WHAT IS NETWORKED LEARNING?

> *A central idea of the English reform agenda is that of a world-class system driven by the energy of the schools. There is an assumption that collaboration is one of the ways in which that energy is generated and sustained. Accordingly, we need to look at how the reform agenda can build collaborative capacity across the school system - hence there is reciprocity, a virtuous circle, in which reform now both depends upon collaborative capacity and seeks to build it.*
>
> *(Tom Bentley, Demos)*

Introduction

Currently much thought, in the UK and around the world, is focused upon how a transition might be effected from one reform paradigm to another. The reform agenda of the past decade or more has been characterised by the application of uniform national strategies (albeit based upon informed understandings from past change efforts); by sequenced and delivered 'outside-in' solutions; and by the application of external accountabilities to measure pupil and school performance. This approach has served well to lever up attainment in the short-term, to make targets and outcome expectations clear, to identify and address problem environments and to mobilise and focus the profession.

It is not, however, a capacity building model. It is therefore unsurprising that attainment trajectories in the UK, having risen sharply initially, have now levelled off, or that professional morale is low, or that schools feel little sense of ownership over the direction the agenda has taken.

So, whilst improvement programmes, which apply existing knowledge across the system, have produced some short-term gains, centre-to-periphery, outside-in change strategies are unlikely to continue to work well in the medium to long term. Change needs are too rapid, knowledge is too ubiquitous, contexts of knowledge application are too diverse and, possibly most importantly, "the improvements already achieved have not closed the gap in educational achievement between the most and least advantaged" (Hargreaves, 2003).

It is no longer efficient or appropriate to use hierarchical models of control or dissemination to try to achieve a task of continuous adaptation and diversification – one-to-many modes of reform work best when there are relatively simple, constant, universal priorities. Similarly, outside-in strategies are unlikely to be sensitive to the unique challenges of diverse contexts, nor to stimulate and thus utilise practitioner innovation.

A new form of team-based collaboration, employing lateral transfer strategies, is a more effective method of integration and adaptation – and has been shown to be so in many different organisational settings. In those sectors that have been through the most profound organisational restructuring over the last generation, 'task groups', 'project-based teams' and collaborative relationships are essential to maintaining organisational coherence and collective purpose amid the manifold complexities and insecurities of contemporary organisational life (adapted from Bentley, 2003).

It is also fair to say, though, that random, unstructured and unconnected team-based patterns will not serve the system well either. They are unlikely to achieve the common purpose and connectivity required to bring coherence and alignment to organisational efforts.

An alternative way of aligning these concerns is offered by networks of schools that promote 'networked learning'. It is this approach that lies at the heart of what NCSL (2002) set out to achieve in the Networked Learning Communities programme.

There is nothing particularly new about networking, of course. Teachers, headteachers and schools have long engaged with one another in forms of collaborative activity. However, there is something fundamentally more purposeful and aspirational about the idea of 'collaborative capacity' and 'networked learning', because they are conceived as being a part of an innovation and knowledge management architecture for the future school system.

'Network' and 'networking' – how are they different?

Before moving the focus more specifically to networked learning, one point of conceptual clarification is necessary. There is a fundamental difference between the 'network' as a form and the process of 'networking'. As used in this paper, networking is a generic term used to describe the activity of 'an interconnected or interrelated chain or group of people bound by broadly shared goals'. As such it may often be loosely formed, might be serious or superficial in focus, fluid in structure and with changing membership. A network is different. Priscilla Wohlstetter (2003) in her study of Los Angeles networks states:

> *A network…is a group of organisations working together to solve problems or issues of mutual concern that are too large for any one organisation to handle on its own (Mandell, 1999). Applied to schools, the idea of networks suggests that schools working together in a collaborative effort would be more effective in enhancing organisational capacity and improving student learning than individual schools working on their own (Wohlstetter & Smith, 2000).*
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> *Although networks of personal relationships – termed 'networking' – have been studied as a means of teacher professional advancement (Lieberman & McLaughlin, 1992; Little, 1993) and as a way to form a community in single schools (Bryk, Camburn, & Louise, 1999), only a few studies have focused on networks as a means of coordinating the efforts of schools (Kahne, O'Brien, Brown & Quinn, 2001; Newmann & Sconzert, 2000).*

This is not just a linguistic distinction; it is both conceptual and practical. It has real implications for the place of schools within a learning system and thus for educational reform endeavours. Schools cannot network; people make networks. The NLC programme design is fashioned around a view that between the school-to-school 'network' as an organisational form and traditional 'networking' activity operates an important alternative pattern of engagement that we call 'networked learning'.

