long-established master's in adult education partly in distance mode and institutional priority was being given to international initiatives. Following a walk in the snow and further discussions the notion of a three-way collaboration emerged.

In the language of actor-network theory we can see here several trajectories crossing. These trajectories crossed in a contingent way, however connected by being located in the same spot during a certain period in time. It was also critical that their meetings came in a certain order. Another key aspect is that these trajectories represented somewhat different academic networks. Although the initial players were in the same general field hitherto they

had not been reading each other's specific work. In terms of problematisation (i.e., who is accepted into the network), the choice included some consideration of difference. The existing programs of the initial three institutions had different emphases and addressed different groups in different social circumstances. In that sense we can notice that different practices of representation crossed and in that the kind of practices among students that were going to be mobilised in the new program were projected by the blend of trajectories into a new mix.

But what kind of collaboration was desired? Moving students between countries was unrealistic as most of those who would benefit from such a program would be in employment and with work and family commitments. A conventional master's program in adult education was thought inappropriate as a focus as two of the partners were already offering such a program. Something imaginative was needed. What could be done together that could not be done separately? Students learning together about globalisation and learning drawing upon their diverse contexts and operating with each other through some form of electronic communication became the theme.

Electronic media was not chosen from the start—rather the idea was that that we should co-operate by offering the same program locally and in that way make it easy for exchanges to occur; both students and teachers could move to another place and engage in the same curriculum. However, that idea was discarded and electronic media became a means to permit students to stay in their own location and take part in the same program with teachers from various parts of the world.

This change represented a shift in thinking about what is moved; instead of moving people messages are moved. Instead of connections through travel, network connections are electronic links. The trajectories will not cross in physical space, but in 'cyberspace.' This change also had the effect that the Swedes could not get money from the agency for the internationalisation of Swedish universities that they had thought would support the project, since they only supported connections in physical space (i.e., through covering travel costs).

The decision to let students connect through the Internet instead of via physical meetings also made possible a network in which the local and the global could be problematised through the program in new ways. Rather than students from different locations meeting physically in the same class at the location of the teacher, thus privileging the locale of the venue, teachers were decentred as they had no students in their own location and students were situated in their own local contexts. Relative to conventional courses links between students were less strong locally but, potentially stronger globally.

We wanted collaboration from strong centres of adult education. We discussed involving the University of British Columbia and Kjell Rubenson in particular as he had good links with each of our groups. Part of the discussion focused on the need for university adult educators to take into their own hands the development of global courses and not run the risk of what might be second-rate instrumental programs being developed by commercial organisations for profit to tap into what was believed to be a large market. We had to collaborate if we were not to be rendered marginal in a rapidly globalising world. We also had to do so in a way that was regarded as legitimate and important in our own institutions. Four universities on four different continents working together on global learning was something which subsequently captured the imagination of the key players and senior staff in the faculties in which they were located. As one of us expressed it, what appealed to us was ‘the grandness of it all’.

In the language of actor-network theory, this was the embryo of a strong network between a several institutions. The choice was based on earlier connections, but these connections had to be developed. It was also a choice that excluded all the other potential participants, at least initially. Looking in the mirror some years after, it is obvious that this choice has also weakened other connections in the planning staff. Someone remarked at a meeting in 2002 that she spent more time together with the intercontinental ICM-staff, than with her colleagues at home. The choice of institutions indirectly formed the content, since it reduced the possibilities to what these institutions represented in terms of knowledge (i.e. which

networks the academics were part of in terms of ways of representing the world of adult learning.)

But having a good idea was not enough. To translate this into practice would require considerable planning. How could we find the resources to plan when we were distributed around the world? The strategy adopted was to utilise our involvement in academic conferences as opportunities to meet and plan. By coordinating involvement in the international conferences at which we were likely to be presenting papers we could find the time to meet at marginal cost, or so we thought. This worked partly, but the time required and the frequency of contact needed to talk through the complexity of the challenge required additional meetings. A pattern developed of having two meetings a year, one alongside a regular international conference and another in association with a local event that could be arranged to utilise the expertise of those meeting. As the program became fully operational this reduced to the present pattern of one per year. The principle of rotating venues was established and meetings eventually took place in the US and the UK as well as the four countries involved.

