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National College
for School Leadership

Schools and academies

A self-improving school system: towards maturity

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Resource

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Executive summary

This fourth thinkpiece on the development of a self-improving school system in England reports progress since 2010 in ways of understanding and conceptualising the dynamics of effective inter-school partnerships. It assumes the manifold benefits of such partnerships as elaborated in the first thinkpiece (Hargreaves, 2010: 6) and now extends the discussion of the challenges of initiating and maintaining partnerships or alliances between schools, which are taken as the building block of a self-improving system. In exploring schools' new responsibilities for teachers' professional development and school improvement, this thinkpiece focuses on the nature of deep partnerships between schools and the action needed to achieve them. The evolving maturity model, initially sketched in Hargreaves (2011), is updated and broadened and provides further guidance on the third dimension, called collaborative capital, which is the state in which leading schools have established the mature partnerships that are the core of a self-improving school system. At this point, partnerships engage in disciplined innovation, develop as entrepreneurs, and acquire the skills to become the confident architects of alliances and partnerships between schools. The revised maturity model is made relevant to all inter-school partnerships, not just teaching school alliances.

Introduction

It is now two years since the first of these four thinkpieces - *Creating a self-improving school system* (July 2010) - was published. It argued that clusters of schools working in partnership could potentially create a self-improving school system. The concept of such a system was supported in the coalition government's white paper, *The importance of teaching* (HM Government, 2010). Much has happened in the interim. The National College now oversees the work of the cohorts of teaching schools and their strategic alliances that include partnerships between schools. At the same time, inter-school partnerships are flourishing in many different forms across thousands of schools in England in response to the coalition government's policy of transferring the main responsibility for teacher development and school improvement away from local authorities and other providers and directly to schools themselves. Everywhere inter-school partnerships, the building blocks of a self-improving system, are being established. For some groups of schools this is a matter of building on well-established foundations; for others, it is a new and sometimes daunting experience. All this has naturally influenced what I have written in the two further thinkpieces, *Leading a self-improving school system* (September 2011) and *A self-improving school system in international context* (January 2012).

The maturity model sketched in the second thinkpiece, before the new teaching schools were established, was based on schools' existing experience of partnerships of many different kinds and sometimes over many years. As schools accelerate the pace of development of these partnerships, the nature of the maturity model's 3 dimensions and 12 strands that were suggested in the second thinkpiece, has become clearer. Today we have a far better understanding of the processes of inter-school partnerships, and in particular how they can contribute to new approaches to combining professional development with school improvement, than was possible two years ago. The rate of progress has been exceptional. Many schools, as well as local authorities, have found this very challenging and become apprehensive and even disillusioned, but many are also finding this natural anxiety both exhilarating and empowering, a spur to energetic creativity.

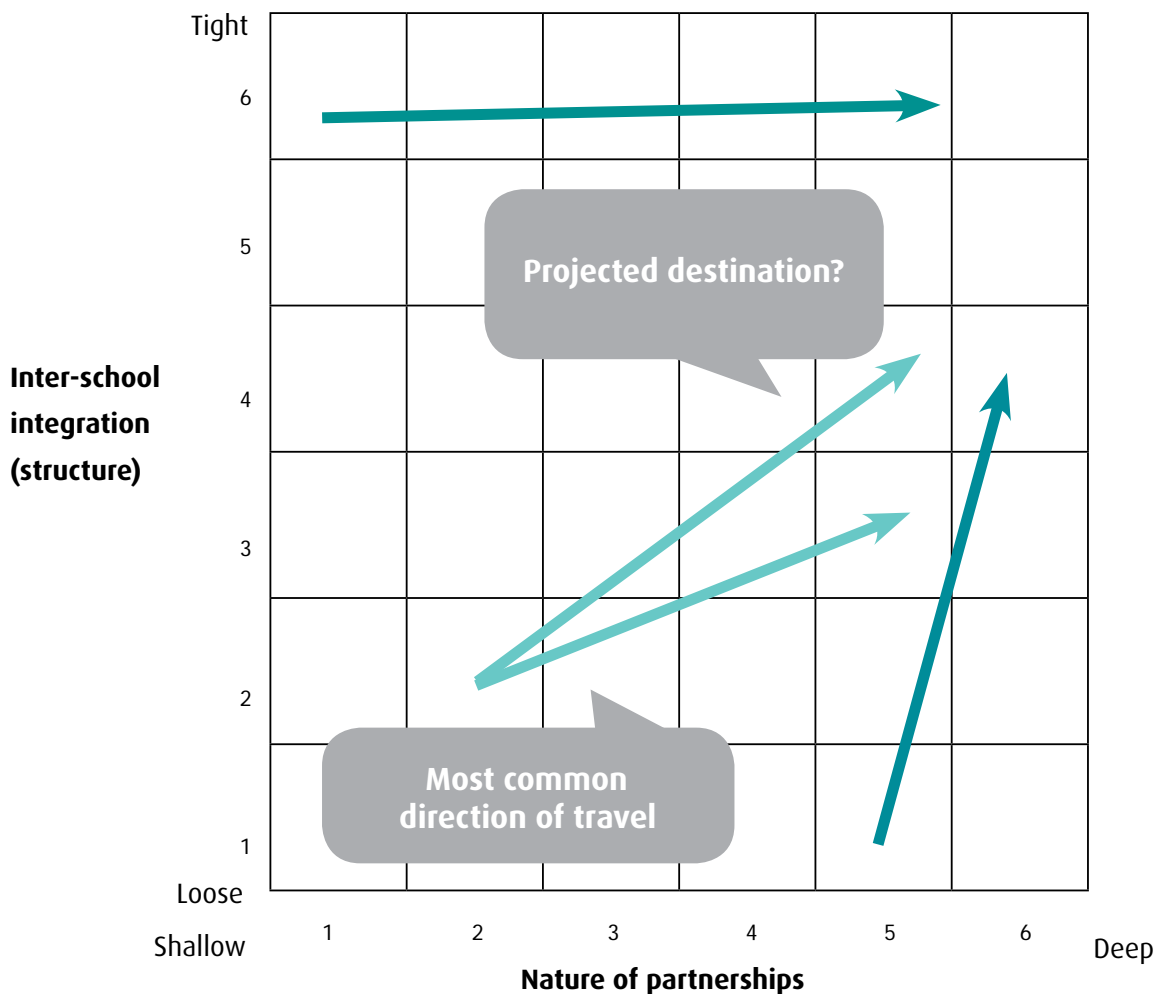
Headteachers rightly approach the notion of inter-school partnerships with some caution, for partnerships incur transaction costs - the time, money and energy to make them work. The larger the number of partnerships, the greater the transaction costs. I believe some of the greatest benefits of partnerships arise when a school seeks to make a deep partnership with a small number of schools. Of course this is not to say that some shallow partnerships - ones that are limited in scope - are inappropriate. Some shallow partnerships are fit for purpose and work well with low transaction costs. But the full benefits of partnership cannot be achieved by shallow partnerships alone.

Most of the school leaders with whom I have worked over the last two years want some of their partnerships, usually between one and three, to be relatively deep. I offered school leaders a partnership grid (Figure 1). The vertical axis is the extent to which schools are structurally integrated - tightly or loosely. Schools in position 5 or 6 are schools in hard federations sharing a common governing body, or a chain of schools under a chief executive. The horizontal axis is the shallow-deep continuum.

School leaders were asked to think of one partnership and mark the cell in the grid in which their school currently sits and then to mark the cell in which they would like to be in several years' time. Finally they were asked to draw an arrow between the two cells. The result yields the direction of travel for the partnership.

In Figure 1 the arrow along the top represents the direction of travel of a newly formed hard federation. The task for the federation is now to achieve the depth to complement the structural integration. The line on the right-hand side is the direction of travel for a longstanding and relatively deep partnership, now considering that greater structural integration is in order. However, the majority of schools make their starting point in the bottom four cells on the left, and their direction of travel is to achieve greater depth, which is seen as a desirable precondition for the tighter structural integration that must be approached cautiously.

Figure 1: Inter-school partnership grid



Understanding what exactly makes a partnership deep, and why deep partnerships are beneficial and yet much harder to establish and maintain than shallow ones, is part of the argument in this thinkpiece. Indeed, we have reached the point where we can specify the criteria by which we can judge a partnership to have developed depth.

