

Deepening Learning in School-to-School Networks

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In fast changing contexts, the complex challenges of creating both higher degrees of quality learning and greater equity for increasingly diverse groups of learners have drawn educators out of their schools and into collaboration with colleagues. Individual schools are seeking connections beyond the walls of their buildings through links with their community, the wider community, other service providers, and, this chapter's focus, other schools. In some jurisdictions, partnership is now a policy expectation. Education is rife with coalitions, collections, collaboratives and confederations. Networks and networking are ubiquitous features of the educational landscape. Our observation, however, is that much of what passes in the name of school-to-school networking is shallow and consists primarily of structural and administrative arrangements for information sharing. What is less prevalent is a pervasive, persistent and passionate focus on making a difference in learning for children and young people – both short term and over the long haul. Ensuring that every student has access to high quality learning today and guaranteeing that each young person has a genuine opportunity to “walk the stage”¹ with dignity, purpose and options are at the heart of what we characterize as deeper forms of networking.

In this chapter, we lay out our understanding of what it means to deepen learning in school-to-school networks, illustrating these ideas with examples from Canada and England. We then argue that the likelihood of developing and sustaining deeper learning networks is much greater if it involves a skillful process of reflective and facilitated adult learning. Throughout, we draw on our own and others' experiences of facilitating and evaluating the development of learning networks.

What is deeper networking?

Networks are, by their voluntary nature, flexible, non-rigid in their structural arrangements and highly adaptable to unique and varying social, political and economic contexts. As organizational forms, networked school communities have strong advantages in being able to adapt to a variety of contexts and challenges. They do not, however, always create greater student learning, as City et al (2009, p.5) highlight in the American context:

It seems as if you cannot turn around in a school or district with an improvement agenda without bumping into some kind of network – a professional learning community, a critical friends group, or a teacher or principal study group. . . Some approaches in the network category are well thought-out, well implemented, and tied to improving practice, but many are not. In some settings, they are simply new labels for meetings that are dysfunctional or disconnected from instructional improvement, or both.

We have observed similar patterns in the United Kingdom and in Canada. Our interest is in *deeper* forms of school-to-school networking – forms that are highly purposeful and oriented to important learning outcomes for young people. We think of learning in the widest sense – learning to know, to do, to live together and to be (Delors et al, 1996), as well as learning to live sustainably with the natural world (Hargreaves and Fink, 2006; Reed, 2009). We define deeper forms of networking as including a focus on learning in which:

A group of schools join together to plan, implement and monitor a range of activities that will enhance learning and teaching within and across their schools. Learning networks focus on learning of pupils, all staff, leaders and other stakeholders, as well as building capacity for learning and sharing knowledge between schools. (Crandall and Stoll, 2005)

We are aware of lists of characteristics of networks and, in this chapter, we take for granted that networks often provide professional development opportunities across schools and that basic structural features need to be in place. Our direct work with school-to-school networks and our understanding of the knowledge base, however, has led us to identify six key features that we believe distinguish deeper forms of networking:

1. Clarity of purpose through shared focus
2. Collaborative inquiry that stimulates challenging, evidence-informed learning conversations
3. Trusting relationships that build social capital for learning
4. Leadership for learning through formal and informal roles, including skilled facilitation of networking links
5. Evidence seeking about intermediate and end processes and outcomes linked to theories of action
6. Attention to the connection between the network and the individual professional learning community of each participating school.

Clarity of purpose through shared focus

Deeper school-to-school networks have a clear sense of purpose that addresses capacity building both for the present and for the future (Stoll, 2009a). This sense of purpose can emerge from concern, and indeed outrage, related to issues of equity. Identifying the groups of learners for whom schooling is not providing a route to overcome poverty or social disadvantage often generates an intense sense of purpose.