This theme is explored in a forthcoming Demos pamphlet (2004, in publication), which states:

> *It is very easy to treat 'networks' and 'networking' as interchangeable terms. They are not, and we need to be clear about how they are different. We can think about the differences in terms of structures. A network implies a more formal organisational structure within which collaboration and working together takes place. Furthermore, a network can exist between schools or institutions…Networking describes an activity rather than a structure. It takes place between people. So, it could be used to describe the activity within a network; equally it could be used to describe two (or more) teachers meeting to exchange ideas or thoughts before going their separate ways again. This is an important difference. The existence of more formal structures via a network offers a means of the whole system learning from what is going on in that network. The content is almost like a public good and the formal structures offer a way in which to understand that content. Networking, on the other hand, will inevitably remain more tacit as there are not the structures to amplify or make explicit what is being discussed. Arguably you cannot have networks without networking, but networking does not require networks.*

This distinction is critical to the discussion that follows about 'networked learning' within Networked Learning Communities. For the purposes of clarity of terms we use the term 'network' to signify the defined school-to-school structure of a Networked Learning Community. 'Networking' is the interpersonal associations and interactions (both professional and social) that occur between individuals in those schools in the Networked Learning Community. What is 'networked learning'? is discussed below.

The NLC programme is a development and research initiative. It is only through establishing good networks and working with them that we will be in a position to learn more about 'networked learning'. In particular we want to learn:

- how effective collaboration between schools happens;
- how 'reach' in a network is achieved;
- how knowledge and practice is transferred;
- how leaders, teachers and others work best together;
- how such collaboration can be sustained;
- and how all this is best focussed so that it improves pupil achievement.

It is also important that we do, because it is becoming increasingly widely recognised that such understandings will be crucial in the new reform paradigm:

> *'In important ways education reform and professional development networks appear to be uniquely adapted to the rapid socio-economic changes taking place in society…As educational networks become a larger and more influential part of the educational landscape, it is increasingly important to understand them organisationally as well as to understand their work, their influence, and their effects on both teachers and students.' (Lieberman and Wood, 2003)*

Networked Learning Communities are designed to provide operational images of lateral learning practices that can be simultaneously supported, studied and made more widely visible to inform system change. In the next two sections we explore the following questions:

(i) What is 'networked learning'?
(ii) Can we create an accessible metaphor for networked learning?

What is 'networked learning'? - A working definition

Networked learning occurs where people from different schools in a network engage with one another to learn together, to innovate and to enquire into practice. Such activity tends to be purposeful, designed, sustained and facilitated. Unlike 'networking', it doesn't happen by accident. Facilitation, active support and brokerage are required.

Within schools and between schools, adults will be involved in multiple random and 'networking' relationships, some with strong ties, others arising from weak ties (Granovetter, 1973; Watts, 2003). These connections offer rich opportunities for learning and make up an unpredictable tapestry of interpersonal connections. They are not, though, 'networked learning' – they are 'networking'.

During our earlier pursuit of helpful theory and research, we encountered a detailed study by a team based at University College, London (Church et al, 2002), which looked, amongst other things, at the elements of participation, relationships and dynamics within networks. At one point they state:

> *This research has led to a profound belief that participation is at the core of what makes a network different from other organizational or process forms. Who participates (issues around power, and resources), how they participate (issues about relationships, coordination, facilitation, governance) why they participate (issues around vision, values, needs, benefits, motivation, commitment), and for how long (issues around sustainability).*

This issue of dynamic and sustained participation, and its purposes, seems crucial to an understanding of 'networked learning'. Answering questions about who participates, why, how, when, for what purposes and for how long may well provide a useful analytical model and offer some interesting insights into networked learning.

'Networked learning' takes place when individuals come together in groups to engage in purposeful, and sustained developmental activity informed by the public knowledge base, utilising their own know-how and co-co constructing knowledge together. They learn with one another, from one another, and on behalf of others.