The maturity model consists of three dimensions, each with four strands (see Box 1). The third dimension, with the unusual title of collaborative capital, was originally sketched in a very preliminary way. The links between the strands – reproduced as Figure 2, which can be treated as a tube map, wiring diagram or jigsaw, whichever analogy you prefer – are complex and not easily explained by school leaders to others who need some insight into these interactions that make a successful partnership.

School leaders would thus value a more coherent and compelling account of school partnerships that can inspire others whilst simultaneously providing them with an accessible overview of what is involved.

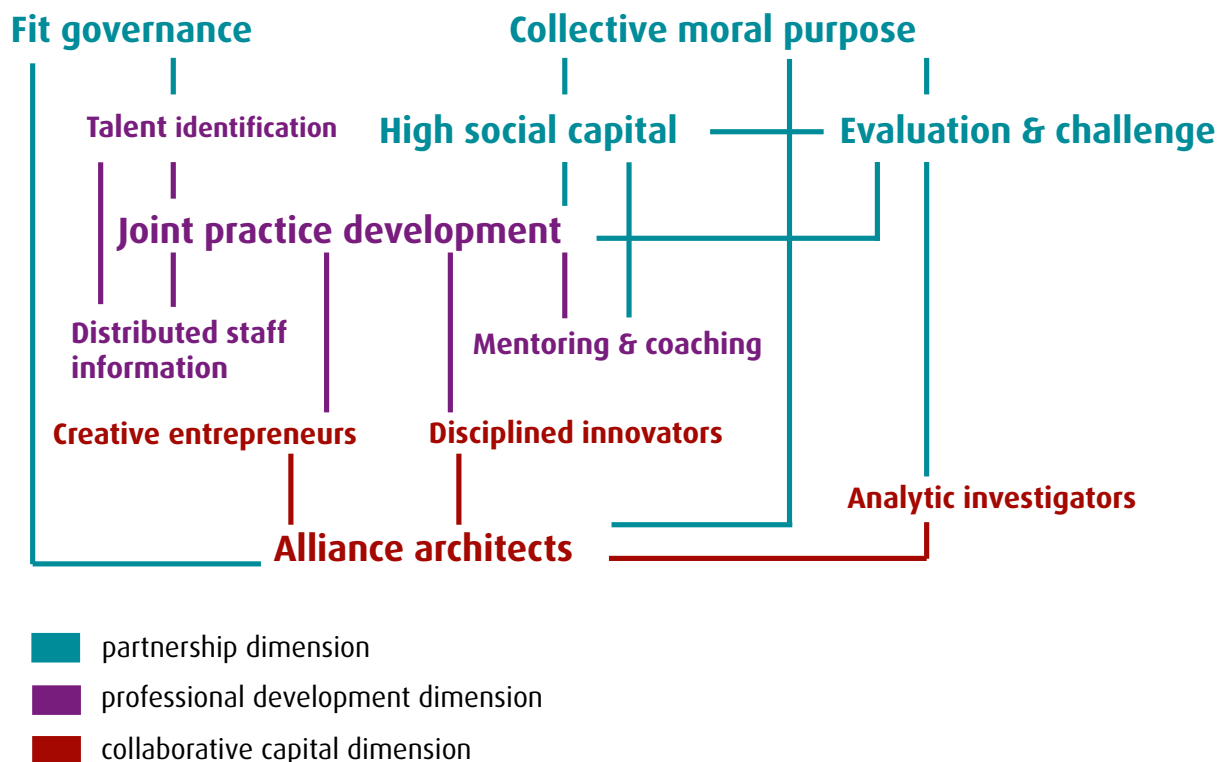
So in this fourth thinkpiece the maturity model is not only brought up to date but is also portrayed in the form of a more coherent and compelling narrative about the purpose and process of inter-school partnerships. The succession of thinkpieces represents an evolution of my conceptualisation of the process of partnership.

The second thinkpiece set out the three dimensions and their strands in a **linear** format, listing them in the order of the maturity model.

The third thinkpiece set out the dimensions and strands in an **interactive** format to display the links between them.

This final thinkpiece sets out the dimensions and strands in a **narrative** format, because the aim is to provide a persuasive story.

Figure 2: Links between the 12 strands



In this way, I hope to show how professional development and partnership competence are the soil in which collaborative capital grows. For this third dimension is the projected future state in which inter-school partnerships are no longer new and under construction but have become a normal part of a very different school system, one in which self-improving schools thrive. This is the maturity to which our best inter-school partnerships are striving.

A self-improving school system is one in which school improvement and professional development are conjoined in the life and work of a school in relation to its chosen partners. This points, of course, to **joint practice development**, lying at the heart of Figure 2. This is the building block on which three other key building blocks are constructed and it necessarily opens the narrative version of the maturity model.

Box 1: The maturity model and its 12 strands

The **professional development** dimension and its strands:

- joint practice development
- mentoring and coaching
- talent identification
- distributed staff information

The **partnership competence** dimension and its strands:

- fit governance
- high social capital
- collective moral purpose, or distributed system leadership
- evaluation and challenge

The **collaborative capital dimension** and its strands:

- analytical investigation
- disciplined innovation
- creative entrepreneurship
- alliance architecture

Note: The order of the strands is slightly different from that in the original version.

The first dimension of the maturity model: professional development

The first dimension, professional development, necessarily takes precedence over the second dimension, partnership competence, for an obvious reason: partnership competence is not an end in itself, but a means to enhancing the professional development from which better teaching and learning arise. Those who want a coherent and compelling account of inter-school partnerships, especially those who work in or with schools as professional practitioners or as governors, have to begin here, with the *raison d'être* of partnership, if they are to be persuaded.

Joint practice development

This means beginning with one particular strand, **joint practice development** (JPD). The term is new to most school staff and to governors, but is easily explained. In the many conferences and workshop I have run over the last two years, I always ask participants to estimate the success rate of the 'sharing good practice' model, by which teachers speak or write descriptively about something they do, assumed to be good, in the hope that impressed listeners or readers will adopt the practice and transplant it or modify it to their own situation. Without exception, teachers tell me that the success rate of such attempted transfer is, in their view, low or very low. This is a puzzle. If this is what most teachers think, why is so much time and energy spent on what has become an almost sacred feature of teachers' professional development – offering or receiving examples of 'sharing good practice'?

The answer, I believe, is that these activities have an attractive narrative structure. They are personal stories about professional practice and they can be treated as authentic and credible. They are readily adapted to the conventional format of teacher conferences or to databases of various kinds that store these reports. Teachers enjoy the activity of sharing and of course some good can come from it. But is there a more effective way of improving teachers' professional practices?

I believe there is, but it entails thinking differently about the nature of professional development and school improvement, and how they are best achieved when in harness. In fact, many schools know that sustained mentoring and coaching have a better record for disseminating good practice than simply listening to fellow teachers at a conference or reading reports of what they have done. The reason is obvious: implementing the new practice in one's school or classroom often proves to be a much more difficult task than it appeared to be in the oral or written account of it. The people who originally designed the new practice had to develop it over time, learning to adjust it in minor ways until it assumed its final shape. But this learning on the job is difficult to transmit to a listener or reader, who without help and support may find the transfer is simply too difficult and so give up. The practice was shared, certainly, but not actually transferred.

However, if the sharing also includes mentoring or coaching, then the necessary help and support are at hand, so when problems in the attempted transfer arise, they can be talked through and demonstrated with reassuring encouragement: the professional learning involved in the transfer is sufficiently well scaffolded to increase the chances of success. For this reason some schools have created a positive climate of mentoring and coaching – among teachers, between teachers and pupils, and among pupils. It works.

Relocating teachers' time and energy from relatively ineffective models of sharing good practice to more effective models based on mentoring and coaching is not easily achieved because it means reforming what we mean by professional development and the means by which it is implemented. The drive to such reform is currently being boosted by the government's insistence that schools must take the major responsibility for professional development and school improvement. The emergent model is less about attending conferences and courses and more about school-based, peer-to-peer activities in which development is fused with routine practice. Professional development becomes a continuous, pervasive process that builds craft knowledge, rather than an occasional activity that is sharply distinguished in time and space from routine classroom work.

What we call this shift in professional development is important. It needs, I believe, a new name. Joint practice development (JPD) is a term that captures the essential features of this form of professional development:

- It is a **joint** activity, in which two or more people interact and influence one another, in contrast to the non-interactive, unilateral character of much conventional ‘sharing good practice’.
- It is an activity that focuses on teachers’ professional **practice**, ie what they do, not merely what they know.
- It is a **development** of the practice, not simply a transfer of it from one person or place to another, and so a form of school improvement.