With clarity of purpose comes the selection of a mutually agreed upon and shared focus. The determination of a specific focus can reflect one of two important perspectives. The first has an evidence-informed orientation. In this scenario, networks select a focus based on evidence about

strong practice. For example, some school-to-school networks draw on assessment knowledge and research (eg Black and Wiliam, 1998; Hattie and Timperley, 2007; Hattie, 2009) in focusing on learner engagement and ownership of learning. The second perspective reflects ideas about innovation and transformation. In networks focused on innovation, schools explore creative ways to engage learners and extend learning and may draw on the notion of ‘disciplined innovation’ (Hargreaves, 2003). Some exceptionally strong networks weave the two perspectives together. In both approaches – using the current practice and knowledge base about learning and applying it in a coherent and sustained way, or using imaginative new approaches that have yet to be researched but have potentially strong learning possibilities – the key to deeper networking is that the focus, and commitment to it, is shared across schools.

Collaborative inquiry that stimulates evidence-informed learning conversations

Deeper forms of school-to-school networking have an inquiry cycle as part of their artifacts of practice (Halverson, 2008). They build on and use the knowledge of inquiry-based research findings to adapt a model that works in their culture. Focused inquiry engaged in by a school community is much more than individual ‘action research’. Collaborative forms of inquiry involve an explicit commitment of a group of practitioners, routinely investigating together, who intend from the outset to involve a wider community within and across their schools. As such, this form of inquiry is “designed to contribute to the collective professional knowledge pool and to influence broadly, as well as specifically, the classrooms of the core participants and their colleagues” (Jackson and Street, 2005, p.11). Such collective inquiry involves the systematic and intentional exploration of information from research, experts and their own practices (Earl and Katz, 2002).

The Canadian network described below used as its starting point the inquiry cycle developed by the Bay Area School Reform Collaborative (BASRC) (e.g. Copland, 2002; McLaughlin and Mitra, 2003). Although many of the BASRC schools did not succeed in becoming fully engaged in sustained, on-

going inquiry-based professional learning, their pioneering work was useful in stimulating thinking about how inquiring schools could be developed.

Recent work from New Zealand provides an alternative inquiry cycle for beginning networks. The cycle Timperley and colleagues (2008) outline as a result of synthesizing research evidence on professional learning, is designed to promote systematic educator inquiry and knowledge building cycles. The cycle starts by asking what educational outcomes are valued for students and how students are doing in relation to those outcomes. Other questions follow: What knowledge and skills do teachers need to support students in achieving these outcomes? How do leaders promote teacher learning related to these desired outcomes? What changes are made for students and what is the impact?

Regardless of the form of the inquiry cycle, evidence-based learning conversations are essential. This type of professional dialogue causes a learning community to reflect on and challenge their existing practice. As educators engage in evidence-based conversations, new knowledge emerges. This may come in the form of new ideas, or from the realization that ideas previously deemed effective don't hold up under scrutiny. This recognition can provide an opportunity for educators to rethink what they know and do. Developing learning conversations as an ongoing practice is challenging work. As Earl and Timperley (2008) explain, they involve negotiating the terrain of trusting relationships, honestly examining relevant evidence and using a set of powerful inquiries *all at the same time*. They also require an undeviating focus on student learning, often still “a largely unfamiliar enterprise” for teachers, even when they are jointly examining students' work (Little and Curry, 2008).

Trusting relationships that build social capital

Social capital is widely recognized as fundamental to the functioning and wellbeing of communities and organizations. Grootaert et al (2003. p.3) describe social capital as “the groups, networks, norms, and trust that people have available to them for productive purposes.” In schools we normally think of

social capital as the trusting relationships and networks that give a school “a strong sense of itself as a community, with ties to other communities” (Hargreaves, 2003, p.25). Louis (2006) maintains that the key to shifting school cultures in a positive way involves developing and combining three critical elements: professional community, organizational learning, and trust. Of these three elements, she concludes that trust must come first, “but few schools (and probably fewer school administrators) have confronted the issue of how to improve this component of organizational functioning” (p. 483).