The challenges of development

A quick analysis demonstrated that we all had approximately the same number of units in a master's program and that we could share the teaching according to the different expertise brought by each partner. Of course, the process became much more complicated than that. We grappled with issues ranging from who would offer which course to how long they would be, what would be the configuration of the academic year (which is fundamentally different in the southern and northern hemispheres), to how the program would be offered. These matters were resolved with relatively little difficulty.

Fundamental to the planning process was thus how to manage time and space in terms of the time students would spend on specific tasks, the interrelationships among students between students and teachers and the creation of boundaries between these time-spans. Time

in this program was not distributed by timetabled hours and the magnitude of student tasks was subject to great variations of interpretation. Creation of such boundaries is a key trait of educational planning. Tyack and Tobin (1994) describe a grammar of schooling that has dominated for a very long time, where time is divided into lessons, content chopped up in small pieces and distributed in time as well as in space (home-work and school-work). In our case it is the adjustments of time-use that is a key prerequisite to create a network-traffic.

However, four problematic themes emerged that occupied much time and effort. These were: the influence of local decision-making processes, differing economic models of postgraduate education in different countries, inconsistencies in assessment systems, and constraints on the use of information and communication technologies. These were discussed in some detail in Larsson et al (2005).

Of these challenges it was the issue of technology that provided the greatest threat to the success of the initiative. How can students located on four continents benefit from studying together? Obviously, traditional print and post-based distance learning packages would deliver materials to students, but connectivity and interchange would be so slow as to be ineffective. Supplementing this with electronic communications would provide the interconnectivity, but the more that was learned about the problem of message overload in the use of conventional e-mail between teachers and students, the more this looked like a major barrier.

The technological solution was to use a web-based tool such as WebCT or Blackboard which would provide a virtual learning environment. Through such a platform course material could be provided instantly, discussion boards established and a range of other learning enhancements incorporated. Could this be utilised by students in all countries? A crucial formative moment occurred when the development team sat in the office of the director of

information technology at UWC in Cape Town and saw how painfully slowly a single web page was displayed. The technical constraint of limited bandwidth appeared to prevent the use of the desired solution. We believed that South African students would be disadvantaged because of limited bandwidth both into the country and into UWC. An equally formative moment occurred six months later during a demonstration of WebCT at UBC. We saw a fully web-based course demonstrated and, much to our surprise, a number of students located in South Africa using it without difficulties. Technological development had reached the point when our desired solution could be realised. There were still substantial problems to be overcome in using a learning environment that required ready access to the Internet in a relatively poor country, but it became possible.

One issue that, perhaps surprisingly, was more easily dealt with than anticipated was that of negotiating the content of the program and who would teach it. As might be expected some areas of the program were multiply covered by existing courses offered by partners (eg. Adult learning) whereas others were more thinly spread (Global change). Unlike many faculty discussions about courses, discussion and decision-making from start to finish were contained in two meetings. The programme was formed by the constellation of persons that were present and the time-constraints made time-consuming discussions impossible. Another aspect of the content-was that the specific players sitting around the table at least partly belonged to different academic networks in terms of how they represent the world (eg. a professional orientation, a post-colonial orientation, etc.) . Distribution of content to different institutions and staff meant that collaborators did not have to involve themselves in creating a common way of representing the world. Different perspectives were celebrated in the program and expectations were created for students that this would be the case. In this area a loose network was established, in spite of close collaboration. The close network described in physics by Nesper (1994) was therefore not formed. It was acknowledged that our program could only

function if we were very constrained on some issues (a common timetable) and very loose on others (a wide variety of conceptual content).

Part 2. An analysis of actors and networks

The development of the actor-network as a series of critical incidents and reconfigurations.