This third feature is the most important. It naturally becomes a development because when two or more people are involved in a relationship of mentoring or coaching, the originator of the new practice goes beyond the process of simply transferring it to a receiving colleague, for two reasons. First, the recipient asks questions of the coach, and some of these questions force the coach to think about the practice in a new way. Second, as the coach explains and supports the recipient’s learning, he or she reflects on the practice and thinks about it in new ways. Both the recipient’s questions and the originator’s reflections strengthen the sense of reciprocity as the practice is further developed to become a co-constructed improvement.

But exactly who are the two or more people (usually not many more) that make up a group of staff working on a specific JPD project? Senior leaders need to know the identities of those with particular strengths to lead JPD groups within a school. In a partnership, the senior leaders need to share and distribute knowledge of those with an evident strength (talent, skill, experience) and, importantly, with the capacity to work well with others. In short, the headteachers of each school in the partnership should be able to name the key people for JPD groups in all the development areas that have priority within the partnership, even when such people are not in their own school. In a deep partnership, headteachers and senior leaders find ways of sharing their best teachers so that such expertise contributes to the professional development of all other teachers who can benefit from it. Creating a culture of mentoring and coaching, grounded in talent identification and the sharing of that knowledge across partnerships, is the way to engineer high-quality JPD (Figure 3 and Box 2).

Figure 3: Links between the professional development strands



■ professional development dimension

Box 2: Creating a culture of coaching and joint practice development

The Portswood Teaching School Alliance (PTSA) in Southampton regards the development of coaching as a key lever for school improvement. The well-documented successes of Portswood Primary School in using coaching for improvements in teaching and learning have for a number of years been shared across the city, with a significant impact on standards in supported schools. In the past year the number of coaching roles in Southampton schools has increased rapidly, particularly at assistant head level. The alliance has run several training sessions this year, with requests for follow-up work to develop leading coaches. Increasingly these coaches work together to share expertise.

A new research study will explore how several schools develop a coaching culture. All will have (or already have) received launch training from the PTSA with a programme of support to embed the coaching culture. The schools work on different timeframes: coaching is well established in one school, whilst others begin their coaching programmes in September 2012. The schools can access coaching network groups and join a coaching hub.

The coaching involves all forms but focuses particularly on in-class direct coaching of teachers. Training includes observation of different forms of coaching in action at Portswood. Every new coach receives feedback in real time on his or her coaching work as well as a coaching plan with regular review of the development of the coaching culture over a year.

This coaching ethos serves as a bedrock of joint practice development (JPD), where teachers regularly team-teach, carry out lesson study and engage in action-research projects in search of innovation to improve the quality of teaching and learning. Distributed staff information ensures teachers can be matched effectively to work together in a climate of trust across partnership schools. Setting this expectation of open-door professionalism begins at the interview stage: teachers are recruited based not upon how good they seem but rather upon how good it is judged they will become – a form of talent identification. Thus the process of rigorous selection, intensive coaching and JPD in a climate of heightened professionalism and openness ensures the highest standards in teaching and learning that have made the school outstanding

JPD is alive and well in many schools, but the staff may well not call it that. They may use a distinctive name, such as the research lesson study, introduced to the UK from Japan by Pete Dudley (www.lessonstudy.co.uk and www.lessonresearch.net), which is certainly one of the most powerful forms of JPD known to me. Or they may have no particular name for what they do, preferring an umbrella term, such as action research.

The greatest barrier to a widespread adoption of the JPD model of professional development is simply the lack of time for teachers to engage in it. To find the time, for example, requires imaginative use of the five professional training days, which do not need to be whole days at all. One or more of them can be simply treated as an amount of time and be disaggregated to make smaller bundles of time that can be redistributed in the working week. JPD requires teachers to meet regularly to engage in the process: a series of such bundles of 30 to 60 minutes over several weeks makes JPD effective. Joint professional training days between partners are becoming common, but a more radical use of such professional development time is unusual (Box 3).

Inter-school partnerships can strengthen JPD because that allows good practices in one school to be shared across the whole partnership, provided the professional training days are deployed to aid this. But it is always easier to engage in JPD within one school than across schools. For this reason, in the most effective partnerships staff move between schools – perhaps for one day a week, perhaps for a term or even a year – so that they can work with a new set of colleagues in JPD activities. Precedents have been set by the work of national support schools, and the new specialist leaders of education (SLEs) will also work in this way. A partnership provides a richer resource for JPD than can any standalone school, provided that people as well as materials are shared.

The **first criterion of a deep partnership**, then, is that it exhibits high-quality JPD as described above.

Box 3: Imaginative use of professional training days to support JPD

JPD in Mount Street Academy, Lincoln

In 2011, Mount Street Academy (infant and nursery) became a national support school and the headteacher began a one-year deployment as an NLE in a nearby voluntary-controlled primary school which had previously been in an Ofsted category. A new leadership structure, consisting of an executive headteacher (Catherine Paine), business manager and two associate headteachers, one from each school, was designed to signify from the outset the mutually beneficial relationship between the schools.

Staff meetings and in-service training (inset) days at the recipient school began in earnest. The executive headteacher emphasised to staff that this partnership would provide opportunities for both schools to share best practice through joint staff meetings and that staff at Mount Street had plenty to learn from colleagues in the partner school. However, with the traditional format of weekly staff meetings and infrequent inset days, it became increasingly obvious that such a design was flawed, especially as it failed to avert the 'done to' approach that caused staff morale in the partner school to plummet further and gave every impression of a rescue mission, not a partnership.

A radically different solution was required: to unite teachers and teaching assistants in small, cross-school teams with a pedagogical focus, and to give staff from both schools a sense of journeying into new territory, genuinely learning from each other to discover what makes great learning for children. Thus were born IMPact teams: improving my practice through action. Grouped around a team leader - an outstanding teacher from one or other school, but crucially including a number of staff from the recipient school - a small group of teachers and teaching assistants began work on JPD. Team leaders meet every six weeks led by the associate head (an outstanding teacher) from the partner school. Teams reflect on their practice and crucially look at published research, which encourages them to push themselves to the next level. Then they lead their own team into action research. All staff aware that they are building something bigger and better than either school could achieve alone.

As a result of the partnership approach to improving practice, staff at the recipient school no longer feel demoralised. Next year, inset days will be replaced by 20 IMPact team twilight and bespoke training sessions. The challenge for Mount Street Academy, as a designated teaching school, is to explore how this JPD approach can work across the alliance.

CPD at Swavesey Village College and the Cambridge Meridian Academies Trust

One training day every two years is set aside for every member of staff to undertake a benchmarking visit, usually to a school identified as having some excellent practice. Staff travel in groups to the school so they can discuss and share the experience. Departments split up and visit different schools to ensure real breadth of experiences. This injects new ideas to invigorate practice and also positively affirms their existing practices that are shared with the schools visited.

There are formal and informal opportunities across the partnership to share expertise. 2011-12 started with a joint training day, working and lunching together to establish positive relationships between the two staffs. The two maths departments have since met formally throughout this year to exchange ideas and focus on developing classroom practice, intervention strategies and teaching materials. In 2012-13 a number of collaborative sessions are planned, starting with matched faculty teams from both schools working on JPD within curriculum areas.

The teaching and learning development programme is based on two-hour twilight sessions, sourced from a disaggregated professional training day. Each session is split into two 45-minute units facilitated by staff from across the trust at all levels from newly qualified teacher to advanced skills teacher. Most staff at the college have contributed to these sessions at some point during the year. Departments agree prior to the evening who will attend which session, after which the department meets for coffee to discuss the practice they have seen and how they may then implement it. This is followed up over coffee at a later date in a 20-minute teaching and learning briefing to share experiences of implementation. This programme has proved incredibly successful, so six sessions will run in 2012-13. How to incorporate partner primary schools in cross-phase training is being explored.

Questions: How many of your staff are engaged in a form of JPD that combines their professional development with advances in their routine classroom practice? How many of your staff are engaged in JPD across partner schools? What further action do you need to take to embed JPD?

JPD can be difficult to establish and needs some enabling conditions. What are these? Essentially they are three strands of the dimension of partnership competence – social capital, collective moral purpose and evaluation and challenge.