It is often easier said than done for teachers and principals to engage in the kinds of focused professional conversations required in deeper forms of school-to-school networking. For educators to take part in truly challenging conversations about practice, trusting relationships must be developed, nurtured, and sustained. Developing trust within a school provides challenges enough; developing trust across schools requires time, persistence and sensitivity to differing contexts. Bryk and Schneider’s (2003) longitudinal study of trust in schools identified four specific components of relational trust: respect, personal regard, personal integrity and competence in core responsibilities. When these four dimensions of trust were in place, parents, staff and the leadership team were able to work effectively to increase safety, belonging and learning. Our own work suggests that these same components provide a basis for trust building between and across schools in inquiry networks, which is then further enhanced through focused collaborative work.

Leadership for learning, including skilled facilitation

Where several schools are involved in a network based on equality of relationships, “network” patterns of connection (Rowan, 1990) are almost inevitable, with patterns of distributed leadership across a range of people in the different organizations. Thinking holistically of a network as an organic system means that leadership of one individual is inadequate: multi-level, shared and collaborative forms of leadership become critical (Allen and Cherrey, 2000). In their research on ‘how networked learning communities work’, an evaluation of the Networked Learning Communities program in England

involving 1500 schools in 137 networks, Earl and Katz (2007) found distributed leadership to be a key feature of learning networks. The leaders took on a diversity of roles: leading network projects, connecting their school to the network, and sharing their knowledge and learning. In their studies of teacher networks Lieberman and Grolnick (2005, p.52) concluded that “networks play a major role in providing opportunities for teachers to validate both teacher knowledge and teacher inquiry”. Within a networked learning community, instead of thinking about leadership as something that a principal does, teachers begin to act as leaders as they facilitate learning for others, lead discussions and contribute to the professional development of their peers (Lieberman and Wood, 2003).

Formal leadership is also important, with head teachers and principals providing a big picture overview, setting the vision, encouraging staff participation, locating necessary resources, and providing other support and opportunities for capacity building (Earl and Katz, 2007). Network facilitators who work collaboratively across formal and informal roles to ensure the network is designed, developed, focused and sustained, also provide a critical leadership role (Hadfield and Chapman, 2009).

Evidence seeking on the impact of networking linked to a theory of action

Deeper forms of school-to-school networking focus on results that are important. Tracking through the benefits of networking to see a positive difference in student learning may be methodologically challenging but it is essential. When schools are faced with a range of possible initiatives, selecting those that don't bring benefits for student learning is fruitless, frustrating and demoralizing. What educators know and do needs to be linked to a theory of action (Argyris and Schön, 1978), a set of connected statements that link people's actions with their consequences for students' learning in the broadest sense.

This is what Earl, Katz and colleagues (2006, p.22) indicate in their exploration of the theory of action modeling the way networked learning communities “are expected to operate in supporting the ultimate outcomes for pupils”. Beginning “with the end in mind” of pupils’ learning, this theory of action posits that changing pupil outcomes depends on changing practices and structures in schools, the intermediate outcome. This, in turn, is influenced by networked learning, underpinned by knowledge creation theory: “learning and the creation of new knowledge by teachers and head teachers that leads to deep conceptual changes and new ways of working in schools and classrooms”.

Participating in a network can make a difference to students’ learning outcomes (Bell et al, 2005). Collecting evidence means finding ways to demonstrate that impact at different levels. The evaluation of the Networked Learning Communities program found a link between a greater number of people in a school actively participating in a network and pupils’ academic results, both in primary and secondary schools (Earl et al, 2006). Of course, it is the nature of that participation that counts. From our own work in Canada and England, we have found that both the quality and quantity of network involvement are significantly connected with the development of positive outcomes for learners.

We are also interested in determining how changes in teachers’ practice as a result of their network involvement have a direct impact on student learning in their classrooms. We have argued that evidence-based learning conversations are essential for adults in deeper forms of networking. In powerful learning networks, we can see evidence of this type of conversation among students as well. For example, two of us closely observed an evidence-informed conversation between two primary reading partners. We analyzed how their teachers’ collaborative planning conversations related to informed assessment and instructional practices (Kaser and Halbert, 2008). We could see clear evidence that the practices of adults and young people were connected. When both adult and student learners share a set of common understanding – and when the concepts and practices are shared across a networked group of schools – the opportunities for deeper student learning are enhanced.