The idea of learning 'on behalf of ' others is very important to the concept of networked learning. It means that 'networked learning' is the interaction of two types of learning:

1. Learning that takes place between individuals from different groups
2. Learning that takes place between individuals within those groups

Within Networked learning Communities, this means that 'networked learning' is the interaction between learning that takes place between individuals from different schools, with learning that takes place between individuals within those same schools.

'Networked learning' is not just a type of learning, or a particular combination of participants. It entails four distinct learning processes:

1. **Learning from one another:** this is where groups capitalize on their individual differences and diversity through sharing their knowledge, experience, expertise, practices, and know how.

2. **Learning with one another**: this is where individuals are doing the learning together, experiencing the learning together, co-constructing the learning, making meaning together. Collaborative practitioner enquiry, and collaboratively learning about recent research is a good example of this activity.

3. **Learning on behalf of**: this is where **t**he learning between individuals from different groups or schools is also done on behalf of other individuals within their groups – or the wider network or system.

3. **Meta learning:** this is where individuals are additionally learning about the processes of their own learning.

To be most effective, the combination of these four learning processes should make use of three different types of knowledge (see Figure 1):

1. **Practitioner knowledge** (what people know, the knowledge that people bring to the learning table).
2. **Publicly available knowledge** (the theory and research publicly available to be drawn in to learning environments).
3. **The new knowledge that we are able to create together** through collaborative working and enquiry.

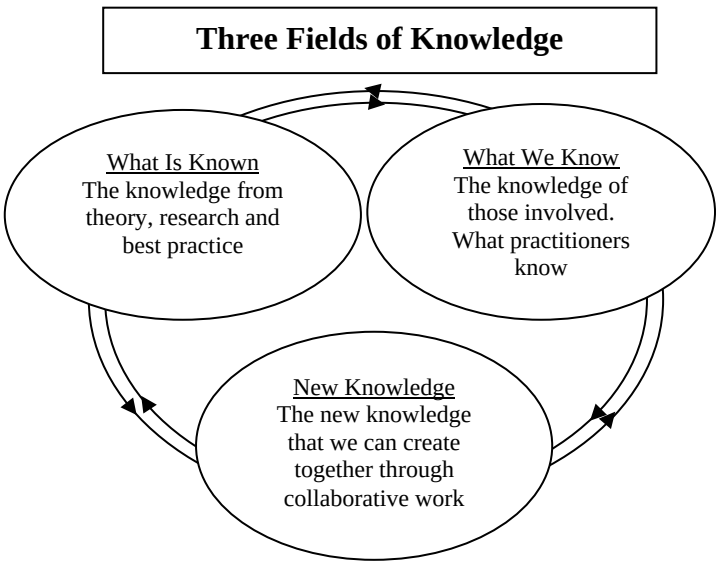


Figure1. 3 Fields of Knowledge

A key dimension of this model is the inter-relationship of the knowledge fields through networked learning activity. This is consistent with what we know about knowledge use in networks. Lieberman and Wood (2003), in their recent publication on the American 'Writing Project', quote (McLaughlin and Talbot, 2001) in stating that: "Linking school knowledge and university knowledge, they (networks) …find ways for "inside knowledge" (the knowledge that teachers create on the job) to inform "outside knowledge" (the knowledge of reformers, researchers and policy-makers), and vice versa".

To be effective, 'networked learning' also needs to be purposeful. In other words, the participants all need to have a shared content focus for their learning, they need to use proven models of professional development and their learning needs to have practical relevance to the context and purposes of their network.

The learning needs to be purposeful in the sense that it needs to be focused on some sort of change. Within NLC's this means changes in teachers' knowledge and understanding and changes in their behavior and classroom practice. However, change in teachers' practice is only an intermediary outcome. The ultimate purpose of 'networked learning' is to improve student learning, achievement and attainment. (Needless to say, there may also be wider benefits to networked learning, typically improved confidence and self –esteem, enhanced motivation, or a greater sense of professional efficacy.)