Box 4: Developing trust at Southend High School for Boys

On becoming headteacher, Robin Bevan wanted to develop a stronger focus on pedagogical issues and to generate more creative thinking in the senior leadership team (SLT). At a later stage various instruments were used to stimulate self-reflection on awaydays. The decision to audit trust was a natural extension to more routine reviews of SLT decisions and practices. It was a way of testing SLT actions against their values.

The trust audit was based on Stephen Covey's (2006) dimensions:

- talk straight
- demonstrate concern
- create transparency
- right wrongs
- show loyalty
- deliver results
- get better
- confront reality
- clarify expectations
- practise accountability
- listen first
- keep commitments
- extend trust

SLT members were asked to identify, without disclosure, the five dimensions in which they individually believed themselves to be strongest, and the three which **individually** they recognised as their weakest. This was not discussed. The exercise was immediately repeated, with each SLT member identifying the strongest five and also the weakest three **for the team as a whole**.

Discussion started with the team's top five: what they did well with illustrative examples. It became clear that the top five entries of some members were in the bottom three of others. The definitions were used to tease out elements on which the team could work together. For example, 'deliver results' revealed a tendency to get there in the end on some projects, but a failure to complete on time through over-optimistic planning. Other entries were common to the bottom three, eg 'listen first', where the usual mode had been for the SLT to prepare a solution to a problem and consult afterwards.

The initial reaction to the trust audit was hesitant, with some natural defensiveness, but it supported later professional discussion, adding a new dimension to such dialogue. It led to an explicit recognition that the SLT must act in ways that embody its values: that it matters how senior leaders do things, and that they hold each other to account for leadership style as well as for student outcomes.

Later the Covey framework was published in a school evaluation document and became a measure for assessing how effectively the SLT operates. By holding this mirror to itself, the SLT made these trust-values apply to the school as a whole. By delegating responsibility and therefore trust to others, the SLT fostered a culture in which decisions are made with reference to institutional values and common purpose.

The reciprocity aspect of social capital is readily visible: when people exchange favours and support one another, their collaborative action is open to inspection by others. Trust, by contrast, is more subtly expressed and not so easily scrutinised. In organisations where there is a hierarchy of power relations, trust is not easily talked about. Senior school leaders are rarely told to their face by more junior colleagues that they are not trusted. Trust is not much talked about in an explicit way. Senior leaders have to infer how well and to what extent they are trusted through indirect indicators, and so it is easy for them to overestimate how much they are in fact trusted.

Trust can be audited and monitored. In Annex 1 are some trust tests I have devised. They can be used between senior leaders and staff, among staff, and between staff and students. These tests could easily be adapted, for example to audit trust between senior leaders across partnership schools. Each item on these questionnaires taps into a different dimension of trust. Of course, it takes courage for a headteacher to get their staff to fill in such questionnaires, anonymously of course, to discover how much school leaders trust one another and are trusted by colleagues, but the results can be highly informative, since it will reveal not only the extent to which the headteacher is trusted but also the particular dimensions of trust on which the headteacher is most and least trusted (Box 4).

If taking this step is thought to be too risky or radical, one could begin with the student trust questionnaire. The headteacher tells a group or class of students who are a focus of concern, say for underachievement or disengagement from learning, that the school wishes to know what students think about their relationships with staff and are thus invited to complete the questionnaire anonymously. The results can be collated and discussed with the relevant staff, as again the detailed findings reveal which aspects of trust in staff-student relationships most need attention.

Auditing trust in these ways makes it easier to talk about trust. As Solomon and Flores (2001:153) put it:

Why talk about trust? Not only because trust has long been neglected as an essential philosophical and ethical concept, but also because talking about trust is essential to building trust. Even if talking about trust can be awkward or uncomfortable, it is only by talking about trust, and trusting, that trust can be created, maintained and restored. Not talking about trust, on the other hand... can too easily betray a lack of trust, or result in continuing distrust. Trust... is, and must be made to be, a matter of conscientious choice.

Solomon & Flores, 2001:153

As people become more comfortable with talking about and auditing trust, the easier it becomes for school leaders to monitor it as a measure of the growth of social capital.

— School leaders are **architects of trust** (McEvily & Zaheer, 2004).

They take practical action to establish and maintain trust among members of the schools (staff, students, governors). This is also a role for those with executive responsibility for the activities of the partnership, who should see the establishment and maintenance of trust as part of what they do as network facilitators.

The way in which JPD is first initiated can be crucial in getting the trust aspect of social capital as firmly rooted as reciprocity. Somebody has to make an opening offer, an act of generosity. It is important that this be done, in the words of Tor Nørretranders (2002:124), in the spirit that 'generosity is a kind of investment in future reciprocity.' For there is a risk that, as pairs or small groups of staff are put together for a JPD project, a perception emerges that one person is seen as the strong partner with expertise who works unilaterally with others cast in the role of novices, whose function is simply to learn from the expert. In other words, this easily looks like a deficit model of partnership in which trust will be difficult to create. But there are other ways of setting up JPD groups. For example, all staff can be invited to complete a short questionnaire with just two questions:

- In a JPD project, what could I offer to someone else?
- In a JPD project, what would I like to gain from someone else?

Everyone has something to teach and something to learn, and the groups can be formed with all participants being able to practise the two roles. Reciprocity is a superb basis for trust-building. In an inter-school partnership, trust between the schools can be built on the basis of a parallel questionnaire between the two schools:

- In an inter-school JPD project, what can our school offer to a partner school?
- In an inter-school JPD project, what could our school learn from a partner school?

Note, however, that unless a school has first created a high level of social capital within itself, it is unlikely to achieve the same level in an inter-school partnership. A school would be wise to establish JPD in itself before embarking on JPD projects across schools.

The **second criterion of a deep partnership**, then, is that the level of social capital is high within and between schools in the partnership.

Questions: What are the levels of social capital (i) within your school and (ii) with partner schools? How good are you at auditing and monitoring trust? Are the links between high social capital and effective JPD in place in the partnership?

Collective moral purpose

A further enabling condition draws on the concept of **moral purpose**, or that which motivates and sustains teachers in their professional commitment. It is not primarily for financial reward or for social status that teachers do what they do, but rather because preparing the next generation to be fully realised individuals and to create a better society are at the very heart of what education is for.

In practice, teachers experience moral purpose in relation to the students in their care – the ones in their own school. This is natural enough, since the care a professional bestows on clients is most strongly felt when in an enduring face-to-face relationship with these clients.

In this regard, inter-school partnerships present a challenge. In part this is because teachers simply do not know most of the students in the other schools and have only rare opportunities to meet and get to know them. More importantly, the schools may choose to work in partnership, but they are in a system that encourages competition between schools. This competition is grounded in parental choice of school, a choice informed by published information on the quality of different schools, especially in the league tables based on performance data and the judgements of inspectors. In such circumstances, the sense of moral purpose will be strongly directed to teachers' own students, those in the school where the teacher is employed. Any moral purpose felt toward students in other schools easily becomes attenuated.

In recent years in England some headteachers have been described as **system leaders**, with designation as national leader of education (NLE) or local leader of education (LLE). These system leaders (i) share a distinctive value, a conviction that leaders should strive for the success of other schools and their students, not just one's own; and (ii) a practice that flows from this value, namely a readiness to work with, and usually in, another school to help it to become more successful. This deployment of NLEs and LLEs has proved a powerful form of school improvement (Hill, 2011).

A self-improving school system based on inter-school partnerships has to push the concept and practice of system leadership to a new level. Today all school leaders are familiar with the idea and practice of distributed leadership – the notion that leadership is not exclusively a matter of what specified leaders at the top of an organisational hierarchy do, but rather is something that all members of an organisation should have opportunities to exercise. Much of the professional development for teachers hinges on the notion of distributed leadership. Increasingly, student development is also seen as requiring them to be provided with opportunities for student leadership.

The next and crucial level is reached when system leadership is also distributed, so that everyone in a partnership shares the values and practices of the original system leaders.

In the most successful school partnerships known to me this already happens: the principles and practice of system leadership get distributed. But there is no common term for this. Initially I coined the obvious phrase **distributed system leadership** for the phenomenon, but the term is, however, unfamiliar and somewhat technical, and I now prefer **collective moral purpose (CMP)**.

How might the four key stakeholders – teachers, parents, governors and students – respond to the issue?

Teachers, I believe, will readily internalise CMP, but on one critical condition, namely that they actually spend some time with students in other schools so that they get to know some of them as well as they know some students in their own school. JPD across schools supports this, but in a deep partnership staff will move between schools according to various schemes of secondment and rotation across the schools. This already happens in a minority of schools, especially those in federations and chains.