We are aware of literature that describes a range of benefits of networking. In addition, we argue that network participants *themselves* should be identifying indicators related to the ultimate outcomes they are seeking, as well as intermediate outcomes related to their theories of action. “How will we know when we have achieved this?” “What will have happened?” “What will this look like?” “What will be different?” “What evidence do we need to collect?” are just some of the questions participants should be asking. A broad perspective needs to be taken to examining outcomes in order to avoid the narrowness and “negative space” issues involved with using single test measures as indicators.

An interdependent connection between the network and schools’ learning communities

The impact of excellent networking practices is unlikely to be realized unless the school itself is engaged in parallel processes to deepen its own professional learning community. In many ways, strong networks mirror the most mature examples of within-school professional learning communities: ones that pay detailed attention to “finding ways, inside and outside their immediate community, to enquire on their practice and together learn new and better approaches that will enhance all pupils’ learning.” (Stoll et al, 2006).

Networks depend on rethinking specific ‘locations’ for professional learning communities (Stoll and Louis, 2007), but they also require two-way bridging – “uploading and downloading ideas, activities and interactions” (Earl et al, 2006, p.8). If a school has no means to process, distribute, use and extend ideas from the network, it can’t learn or benefit from the engagement. This means keeping internal and external networks in balance (Hargreaves, 2003), and ensuring that developing schools’ internal professional learning communities involves the same deeper processes, rather than the shallow formulaic, and frequently ‘laminated’ approaches mandated in some jurisdictions. Network activity can help strengthen professional learning opportunities for individuals and their access to quality learning. Networks can contribute to the development of strong professional school learning

communities. It is, however, within individual school learning communities where the greatest impact on student learning takes place. Without strong school learning communities, the capacity to generate improvement based on learning from network involvement will not be fully realized.

What does this look like in practice?

Network of Performance Based Schools

Our first set of examples comes from a decade of experience with the Network of Performance Based Schools (NPBS) in British Columbia, Canada (Katz et al, 2008; Kaser and Halbert, 2009). Although British Columbia students tend to perform well on international assessments (PISA, PIRLS, TIMMS), there are significant numbers of young people who are not strongly engaged in their learning. NPBS has as its purpose improving learning outcomes and learning engagement for all learners, through school-based inquiry and the application of key strategies informed by current research on learning and formative assessment. Networking strategies have been used to grow the network from its initial membership of 30 schools. Currently there are 400 schools in 16 regional networks across the province, supported by volunteer leaders, with two lead facilitators.

It is not the case that each of the 400 schools involved in NPBS exemplifies the deeper forms of school-to-school networking described in this chapter. Schools enter the network at different times, for different reasons, and under different conditions. What we have observed, however, is that schools that persevere with their inquiry, refine their strategies and link their work with other schools over a three-year time frame, achieve important learning gains. Schools joining NPBS understand from the outset that their shared purpose is to improve learning for all students, particularly those who are most vulnerable. Schools commit to using classroom based content area progressions in active health, art, Aboriginal understandings, writing, reading, science, citizenship and numeracy to determine individual learner progress and group growth. The use of shared measures and the exploration and application

of research-informed learning strategies provide coherence across the networks. This coherence allows schools with a similar focus to learn more rapidly from other schools. The clarity of purpose is regularly reinforced through leadership meetings, e-newsletters, webcasting, publication of school case studies, face-to-face regional meetings, and an annual seminar.

Each year NPBS schools engage in a spiral of inquiry designed to stimulate challenging, evidence-informed learning conversations. This involves exploring the following seven questions:

1. What have you identified as a critically important learning challenge for young people in your school?
2. How can that challenge be turned into a question for exploration?
3. How can you develop, use or adapt classroom/school criteria for learning success that will guide your exploration?
4. How will you support ongoing educator learning?
5. What engaging learning and teaching will you develop?
6. How will you assess the learning of your students?
7. How will you look for and identify patterns that will inform your next area of inquiry?