Who are the actors involved? At the obvious level there are the individuals from the four institutions who met and communicated with each other and other colleagues who were actively involved from time to time comprising about twenty in all. Another set of human actors were students envisaged as the beneficiaries of the program. At the time of planning these were not identifiable individuals but imagined learners who nonetheless had characteristics, needs and aspirations that had to be considered. The non-human actors were the communications (primarily e-mail) and physical transport systems that enabled the human actors to meet and exchange views. Importantly it was also the web platform, Blackboard, which was adopted as the learning environment and was used as a medium for keeping records of the entire development project. Another set of actors were the conferences that provided some legitimation for physically meeting and which represented nodes of other networks of which the academic actors were also part. Yet another was the various, conspicuously non-networked, accreditation systems that approved the courses and created demands for certain kinds of information in particular formats.

The networks were formed with human and non-human actors. The initiating team enlisted colleagues and administrators whose assistance was needed in putting together and getting the program approved. The initiating team was also part of the wider network—the ‘invisible college’—of researchers in adult education who meet at conferences and read each other’s work. The structures of the academic field themselves constituted another network; conference proceedings, books and journals formed a web of connectivity in which human

actors could operate. The use of the Internet itself was key to the development. It was the medium through which we communicated when apart, it was the network supporting the learning platform and the ways in which students were enabled to communicate with and work with each other.

Networks in actor-network theory are not the structures or the relationships themselves, but, as Law (1997) argues, processes or achievements. Therefore, it was what was made of the pre-existing and emerging networks we must consider here. Possible connections do not constitute a network; it is realised connections that do. Actor network theory is also concerned with the mutual interrelationships between actors and the network. In the case of the innovation here, the actors alone could not create the program; it was only through their interconnectedness via existing ‘invisible colleges’ and mutual links that enabled the program to be brought into being. Similarly, without the technologies, the group itself and the program for students could not be formed or sustained to produce new connections and involve new actors.

The new actor-network formed through the development of the program both cements existing relationships and creates the context for involving others. These others are immediate colleagues who help teach the courses and students in the first instance, but potentially others also. While the actor-network was challenging to initiate and the program difficult to establish, the new network creates a stability that makes possible consolidation and further development. For example, while the courses were designed initially to accommodate students from the four countries involved, students from six additional countries were involved in the second cohort. In the most recent cohort, students located in [x] countries are enrolled so eventually, the network will have actors—students and program graduates—in many locations over the globe. The tenet of actor-network theory that the actor-network increases in size and strength as more actors become enrolled (Busch, 1997) is illustrated by this. Strengthening the actor-network is not just about increasing the number of human actors;

the adoption of the web-platform was a major factor in creating a more manageable set of connections. In turn this makes the network more robust and permits the involvement of additional actors. However, the actors involved in the original design process have resisted expanding the network beyond the original four universities even though the innovative character of the program has resulted in several overtures from various universities around the world to join the partnership. There is some concern that even though adding other respected universities to the partnership might broaden the base of support and expand the intellectual resources available to the program, if done too quickly it might weaken the strong relationships among the original actors and introduce challenges to the hard-won agreements reached about the program's underlying philosophy and operating patterns.

The starting point was the idea of co-operation comprising four parallel versions of a program developed jointly. This also comprised the use of e-mail for communication within and between these four separate networks. The Internet as a means for communication was from the outset not seriously considered, but was rather a sleeping actor at this point, as one of the partners had limited technical possibilities. We eventually decided that the program should be essentially the same in each institution, and that it would be offered by each university as its own, but with teaching for each course offered by only one of the four partners. This meant that the same program had to proceed simultaneously through the accreditation processes of four different systems. The decision about a jointly delivered program also introduced the first serious threat against the network, in that it challenged university bureaucracies, which at this time stepped in as significant actors introducing different demands on approval, financing and assessment. A critical incident this created was that one of the four partners was unable to enrol students in the first cohort, but had to undertake the teaching for the other three institutions. That this could occur is testimony to the level of trust and commitment that had been engendered by the collaborative process.