Parents, by contrast, may find it very difficult to come to terms with the concept of CMP in a partnership. After all, they choose one school for their child, and this is often based on the idea that the chosen school is judged – on the basis of league tables and inspection reports – to be a better school than some alternative(s). Why then should such parents support the notion that the staff of their chosen school should feel a moral commitment to the success of students in a school that the parents rejected?

There are two possible answers to this. The first is that the schools in partnership integrate with one another in a structural sense, as is the case with hard federations, chains and trusts. When parents choose one of these schools they are thereby also choosing the whole set of schools that constitute the federation, chain or trust. For this reason, as inter-school partnerships become deeper, they will be under pressure to become more structurally integrated (see my projected destination for the direction of travel in Figure 1).

The second answer is that the teachers in a school persuade parents that CMP is a way of maximising the benefits of inter-school partnership, which results in **all** the members becoming better schools. Partnership and the associated collective moral purpose are not taking resources away from their child and relocating them to other children. Rather it is an investment in collective school improvement, which means that the quality of education for all the children in every school in the partnership, including their own, will be enhanced.

Governors may well adopt attitudes closer to those of parents than of teachers. The role of the chair of a school's governing body has never been more significant in leading the governors to adopt the values of distributed system leadership and collective moral purpose. Without such leadership, governors at best underestimate the potential value of inter-school partnerships and at worst oppose or impede their development.

There are important implications about how the governing bodies of schools in partnership should relate to one another. CMP might be easier to achieve if governors became, in the language of networks, **boundary spanners**, such as through cross-membership of governing bodies, a governor sitting on two governing bodies, or governors being paired across partner schools, each attending, as an observer, governors' meetings in the partner school.

The response of **students** will be discussed later.

Collective moral purpose clearly nurtures social capital, which is thereby strengthened in its support for joint practice development. Joint practice development across partner schools is an active expression of collective moral purpose. This does not remove competition from schools in partnership, any more than collaboration between firms removes competition in Silicon Valley. But it does turn the competition into a healthy form. Competition that destroys collaboration is dangerously unhealthy, yet it remains widespread and often prevents inter-school partnerships from even being started. This is why, when partnerships are entered into, the leaders must ensure that all involved get early benefits from the collaboration. As Mark Pagel (2012) puts it:

Alliances, agreements, friendships and coalitions can often pay their way by giving all of us more returns than we could have had by going down the path of outright competition... The trick of getting cooperation to work is somehow to contain the conflict before it consumes the riches that could otherwise be shared.

Politicians of all political persuasions have promoted competition between schools in order to raise standards. It has had some successful outcomes. But it has also sometimes undermined collaboration and stifled some of the most significant means of school improvement. The answer does not lie in removing competition completely, but in fostering healthy competition that can be sensibly combined with collaboration.

It is commonly believed that a Darwinian view of evolution entails a belief that harsh competition is the natural state of animals and that co-operation only comes about by an imposed authority that tames competitive impulses. Such a view is now strongly repudiated. Pioneering work on collaboration by Peter Kropotkin (1902) is today finding support from a wide range of writers – Robert Axelrod, Samuel Bowles and Herbert Gintis, Mark Pagel, Stephen Pinker, Matt Ridley and Robert Wright, among others – who argue persuasively that human genes and human culture co-evolve to promote human co-operation, which is a natural, not artificially imposed, human condition.

In Matt Ridley's (1996):

Our minds have been built by selfish genes, but they have been built to be social, trustworthy and cooperative... Human beings have social instincts. They come into the world with predispositions to learn how to cooperate, to discriminate the trustworthy from the treacherous, to commit themselves to be trustworthy, to earn good reputations, to exchange goods and information and to divide labour. In this we are on our own... this instinctive cooperativeness is what sets us apart...

Ridley, M, 1996:249

In this optimistic view of human beings, co-operation is something we should foster at many levels in education, within and between schools.

The **third criterion of a deep partnership**, then, is that collective moral purpose is a value shared by all, including students, within the partnership.

Questions: To what extent is there a commitment to collective moral purpose among the stakeholders in the partnership? What action do you need to take with which stakeholder groups to enhance commitment to collective moral purpose?

Evaluation and challenge

The last of the four strands in the partnership dimension is evaluation and challenge, by which is meant the ability of each school to evaluate the quality of the education offered by partner schools and to offer challenges to help their practices to improve.

I have asked hundreds of headteachers to describe their immediate reaction if a fellow headteacher offers to evaluate and challenge the achievements of their schools. All of them offer the same reaction – to feel anxious, threatened and defensive. It is, of course, a perfectly natural reaction. It is strongly felt, for most of the evaluations and challenges that headteachers and their staff experience is from inspectors and Ofsted. But there is something distinctive about formal inspection: it is evaluation and challenge based on power. Inspectors have the authority to make evaluations and issue challenges, and it is very difficult indeed for headteachers and teachers even to question, let alone reject, such evaluations and challenges.

Potentially, evaluations and challenges between headteachers and teachers in schools in partnership need not be based on power and so produce a much less defensive response. What makes the difference is what replaces power in the relationship and here it is two critical links in the interactions between the strands.

- The first is the collective moral purpose link, which requires headteachers and teachers to be committed to the success of one another's schools and willing to work to that end. Evaluation and challenge are ways in which that commitment to the success of others is expressed.

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- The second is the high social capital link, which reveals that the relations between those who offer and receive evaluations and challenges is one of trust and, of great significance, reciprocity as well. The trust means that evaluation and challenge are offered not to judge the other, but to help them to improve. And the reciprocity means that those who offer evaluations and challenges expect in turn to be recipients of evaluations and challenges. This, in turn, is intended to strengthen collective moral purpose.

This is very different from evaluation and challenge based on power, and is more likely to be actively welcomed as a worthwhile, if not always painless, experience. Without proper evaluation and challenge, conversations between headteachers and teachers decline into undemanding chats in which the big issues of school quality and school improvement remain unconfrosted.

It is vital that evaluation and challenge operate at every level in all the partner schools. At the level of teachers it is crucial in its contribution to JPD. Without an injection of challenge, JPD can slide into complacency. It is when teachers in a JPD group have accumulated sufficient social capital within a framework of collective moral purpose that, with an evaluation and challenge boost, the developmental work of the JPD group makes the greatest progress.

Embarking on evaluation and challenge when there is little social capital and an absence of collective moral purpose is likely to provoke defensiveness and resistance, which then make the establishment of social capital even harder to achieve. When the enabling conditions of evaluation and challenge are established, engagement in evaluation and challenge actually enriches social capital and affirms collective moral purpose. If these enabling conditions are lacking, evaluation and challenge between two school leaders are more likely to work if another leader who is experienced in evaluation and challenge, such as an NLE, acts as a broker or facilitator.

Students currently get most of their evaluations and challenges from teachers, and sometimes react badly, since evaluations are interpreted as a putdown or an instance of being picked on, and challenges as unwelcome demands to work harder. Again, this may spring from the power differential between teachers and taught. More use could be made of evaluation and challenge between students. It is well known that two critical features of successful computer games are challenge and feedback – feedback is an evaluation of how well one is doing in the game and challenge is provision of the next and higher target. These are not resented in a computer game: without feedback one does not know how successful one is being and without challenge the game is too boring to make it worth playing. Perhaps more peer-based evaluation and challenge would be more effective than, or even complementary to, teacher-based evaluation and challenge.

At first sight, face-to-face, such peer-based evaluation and challenge across schools in partnership seems difficult to engineer, as moving pupils between schools can be expensive. In many schools there are successful systems of mentoring and coaching within the school, but it is rare across schools. We forget that nowadays most school students are second-generation digital natives (that is, digital natives from birth) and communicate frequently and easily through the new technologies. Establishing peer-based mentors and coaches between schools is a powerful way of supporting student learning during out-of-school hours. There are three main benefits:

1. As is so often the case, student mentors and coaches find that in seeking to teach a fellow student, their own learning is thereby improved.
2. To embed this, teachers can encourage students to introduce an evaluation and challenge element into the peer relationship.
3. Pairing students at different levels of achievement is more successful than doing so with teachers. Among teachers, the pairing can arouse resentment and defensiveness in the less effective teacher, whereas such a pairing between students is often treated as simply unthreatening help with learning and the demands of schoolwork.