As indicated previously, we are aware of how difficult it is to have genuine evidence-informed learning conversations. Fear, insecurity and norms of professional isolation all contribute to educators' reluctance to openly address serious problems of practice and performance. We believe that the increasing depth and sophistication we are seeing in the conversations in many schools is connected to leaders modeling a genuine sense of inquiry and to educators developing confidence as they work with the spiral of inquiry over time. Telling the truth is also a key component of genuine inquiry. In some contexts it takes courage for schools to be open about disappointing results. Without a high degree of honesty, however, network involvement will stay superficial and the potential for real growth

will be limited. NPBS schools are expected to tell the truth, even if it is painful, and they are acknowledged for their persistence in addressing the sometime brutal realities.

Another key feature of NPBS meetings and events is that all participants are expected to “leave their role at the door”. This allows teachers to freely enter the network as learning partners with principals and to increasingly take on leadership roles. Trust builds as school teams work together without the constraints of formal arrangements at the school or district level. We have seen power relationships shift and educator confidence grow as leadership becomes more defined by contribution than by role. In addition, although technology can be used to enhance communication among schools, face-to-face meetings are essential for building trust. Because of the large distances school teams need to travel to visit other schools and to attend network meetings, we have noticed that travel time provides invaluable opportunities for conversation and for strengthening relationships. Once a personal relationship has been established, the use of more virtual forms of communication is welcomed.

The leadership for NPBS has evolved since its inception with the emergence of regional hubs and local leaders. A common trait among the local leaders is their commitment to networked learning. Their roles are diverse – from classroom teachers to superintendents – yet they manage to facilitate the regional networks with considerable consistency. Network leadership requires a facilitative style with an interesting and unusual blend of qualities. Leaders work well in networked communities when they can be both authoritative and open, when they understand power and can give it up for the sake of a larger community, and when they are curious but defined by purpose.

Deeper forms of networking cannot occur when the network inquiry is seen as something separate, distinct and disconnected from other key initiatives in the school. British Columbia is similar to other jurisdictions in the number of policy directives, planning requirements, professional development opportunities, and assorted expectations that schools face. This dazzling array of initiatives and

requirements can overwhelm even the most focused of schools. The BC network has been sustained and has grown steadily partly because of the links being created among the school inquiries, professional learning, and planning for school change. As discerning district leaders have observed the steady learning improvements in NPBS schools, they recognize that the inquiry cycle can serve as both the basis for teacher professional learning and for school planning processes. This has freed up schools to focus more deeply in areas of identified need. School leaders, formal and informal, express a sense of relief when they see the coherence between initiatives, requirements, and investments in time and energy.

Within NPBS, some varied forms of greater depth have evolved. Some regional networks have found that an individual school moves so rapidly to deeper forms of learning that it becomes the central “hub”. One example of this is Glenview Elementary School, a K-5 semi-rural school. The school’s signature strategy is cross-grade learning, with a strong emphasis on learners being learning and teaching resources for each other. Every teacher is knowledgeable about contemporary learning and assessment practices and all educators routinely provide help to other colleagues. The school has evolved into a Learning Rounds school (City et al 2009) where for a half day every two weeks classrooms are open to interested colleagues. In the past school year, over 200 teachers have participated in Glenview’s learning rounds. Glenview teacher leaders also visit other schools to act as coaches, critical friends and co-enquirers. Teachers have written articles and posted resources on the NPBS website. Two DVD’s have been produced to illustrate the learning work in action. Glenview is not a demonstration school in the traditional sense. It is more like a trading post where ideas and strategies are freely exchanged. Interested colleagues observe the school in person or on-line. They practise in their own settings and invite Glenview teachers to observe and work with them. Glenview educators simultaneously model, stimulate, inquire and coach. The organic nature of this school-to-school networking is consistent with the living systems models and notions of complexity described by Capra (1997) and Wheatley (2006). This form of networking is not aligned, but it is coherent.