In summary, 'networked learning' activity in NLCs is:

1. focused upon shared learning objectives;
2. comprised of participants drawn from different schools, learning on behalf of colleagues within their own and other schools in the network;
3. comprised of participants within the same schools, learning on behalf of colleagues within their own and other schools in the network;
4. designed to enable individuals to learn from, with and on behalf of others;
5. exhibits the characteristics of the learning design outlined above;
6. purposefully designed and facilitated to change professional knowledge and practice in order to improve student learning.

The nature of networked learning activity tends, unsurprisingly, to be characterised by learning relationships and purposes. Whilst this seems obvious enough, how different is this from the characteristics of many school-to-school gatherings (and many within-school ones), with their emphasis upon agendas, routine activity, or didactic presentations?

Despite what is known about high quality CPD activities, all too often teachers' experience is that they do not start with the knowledge that practitioners bring; often do not connect with the publicly available knowledge base; and rarely is new knowledge created and captured through collaborative processes or on behalf of a wider constituency. A working model or metaphor may help at this point to illuminate the networked learning concept.

Can we create an accessible metaphor for networked learning? - Threads, knots and nets

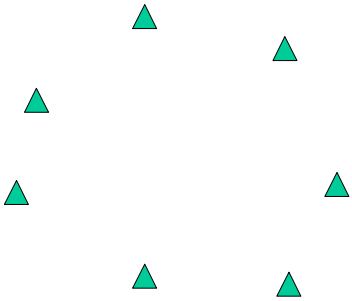
Church and her team (2002) found the conventional typologies of networks unearthed through their literature search to be unhelpful in explaining the uniqueness of network components. They alighted instead upon the 'net' metaphor as a way of accessing and illustrating the distinctiveness of the key components. In what follows, this net metaphor is utilised to make explicit some of the theory and to describe – albeit in idealised terms – how this relates to 'networked learning'.

In the model below, the triangles represent the network participants (in our case member schools). The threads between them stand for the relationships, the communication and the trust. They represent 'relationships with a purpose' (or what Canter, 1994, calls 'the collective and collaborative optimistic ambitions of the participants'). The knots represent what participants do together, the purposeful activity that joins them. They work on behalf of the whole. It is the knots that provide the network with its internal architecture, a 'quasi-structural dimension' that only exists to achieve benefit for members – the children within schools primarily, but also the adults and the community served by the network. It is the common and aligned actions between people on behalf of shared purposes that make it a network, rather than 'networking' (which can be predominantly social), or a 'cluster' (which can be predominantly structural).

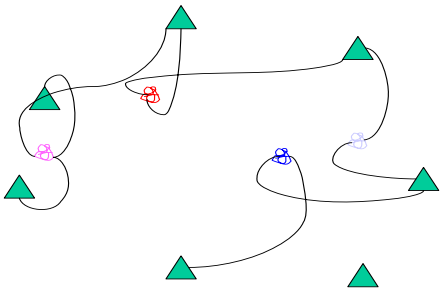
Networks seek to do something together – on behalf of one another. And when network members create collaborative groups to work and learn together, they are engaging in an effort to contribute to that shared goal. It is this joint activity that gives the focus and strength and purpose to the network. It adds value to the whole.

Threads tie us to each other across the joint activities and create the strength to connect members. Without trust and high levels of communication there are no networked learning relationships. This operates as a 'sub-structure' – the cultural norms of the network[1]. The threads link the participants through communication, shared ideas, information, relational processes – even problem resolution and conflict. The participants spin these threads out from themselves. They voluntarily participate and connect, because networked learning is founded upon discretionary effort; it is normally or typically beyond the prescribed role responsibilities and structural positions of participants' 'home' school. These 'threads' and 'knots' together provide the tensile strength of the network and need to be tended, stretched and played in just the same way that artisans will tend and play a conventional net (see Figure 2).

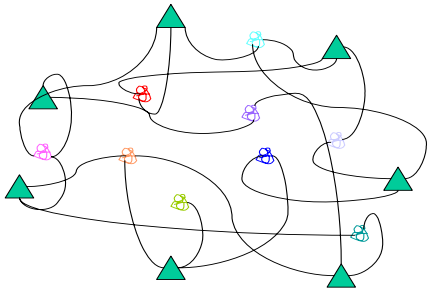
[1] This feature is crucially significant, because it helps to explain the competition-collaboration paradox. Francis Fukuyama suggests that social capital arises spontaneously as a product of iterated relationships. . If individuals interact with each other repeatedly over time, they develop a stake in a reputation for honesty and reliability. He suggests that relationships based upon a society composed entirely of selfish people will develop social capital over time, simply because it makes sense to work to cooperate rather than in opposition. Given high levels of trust and communication, competitors will form collaborative relationships.