The first reconfiguration of the network was caused by the inclusion of the Internet as an important actor in the system. This inclusion was made possible by the loyalty of the partner with the weakest technical resources whose needs strengthened the network. The discovery that the limited bandwidth into South Africa was not the overwhelming constraint it was thought earlier to be points to the importance of technological development as a key factor in our actor-network. What was until then a potentially vulnerable network was strengthened by the ability of students in South Africa, and indeed in other countries, to access the Internet from places other than a university campus. They could attain download times that made web-based study possible. This could only be sustained, however, by limiting the pedagogical content of the program to resources that could be accommodated within the still limited bandwidth. The technological solution was a 'low-tech' solution as it avoided the use of audio, video and synchronous chat.

The second critical incident was an acute questioning of the model of collegial leadership of the program. This challenged the relationship between the collaborating partners, but paradoxically resulted in strengthening the network even further, since the outcome of a critical discussion was the decision to keep the model of a co-ordinating leadership as a four-way agreement. This critical incident, thus, did not result in a reconfiguration of the actor-network system although it clearly had the potential to do so.

A third critical incident appeared as a result of a conflict between two of the non-human actors: the course platform and the economy. The choice of one of the alternatives considered would have brought insurmountable economic consequences for at least two of the partners. The incident was resolved by a second reconfiguration meaning that another platform was chosen. This choice was made possible through the introduction of a new actor; the Linköping

Blackboard licence. The ICT-centre at Linköping University was from then a new actor in the network, providing the necessary technical support for the project.

We see how economy as an actor in the network has played out in different ways at different times during the process, each time challenging the original idea of mutual agreement. An external actor, the Swedish International Development Agency (SIDA), also put money into play within the network. A SIDA grant made it possible to arrange workshops with students in the first cohort and to actually involve them in the development process. This was an important means of strengthening the network. Since the courses were developed in sequence rather than in parallel, this provided the opportunity for later course developers to benefit from the input of students.

One of the main reasons for each institution offering the program as its own was to circumvent the difficulties which arose from each institution (and country) operating a different economy of higher education. In one extreme, programs were fee-free so long as the number of student places could be accommodated within those allocated by the state (Sweden) and at the other master's programs are based on full cost recovery fees (Australia). Canada and South Africa operate in a mixed economy for postgraduate places wherein fees cover part of the costs while the state subsidizes the rest.

The writing of papers and the presentation of research about the program is another way of strengthening the network without directly adding more human actors. The presence of documentation of the innovation and the act of public commitment to the program strengthens the network. This is an example of the way in which the performativity of the innovation contributes to its sustainability. Other activities that have reinforced the network include rotating planning meetings so that each university has an opportunity to draw into the network local colleagues, deans and other administrators who "meet and greet" the core planning group. This raises the profile of the program and builds political capital among those whose

work or reputation can be enhanced by a close association with an innovative global undertaking. Several of the principal actors have also spent time on sabbaticals and in other ways with colleagues at partner universities. And early graduates of the program organized a symposium in South Africa in August, 2004, attended by peers from Canada, Sweden and Australia. For most students, this was the first time they had met face-to-face with others with whom they had been studying in a virtual global classroom for two years. Each of these represents efforts that have sustained and strengthened the network.

The use of actor-network theory has enabled us to provide a richer conceptualisation of our practice than would have otherwise been possible. It has directed our attention to features of our practice not explicit or even conscious to us at the time and has enabled us to value the variety of facilitating features and technologies that were essential to this collaboration.

Part 3. Reflections on the development of global programs

The process of developing a collaborative venture was not initiated with the intent of producing a global program, but it rapidly took on this character. It is therefore appropriate to end this discussion with some reflections on how our experience and the analysis we have undertaken has shaped our views about such an enterprise.