Ealing Professional Learning Community

Networking characterized by the features we have outlined usually takes time to develop and deepen. Nonetheless, we have seen examples where network facilitators seem to 'get the point' fairly quickly. One example is the evolving story of the Ealing Professional Learning Community that one of us has been following, an early stage network at the end of its first year. Ealing is the third largest borough of London, with a population of more than 300,000, approximately 75,000 of who are aged 0-19. It is within this context that the idea of a school-to-school professional learning community (PLC) emerged. Interest was so great that nine schools participated in the first year (2008-9) and the remaining three will join in the second year. Willingness to engage in a school-to-school network is significant given that the national backdrop is one of markets, choice and competition between schools.

A district leader and a school's deputy headteacher developed the original connection with support from the school's headteacher. As well, an advanced skills teacher (AST)² became involved early on. This small group "bounced ideas around" to develop the first year of activity for the network, and the school – Twyford Church of England School – became the network's lead school for the first year. Probing this group, and reflecting on observing sessions when the schools get together – a full-day's launch followed by five half-day sessions – it is clear that these ideas have been underpinned by an evidence base on learning, leadership, professional learning communities (within and between schools), school improvement and change. For example, a 'vertical team', including a senior leader (the school's network coordinator), middle leaders and teachers, represents each school. Both school improvement and networking literatures are clear that commitment and involvement of senior leaders and other staff is critical to success

Attention was paid up front to purpose and focus. An early activity was exploring participants' 'convictions'. Ten evidence-based statements about leadership and 10 about learning were interrogated and discussed. These statements were revised as a result of this dialogue, are one of the

resources on the network's intranet and the learning convictions were revisited at the fourth meeting. Improving learning is at the heart of the network's endeavour, and the group are particularly focused on evidence-based approaches to learning how to learn and the six Personal Learning and Thinking Skills (PLTS) being promoted within England's national secondary curriculum which have also captured their imagination, namely that students should be: independent inquirers, creative thinkers, reflective learners, team workers, self managers, and effective participators.

Participating teams have been involved in a range of structured activities, the latter ones of which have been 'sharpened' through data gathered in earlier activities in an evolving learning design. An early and core activity was the learning review, the network's main form of inquiry. This is a process whereby a review team consisting of approximately 10 colleagues from the host school, lead school, other schools and the local authority spend a day in the host school, reviewing practice through observations, interviews, examination of documents and data and, sometimes, viewing DVDs of practice.

In a system accustomed to high accountability, in part through an external inspections process that often leaves people feeling that they are being monitored so that others can identify their weaknesses, the choice of appreciative inquiry (Cooperrider and Srivasta, 1987) as the mode of inquiry is interesting. As the word 'appreciative' suggests, it starts from a positive standpoint, identifying the best of "what is" to pursue possibilities of "what can be". As the originators argue, this form of inquiry brings a new meaning to action research in its focus on intentional, positive change. As used by Ealing's network, it is a process of collaborative inquiry, based on interviews and affirmative questioning to collect and celebrate "good news stories" and through this identifying other areas and ways in which the school could become "even better if". The host school selected the key focus for the review based on a question about where the culture for learning was most deeply embedded in the school or where there was the greatest potential for developing and embedding a learning culture. Other lines of

inquiry connected with one or two skills from the PLTS framework were then selected to focus the review more sharply. The host school decided on evidence they wanted the review team to explore but project documentation encouraged them to include 'a broad and probing range'. There were no problems in any school with finding a sufficient number of teachers willing to have their classes observed. In part, this may reflect the more open culture of schools that the approach to the inspection system and performance management by leaders has engendered. But, it also appears to be because the host team was genuinely able to reassure teachers that it was good practice that the review team was exploring, which was critical for building trust.

At the end of the day, the review team got together for a conversation where they had to decide on verbal feedback they would give to the head teacher and other senior leaders. This meant colleagues in the host school, other schools and the LA engaging in honest and penetrating dialogue about what they saw and what might have been 'even better if'. The host school subsequently agreed on targets and wrote a short report for its school community and the network, also agreeing to share this, its targets and its subsequent change strategies through the project's virtual learning environment and in face-to-face meetings with the wider network and the district. Topics and issues emerging in the reviews were fed into subsequent sessions where examples of excellent practice were shared and explored and challenges discussed and interrogated. In one workshop, the data from learning review interviews with students was analyzed as teams examined ways in which students might become more actively engaged in their learning.