1. The network partner schools



2. The growth of threads and knots



3. The net - working!

Figure 2: Threads, knots and nets

The 'networked learning' knots are the "key points of dynamic learning, with potential for wider resonance" (Warren-Little, 2003), where the threads the participants spin meet and join together to engage in meaningful work for the network. They are the joint activities aimed at realising the common purpose. They make the most of members' contributions, commitment and skills. They provide benefit, purpose, energy, collective empowerment and inspiration. In the case of Networked Learning Communities, the most effective knots are dynamic and sustained enquiry, learning and problem-solving activities between network members from participant schools.

The net provides the overarching 'structure' or 'fabric' created through the stays (the partners), the relationships (threads) and the 'networked learning' activities (the knots), a structure which allows for autonomy in community, a structure which participants design and re-create for themselves, to which they contribute and from which they benefit. The net provides shape without losing identity, and is dynamic enough to expand to incorporate new participants and new knots without losing its common purpose. The structure is flexible and adaptive, not fixed and constraining. Additionally, it is a structure that exists outside normal institutional parameters, so it also offers 'liberation from context', and freedom from role expectation. Networked learning knots may well offer highly promising opportunities for 'distributed leadership'. They hold the potential for activity that is unencumbered by institutional role and status parameters and perceptions.

To conclude the metaphor, we know that network architecture - just like any other organisational structure - need to be tended by someone in a leadership role whose professional identity makes that task a priority (Wohlstetter, 2003). We also know that you have to work the net (Lieberman, 1996, 2003). A network needs 'net workers'. The leadership of a network structure can be represented as a role involving values affirmation, co-ordination, communication, connection, maintenance and repair. The coordinators, or facilitators, or co-leaders of Networked Learning Communities are the artisans who keep the net in good order, know which knots are best for what, notice the breaks, the fraying threads and seek to renew them. They watch out for broken threads, knot together appropriate activities, put out new threads to new participants, and initiate new knots, so extending the net. They are net workers who foster and promote 'networked learning'.

Networked learning is critical to network success. The knots are where we see it happening.

What are we learning about 'networked learning knots'?

As stated above, strong threads (relationships, trust and communication) are required to create good knots. However, joint work arrangements with staff from network schools are the means through which trust, openness and relationships are fostered.

Which comes first? The answer is almost certainly that both are important and that development is iterative, but it is equally true that the 'threads' will not precede the 'knots'. We need to do good work together to develop strong threads – and there is good theory and evidence of the potential dys-functionality of trying to spin threads as ends in themselves.

Networked learning knots are the right place to start for networks.

From our observation of NLCs there seem to be five types of networked learning 'knot' that are worthy of further study:

- **Joint work groups** (e.g. project teams, curriculum development groups)
- **Collective planning** (e.g. steering groups, professional development groups)
- **Mutual problem-solving teams** (e.g. focus groups)
- **Collaborative enquiry groups** (e.g. enquiry teams)
- **Shared professional development activities** (learning forums/joint staff days).

Some of these might be seen as being 'architectural' to the network (such as steering groups and learning forums), whilst others are more fluid and adaptive (such as enquiry teams and project teams). Both may be important.

There also appear to be four types of networked learning 'knots' that are particularly high yield, both symbolically and practically. They are:

- Launch events and joint staff days;
- Headteacher learning groups;
- A shared professional development planning function;
- A monitoring, evaluation and dissemination group.

This analysis, though, does not help us to know where it happens, how it happens, what goes on, who takes part, for what purposes, or how people make it work when it works well. This is a key task for the NLC programme's research strategy. As Judith Warren-Little (2003) advised the group:

> *We need to study how participation in the knots plays out for people. We need to unpick what it means at the level of practice – to track the 'footprints of practice'. These will be the sites that will have illumination; the rituals and high yield knots. For example, in the National Writing Project in the USA, the 'author's chair' is one of these ritual knots. Something important happens here.*

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