But how do you get the students to meet and form pairs? One way in which to do this is to set up groups of students as **learning detectives**. In this sophisticated version of a learning walk, a group of students visits a partner school to observe the school and classrooms to discover ways in which their own school might learn some new ways to support their learning. The detective aspect comes into play as the students are briefed to seek evidence for the effectiveness of their discoveries, which entails interviews with relevant staff and students. This is a potentially powerful way of moving to better ways of teaching and learning as it can be easier to do at student than at teacher level. There is also the advantage that the students then have an incentive to help to make the imported ways of teaching and learning actually work in their new context.

A parallel team of learning detectives in the partner school is invited to reciprocate the exercise, which as always helps to build trust in the social capital that supports any form of mentoring and coaching. Throughout this activity both staff and students are put on the alert to the possibility of forming pairs for digital mentoring and coaching. Such relationships build collective moral purpose as well as peer-generated social capital and evaluation and challenge. Remember, however, that introducing evaluation and challenge at student level is much easier if the school has already invested in student voice (Rudduck, Chaplain & Wallace, 1996; Fielding & Bragg, 2003).

The **fourth criterion of a deep partnership**, then, is that evaluation and challenge are practised at all levels within and between schools.

Questions: Are evaluation and challenge well established among senior leaders in the partnership? If not, who might help to facilitate this? What action do you need to take to embed evaluation and challenge at all levels in partner schools?

In Figure 5 the four criteria are listed in order of difficulty. JPD is, relatively speaking, the least difficult to implement, and once established it helps to build up the trust and reciprocity of social capital. Collective moral purpose is more easily achieved among staff and students if JPD and high social capital are already well established. Evaluation and challenge are less likely to work well if the other three criteria are far from being met.

Figure 5: Criteria for a deep partnership (in ascending order of difficulty)

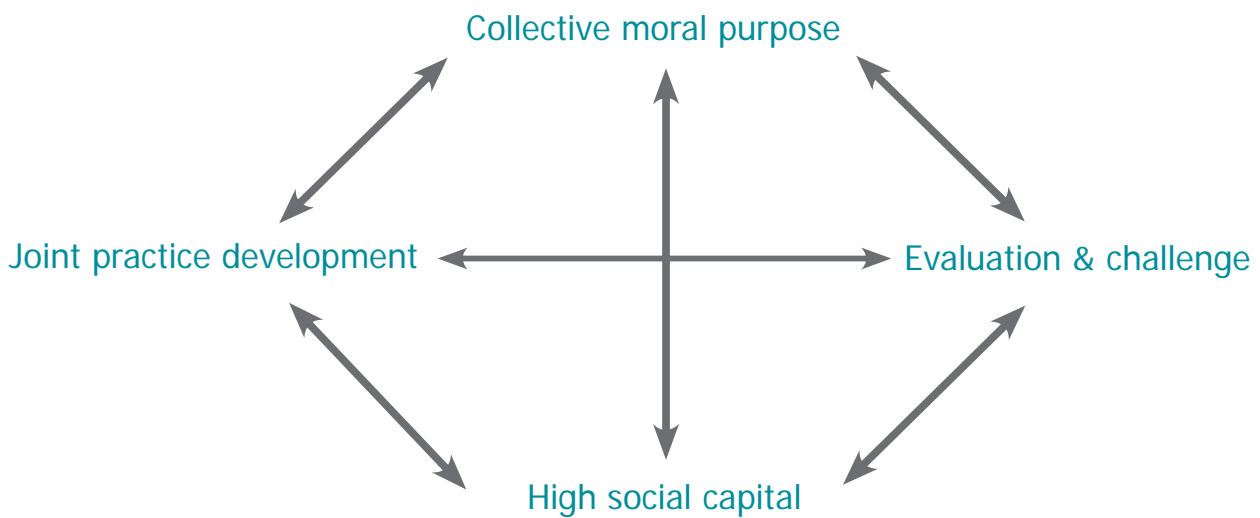
- ✓ Joint practice development is well established within and between schools in the partnership.
- ✓ Social capital is high within and between schools in the partnership.
- ✓ Collective moral purpose is a value shared and enacted by all stakeholders, including students, within the partnership.
- ✓ Evaluation and challenge are practised at every level within and between schools.

The challenge of expressing a self-improving system

At the heart of a self-improving school system – and, I hypothesise, of any self-improving system – are the interactions between the four key strands that are crucial to deep partnerships (Figure 6). Note that the arrows fly in both directions: all the interactions work reciprocally, building up the core of the maturity model. Strengthening these four simultaneously and constantly monitoring the state of each, as well as their interactions, is the task for school leaders. There are two dangers:

- The first is to focus on what at first sight looks to be the simplest, joint practice development, and expecting it to work well without the enabling support of the other three.
- The second is not recognising that the four have to be working well within each of the partner schools before the benefits of the process between partners can be fully realised.

Figure 6: Interactions between the four key strands of a deep partnership



School leaders may treat Figures 5 and 6 as a kind of aide-mémoire for reflection on the interactions of these four critical strands in the evolution of their own partnership. Do they amount to anything more than some technical language, some rebarbative jargon? What they mean in practice can indeed be expressed in more familiar, everyday language.

Take the following statements, for example:

- The staff work together to improve the quality of teaching.
- In our partnership there is a high level of trust between staff.
- We are committed to the achievement and success of pupils in all the schools in the partnership.
- We monitor the work of the partnership and challenge one another to aspire to yet higher achievements.

These statements are perfectly acceptable expressions respectively of joint practice development, high social capital, collective moral purpose and evaluation and challenge.

Yet Figures 5 and 6 do have real advantages over them. There are many ways in which the four key concepts can be expressed and no one expression fully captures or exhausts what is contained in the concepts. The first statement, for example, does not capture how JPD differs from much weaker forms of professional development; and the second statement rightly captures the importance of trust, but ignores the power of the concept of social capital, which links trust indissolubly with reciprocity. Moreover, the statements tell us nothing about the interactions between the four concepts, which we know to be crucial.

The four concepts do not, of course, replace the need for statements in everyday language: their purpose is to enrich them and to enhance the coherence of how they are linked within a persuasive narrative or educational philosophy. School leaders need both a sophisticated understanding of the complex dynamics of partnerships and at the same time a capacity to express and explain this in simpler terms to a wide variety of stakeholders.

The third dimension of the maturity model: collaborative capital

Collaborative capital is the term I use to describe a position where the partnership arrangements among a group of schools, some of which are deep whilst others are shallow but perfectly fit for purpose, are firmly established as the normal state of affairs in the system as a whole. At this point most schools are in partnerships, which are seen by stakeholders to yield multiple benefits, the most important of which is the capacity for continuous self-improvement.