Inevitably, the schools' own professional learning communities are at different stages of development and the commitment of their headteachers varies. Where there is greater commitment, it has proved easier for team members to attend sessions. In addition, the learning review process appears to identify which schools are open to scrutinizing their practice and learning from and with their

colleagues, and which ones think that they have much to offer other schools but little to learn from them.

Plans for the second year include sharpening their focus to concentrate on independent inquirers and reflective learners in particular, as identified in many of the learning reviews and relating this to local and national interest in Assessment for Learning. There will also be three new schools on board, and the network's development will be co-lead by several of the schools from the first year of involvement, distributing leadership among schools. The ideas, energy, strategic focus and leadership of the originating school are being built into the ongoing design. Unquestionably, this evolving network has faced, and continues to face, a number of challenges, but we have chosen to focus on the features that exemplify what we mean by deeper networking. They have made a constructive and well-informed start.

Can you learn to develop and sustain deep school-to-school networks?

The kind of deeper networking we have characterized is rare. It involves considerable thought and the wise practice of educators combined with current research knowledge. In our experience connecting the practice and research knowledge can't just be left to chance. In part, this means a persistent and sustained focus on professional learning. Two recent syntheses of evidence on professional learning that makes a difference to students emphasize the importance of external expertise (CUREE, 2003, 2007; Timperley et al, 2008). Timperley and colleagues conclude, however, that external expertise is necessary but insufficient. What appears to make the difference is surfacing tacit knowledge and challenging existing assumptions. Evidence-based dialogue carried out in a spirit of inquiry seems to promote powerful professional learning. Conversations that make presuppositions, ideas, beliefs and feelings explicit and available for exploration help to promote knowledge creation.

Our experience suggests that stimulating such dialogue is enhanced by a bridging process involving facilitated knowledge animation (Stoll, 2009b). Knowledge animation is a social process by which people make learning connections when engaging with external knowledge; in this case, research findings. Its aim is helping people to learn and use ideas generated elsewhere, and through this process to create their own useful knowledge. This means finding ways of making research knowledge accessible and mobile so that it will stimulate dialogue that challenges people's thinking, promotes new understanding and helps them generate new knowledge that will enhance their practice. In relation to this chapter, knowledge animation is concerned with helping educators learn and apply research underpinning deeper networking. Our own experience has highlighted three forms of stimulating learning about deeper school-to-school-networking through knowledge animation: network facilitators as knowledge animators; finding ways to develop specific tools and materials that help educators engage with networking issues and apply them to their contexts; and providing critical friendship to networks as formative evaluators in a process of 'evaluation for learning'. Here, we expand on the first two.

Network facilitators as knowledge animators

In the Canadian example, the network facilitators serve as knowledge animators through extensive personal research in the areas of student learning, assessment, teacher professional learning, school change and leadership. Current resources are collected, organized, and provided to regional leaders. Personal contacts are made with researchers and the annual seminar blending theory and practice is used as a way to strengthen the connections between schools and the people upon whose ideas they are drawing.

The combination of school-based inquiry and connected focused academic study is another way in which knowledge is animated in BC. The network facilitators have developed a graduate program in school leadership based on many of the concepts fundamental to the network. The program is

designed around six leadership mindsets (Kaser and Halbert, 2009) that include intense moral purpose, learning, trusting relationships, inquiry, evidence seeking and learning oriented design. Through the intensive year-long study involved in this program³ participants use the network spiral of inquiry to deepen student learning within their school setting and to apply their leadership learning. Participants in the graduate program often come to further study as a result of their participation in NPBS; in other cases, educators will encourage school involvement as an outcome of the program. In either case, there is emerging evidence that the combination of participation in graduate level coursework and the development of deeper forms of school-to-school networking are leading to substantially improved learning results.