Our experience has shown that it is possible to develop a global program in which four universities can collaborate together in ways that respect their differences but which leads to a common program which all share and in which all have similar stakes. A key feature of our collective experience has been the extent to which reciprocity has been a theme. We have not established a new joint venture entity to make it work, but adopted a networked approach in which one node is not privileged over others. This has only been possible because no one individual or institution has wanted to, or been allowed to, dominate. This has not, we suggest, been a matter of personalities but rather because of an awareness among the players that such an approach would sabotage the process.

An important element of this has been the deliberate de-centering of individuals and institutions. While we have an international coordinator and named individuals taking specific roles, none of them take on a traditional leadership role in which they make decisions after consultation with others. All decisions of any substance require four-way agreements; none of the institutions is identified as, or is *de facto*, the lead institution—all ‘own’ the program. While this has led to additional demands in the development process, it has also established a kind of stability. This stability is not interpreted by us as rigidity as in practice the faculty members teaching each course have a similar degree of autonomy as they would have in any one of the institutions. They are subject to the gaze of their colleagues in ways that are unfamiliar to them, but there is a care in the giving of feedback that maintains the principle of autonomy throughout.

The use of ideas from actor-network theory has enlarged our analysis through drawing attention to the importance of the layers of networks that sustain our principal, four-way network. These consist of the inter-relationships of other colleagues, of links of conferences and publications, the Internet and travel that is a common feature of academic life. While separate in location and institution the layers of communication, interconnectivity and mutual dependence are greater than it appears at first sight. Now that the program is in operation, there are new networks of teachers and students which both need to be sustained and which in turn sustain networks. It is interesting to speculate on what might occur in a field significantly larger and more diverse than the relatively modest one of academic adult education. Similar processes would be at work, but some features of interconnectivity would be less and mutual dependence might not be so apparent. The insights from theory point to some of the processes which have worked to our benefit, but the question remains of what is it that has built and sustained our commitment over time when faced with so many practical adversities?

The development was experienced as a creative and satisfying process by all the authors, albeit one that involved major frustrations and disappointments interspersed along the way.

The constraints we faced focused our innovation and while we might prefer that some of them did not exist (eg. the conflicting assessment schemes), this is a representation of the very global learning that the program portrays. Reciprocity was a key feature throughout. Without the willingness to subordinate our individual desires to a greater collective desire, this ‘world class’ program could not have been developed.

Before we end this analysis, we must acknowledge a few problems that remain unsolved. We do this to illustrate the fact that even with the best of intentions and large quantities of goodwill among the actors, networks remain fragile. Two examples illustrate this. The program has been operating in its current configuration with full participation from all four partners since 2001. Several efforts have been made to conclude a formal legal agreement (letter of understanding) among the four universities, but four years on this still has not been accomplished. One reason for this is the differences in legal systems involved and the problematics of crafting a written agreement that is understandable and acceptable to all parties. Another is the varying degrees to which universities have experience with such complex undertakings and their comfort with the compromises required. One of the partner universities, for example, has as part of its collective agreement with faculty a provision that the structure and content of online courses developed as part of a faculty member’s workload remain the intellectual property of that faculty member rather than of the employer. This is an unconventional provision by international standards and has made it difficult to arrive at language that respects the intellectual property rights of faculty and the rights of the participating universities to offer a program with reasonable continuity within the curriculum. A third reason is the relatively low priority we as academics have placed on concluding this agreement. We see the program operating satisfactorily without an agreement, but also realize that a serious breach of the principles that have guided our collaboration could easily destroy the network.

Another example of the fragile nature of the network is the unexpected low enrolment through one of the partner universities. This has created some anxiety within the network because of the prospect that one of the key actors may have to withdraw. It remains to be seen whether or not this will happen, but it does suggest that the market economy of higher education exerts a strong influence on the prospects for long term success of such undertakings.

Notwithstanding these concerns, a new kind of networked program has been created and sustained. It has stimulated innovation in institutional responses, in flexible working and in pedagogy. Actor-network theory is not a predictive methodology, but it does suggest that the system will be sustained if the robustness of the network prevails. We await new actors to enter to test this in practice.

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Each author currently teaches in all of the institutions mentioned in this paper.

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