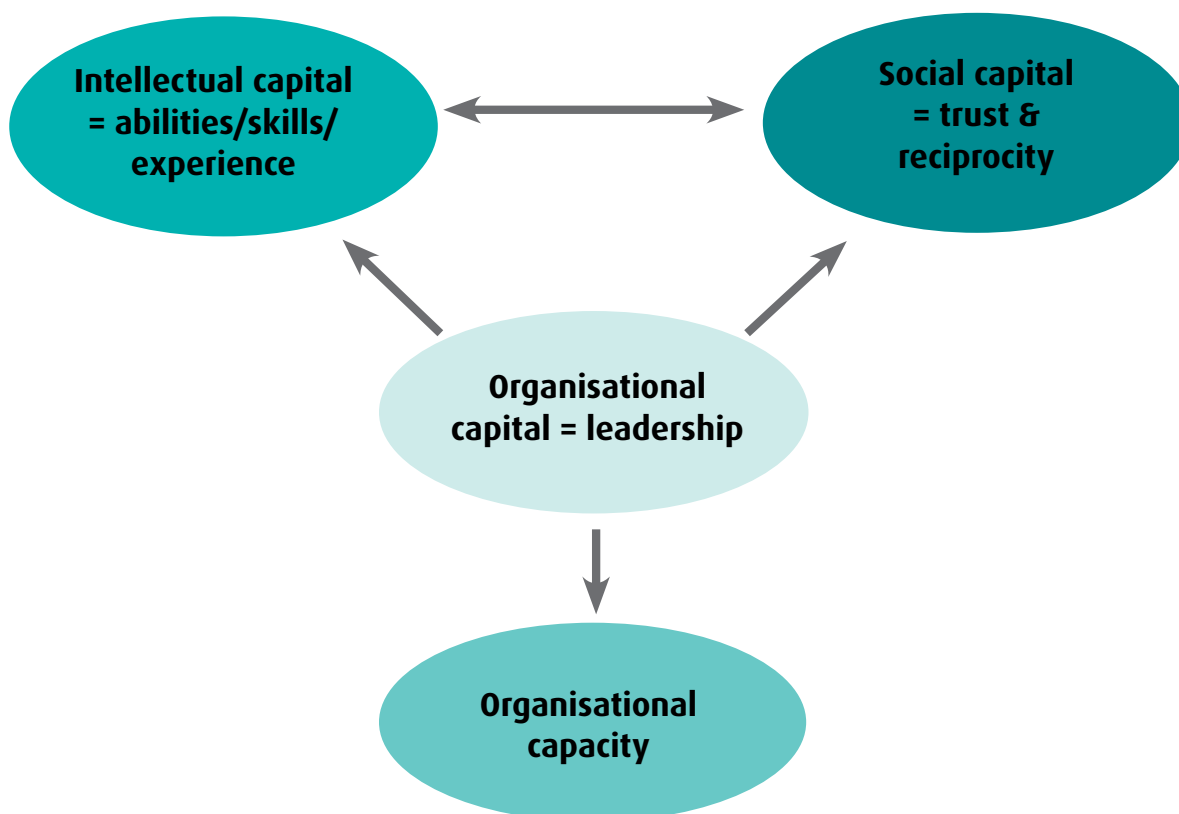
Partnerships that have reached the leading stage in the first two dimensions of the maturity model, initially a minority, now pave the way into the third dimension with its four new strands. As shown in Figure 2, collaborative capital arises out of the interactions of the strands of the first and second dimensions. Collaborative capital cannot grow independently, but only out of these roots.

In *Leading a self-improving school system* (2011) I felt it too early to suggest descriptors of the stages or levels in each of collaborative capital's four strands. In Annex 2, which contains the revised maturity model, some relevant text for the third dimension has been drafted. In two or three years' time there will be more deep partnerships on which to base a more confident statement of collaborative capital.

To explain the term collaborative capital I need to say more about the concept of capital, which hitherto in the thinkpieces has been restricted to one type, namely social capital. But there are other kinds.

Social capital provides an organisation with trust and reciprocity, and when it is high has a positive impact on the knowledge, skills and experience, the **intellectual capital**, of the members of that organisation (Figure 7). Within a school, the development of social capital, boosted by increasing levels of trust and reciprocity through joint practice development, allows the members of the school, both staff and students, to share their knowledge, skills and experience, which increases the overall level of intellectual capital. As this rises, and people improve their knowledge, skills and experience through the process of sharing, social capital is boosted further.

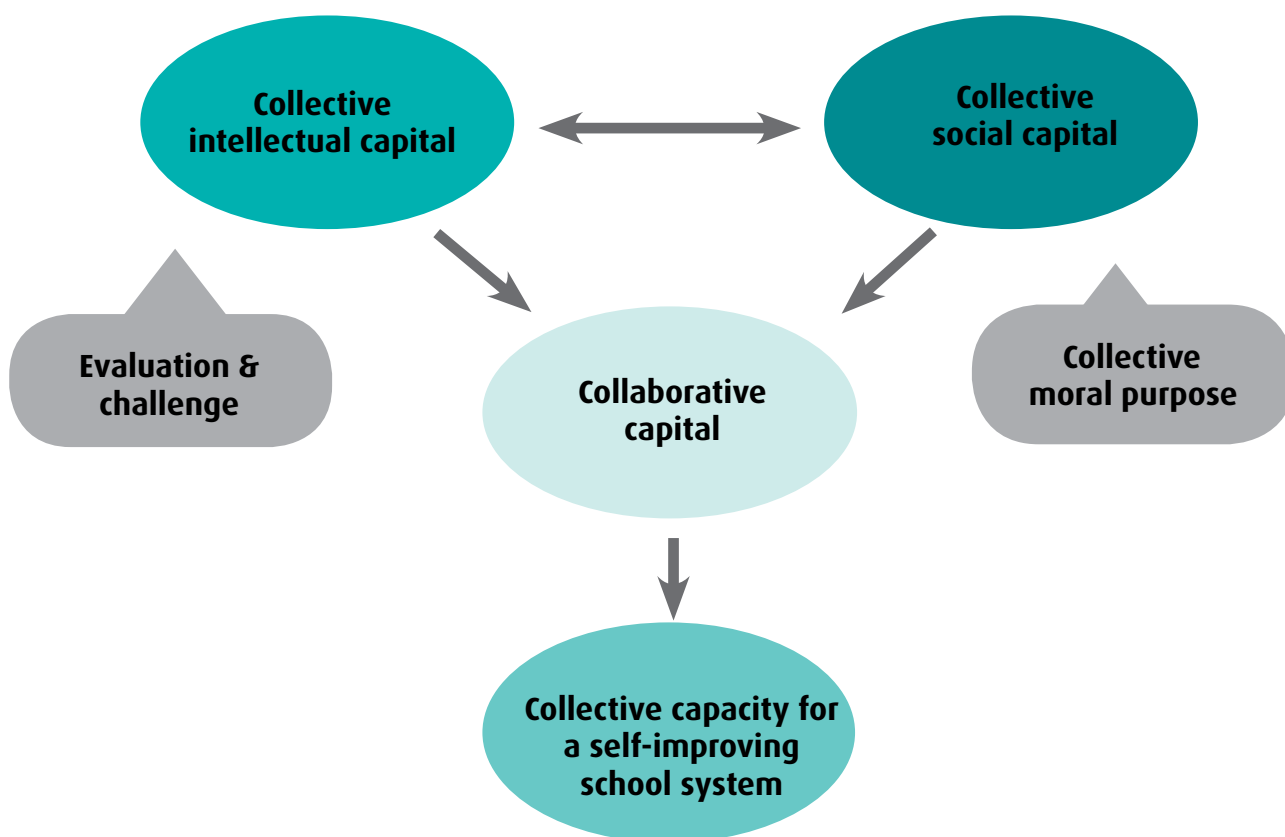
Figure 7: Developing capital within a school



None of this happens spontaneously: the process requires the intervention of school leaders. The various and often subtle abilities of leaders by which they support the mutually reinforcing interactions of social and intellectual capital, all this we can treat as **organisational capital**. Once this is mastered and deployed by school leaders, the school builds up its organisational capacity to engage in major school improvement. Organisational capital is one of greatest skills of the headteachers and senior leaders who produce rapid but sustainable improvement in their schools.

When schools working successfully on this individually then decide to embark on an inter-school partnership, the processes involved achieve a new dynamic (Figure 8). As trust increases across the partnership along with reciprocities at all levels in activities linked to JPD, there emerges a form of **collective social capital** across the schools. But it is not just a simple addition of the social capital of the schools in the partnership. Something has been added to social capital as the partners have adopted collective moral purpose, especially when this has expanded out from the schools' leaders to embrace staff, students, governors and parents. This collective moral purpose provides a huge boost to collective social capital, which in turn allows a more effective exploitation of the **collective intellectual capital**, which is also greater than the intellectual capital of each individual school.

Figure 8: Development of collaborative capital



As the partnership's overall knowledge, skills and experience are augmented and evaluation and challenge operate at the levels of staff and students, not just senior leaders, the quality of JPD rises to new levels, and becomes the powerful but disciplined innovation which drives the better practices that are essential to a self-improving school system. Thus a new form of capital is created, which can be called **collaborative capital**. This new inter-organisational property in turn enhances the **collective capacity** on which a self-improving system depends.

This exploration of collaborative capital begins with the important links between evaluation and challenge and analytic investigation, for without them educational innovation cannot, as we shall see, become properly disciplined.

Analytic investigators

At present, the number of school leaders who can engage in successful evaluation and challenge across school partnerships is small. This is natural because of the four criteria for a deep partnership, it is the most difficult to achieve, and in any event fully mature deep partnerships are themselves still relatively rare. Of course if two headteachers have qualified as Ofsted inspectors then they are more likely to move comfortably to evaluation and challenge across a partnership, but such inspectorial experience does not make evaluation and challenge any easier for the rest of the staff.