Creating research-based materials on networking for learning

Networking for Learning is an interactive simulation created to help colleagues as they develop learning networks (Crandall and Stoll, 2005)⁴. It is anchored in research on networking, professional learning communities, leadership, and school improvement, and also draws on ideas from an earlier simulation about educational change (Making Change Happen, commonly referred to as 'The Change Game'), a popular professional development tool in North America. The key purposes of *Networking for Learning* are to raise and promote understanding of critical issues involved in developing sustainable learning networks that make a difference, by bringing colleagues together in a situation that will surface their tacit knowledge, facilitate reflection, provoke dialogue and problem-solving, and promote learning and application within their own network contexts.

In twos or threes at a laptop, participants have to adopt the mindset of a team of consultants whose brief is to help an imaginary group of schools create a network focused on learning. Together, they have to help this group of schools create a learning network through decisions made that are intended to 'move' the characters on the simulation board through stages of change associated with the network's development – from 'exploring' to 'sustainable' in three simulated years. They have access

to initial information about the schools and characters and an annual 'budget' to spend on activities they believe will make progress toward their goals. They choose from a list of activities, each choice producing feedback. Characters may move, signifying progress toward sustainability. Sometimes they also receive either benefits (evidence of student learning gains) or capacity enhancements (evidence of increased staff, school or network capacity to support learning).

We have found that facilitation enables participants to come to more powerful understandings of the material and deepen their learning through an undeviating emphasis on the importance of participants taking a learning and inquiry orientation towards the simulation (Stoll, 2007). The simulation is a learning tool designed to help participants understand their own work, reflect on current challenges, and create effective future solutions. It deals with complexities involved in initiating and sustaining change with a diverse, cross-organizational group, and enables users to explore frustrations and tensions of working across schools that may have different routines, priorities and professional cultures. This demands that facilitators create a space for learning and inquiry among participants – moving the group away from 'playing a game' into using the simulation to explore issues experienced in their own work. Facilitation also attends to ongoing review of the group's learning and actions arising from this. The simulation has been introduced into New Zealand for use with school clusters, where participants in session described how: “This made me think really hard about what makes a good network ‘tick’. We have always evolved. We can be more proactive”; “We need to be more strategic and more planned and think things through more”; and “Between the initial gathering of innovators and then getting all staff on board there are an array of choices to be made. I had never thought of the impact of these choices before on the school and cluster”.

Some senior leadership teams are also using the simulation and in reflecting upon the discussion generated by the simulation session, a principal noted that “dissonance with current values and

beliefs was created which deepened the level of discussion and dialogue as the team looked to reposition, or reconstruct their thinking, individually and collectively” (Taylor-Patel, 2009).

Conclusion

School-to-school networking has the power to make a difference to students’ learning and future life opportunities, but not if it is treated as a shallow ‘must connect and don’t really know why or how’ exercise. As network facilitators and researchers, we are curious about networks that are committed to equity and quality. We are interested in networks that are applying knowledge about current learning strategies and contemporary approaches to assessment and that encourage a disciplined approach to innovation. Deeper networking is grounded in meaningful focused activities underpinned by compelling purpose. Participants are seriously challenged to develop their practice through inquiry and dialogue. They accept and, at best, even embrace challenge because of attention paid to developing trusting relationships. Deeper forms of networking build leadership capacity, and seek broad evidence of impact on learners and their learning. We make no claims that creating and developing networks of this kind is easy; far from it. They require skillful facilitation that is informed by knowledge about networking that makes a real difference to learning at all levels but, most particularly, to the learning of all students. Anything less is tinkering at the edges.

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¹ This term refers to high school graduation in a North American context.

² Advanced Skills Teachers receive official recognition for their expertise, and offer support to colleagues within their school and other schools in their local authority.

³ <http://www.educ.uvic.ca/csml>

⁴ The Innovation Unit of England's then Department for Education and Skills and the National College for School Leadership sponsored the original version of the simulation for use by schools involved in England's Primary Strategy Learning Networks. The current version has been updated.