Once evaluation and challenge is established in a partnership, school leaders find it easier to become analytic investigators, that is, as described in *Leading a self-improving school system* (Hargreaves, 2011:26), people who possess the skill to make a rapid diagnosis of the strengths and weaknesses of another school and to understand the main options for overcoming the weaknesses. Evaluation and challenge within a partnership strengthens the diagnostic skills of school leaders for their own school as well as for a partner school.

All school leaders can learn to become comfortable with the process of evaluation and challenge across partnerships, but not all will be able to acquire the specific skills of the analytic investigator. In my view, as all headteachers lead not just schools but the partnerships in which their school is set, they will all need to become analytic investigators if the school system is to be truly self-improving.

The seeds of analytic investigation have already been sown, sometimes in existing deep partnerships, and sometimes in new schemes for partnerships, such as the peer review approach under development in teaching school alliances in conjunction with the National College, in Challenge Partners (www.challengepartners.org) and in By Schools For Schools in Greater Manchester (www.byschoolsforschools.co.uk).

Questions: Have all school leaders in the partnership developed the skills of analytic investigation? If not, what action needs to be taken to strengthen the enabling condition of embedded evaluation and challenge?

Disciplined innovators

It was obvious to me some years ago that various forces were putting pressure on schools to become far more innovative than had been usual in the past. Several hypotheses were suggested. The predisposition for innovation in school and classroom would increase as a response to:

- the greater the degree of school diversity and specialisation
- the greater the extent of decentralisation
- the greater the degree of parental choice of school
- the lower the level of parental satisfaction with state school provision
- the greater the assigned importance of, and provision for, ICT in school
- the greater the polarisation and social exclusion in society

Hargreaves, 1999:53

As the coalition government's school reforms begin to bite, and schools in England begin, with the government's strong encouragement, to take more responsibility for professional development and school improvement, the need for innovation to respond to the above six propositions assumes ever greater importance.

In a self-improving school system, innovation in teaching and learning has to be a feature of all schools. But given the conventional isolation of schools from one another, much traditional innovation has been too parochial and too slow to meet the expectations of rapid system improvement. Through inter-school partnerships, however, school leaders now capitalise on the more powerful interactions between collective social capital and collective intellectual capital, for this fuels the collective capacity by which schools can meet the high expectations of a fast-moving, self-improving school system.

By means of the skills of analytic investigators and the practices of evaluation and challenge, schools in partnership choose the areas on which to focus developmental work. They are no longer casual or undisciplined innovators, selecting topics unsystematically and working on them haphazardly at the whim of particular individuals and their preferences – the still widespread incontinence (‘letting a thousand flowers bloom’), which ignores the fact that so many of them rapidly wither. Rather they have become practitioners who know how to meet the following four criteria of disciplined innovation.

1. Building from acknowledged failure is the first criterion of disciplined innovation.

The topics for innovation arise out of orderly and regular scrutiny of what needs attention. A successful surgeon, claims Atul Gawande (2007), needs ingenuity, by which he means a willingness to recognise failure, and then a determination to seek a solution rather than to paper over the cracks. The reflection on failure has to be deliberate, even obsessive, if it is to fuel the ingenuity that leads to solving the problem. The same applies to teacher innovators: it is the close attention to what is not working that gives birth to innovative practice through the persistent search for a solution. As the great innovator Thomas Edison put it:

Discontent is the first necessity of progress

or in different words:

I have not failed: I have just found ten thousand ways that won't work

or most memorably of all:

You must learn to fail intelligently. Failing is one of the greatest arts in the world. One fails forward towards success.

In short, disciplined innovation requires a powerful **diagnostic system** for what needs to be developed, which is provided by the skills and processes of analytic investigations and evaluation and challenge, as well as an **innovation system** by which people develop the solutions to what is acknowledged to be not working well enough. As is so often said in the business world, fail faster to succeed sooner.

Question: How good are your staff at scrutinising failure, not to assign blame or to depress motivation, but as the impetus to explore the potential for innovative solutions?

2. Embedded joint practice development across schools is the second criterion of disciplined innovation.

One of the most significant features of joint practice development is that it is *inherently* innovative. Michael Huberman (1992) captures this well:

Essentially, teachers are artisans working primarily alone, with a variety of new and cobbled-together materials, in a personally designed work environment. They gradually develop a repertoire of instructional skills and strategies, corresponding to a progressively denser, more differentiated and well-integrated set of mental schemata; they come to read the instructional situation better and faster, and to respond to it with a greater variety of tools. They develop this repertoire through a somewhat haphazard process of trial and error, usually when one or another segment of the repertoire does not work repeatedly. Somewhere in that cycle they may reach out to peers or even to professional trainers, but they will typically transform those inputs into a more private, personally congenial form. When things go well, when the routines work smoothly and pupils are attentive and productive, there is a rush of craft pride...

Huberman, 1992:136

There is sometimes a debate among educationists about whether teaching is a science or an art. I believe it is better seen as a craft, one that selectively draws from time to time on both science and art. Craftsmen, as Richard Sennett (2008) has pointed out, are committed to doing good work in a continuing search for excellence, and to that end seek the best tools for the job. In this approach teachers are craftsmen and the classroom becomes a professional workshop, in which they work together, and often with students too, as co-constructors of better teaching and learning.

The capacity of students to be co-innovators with teachers for improved teaching and learning is enormous and most notably in the application of the new technologies. The debate about the value of these technologies for educational improvement is still far from resolved, with both passionate proponents (eg Chen, 2010) and sceptical critics (eg Oppenheimer, 2003; Turkle, 2011). The fact remains many students are digital natives whereas so few teachers are and the gap between the two is getting wider rather than closing. Schools often fail to capitalise on students' evident expertise with the new technologies. In best practice, staff invite students to act as the innovators of more effective educational use of these technologies and then to advise staff on what changes need to be made in school. Students become the lead innovators, working with teachers to co-construct better teaching and learning (Box 5). The illustration from Skipton High School exemplifies an important point first made by Eric von Hippel (2005:45), the leading authority on consumers as innovators, that users can be surprisingly innovative precisely because they value the process of innovation as much as its outcomes. In the business world customers and clients can become co-innovators when they meet three criteria:

1. They are passionate about something they are trying to accomplish.
2. They have a deep understanding of their situation and its constraints.
3. They have a clear vision of an ideal outcome – what it would be and how they would feel having achieved it.

Seybold, 2006:8

Many students in many schools meet these criteria of readiness to be co-innovators with the staff. Schools that have already invested in student voice will have established such processes and so find the move to students as co-innovators a relatively easy one. Holding out the promise of co-innovation to students is a powerful way of engaging them in their learning.

If we want people's intelligence and support, we must welcome them as co-creators. People only support what they create (Wheatley, 2002:17).

This same spirit of **togetherness** inspires Richard Sennett, when he describes the collective activities of craft workshops. Improvisation is central to the work of craftsmen and to that of teachers too. These constant little improvisations, by which teachers modify their lesson plans to ensure success, are taken for granted as a natural part of the job. Sennett's point (2012:114) is that in workshop settings these small repairs sometimes have larger consequences and enlarge from incremental innovations (which improve what is) to more radical innovations (which define what could be). At whole-school level these amount to significant reconfigurations, such as replacing horizontal pastoral groups with vertical tutoring, reconstructing the school year, or, most importantly, making the transition from standalone schools to integrated inter-school partnerships.

Inventive teachers devise many new practices and so become Huberman's tinkerers, transforming classrooms into Sennett's workshops. This is also happens in hospitals where such innovation often precedes formal research:

In obstetrics... if a new strategy seemed worth trying, doctors did not wait for research trials to tell them if it was all right. They just went ahead and tried it, then looked to see if results improved. Obstetrics went about improving the same way Toyota and General Electric went about improving on the fly, but always paying attention to the results and trying to better them. And that approach worked. Whether all the adjustments and innovation of the obstetrics package are necessary and beneficial may remain unclear... but the package as a whole has made child delivery demonstrably safer and it has done so despite the increasing age, obesity and consequent health problems of pregnant mothers.

Gawande, 2007:189

Box 5: Co-constructing learning through the new technologies

Skipton Girls' High School

Co-construction means teachers and students work together to develop teaching and learning through course design, materials and route maps, with a corresponding shift in the balance of ownership and authority. Using new technologies as a tool and co-construction as a process has produced a powerful catalyst for a fundamental change to teaching and learning.

Twilight CPD sessions on a Monday afternoon are often shared by staff and students, with up to 50 students joining their teachers in teaching and learning innovation groups to develop materials and ideas, and plan their individual and cross-curricular learning for the weeks ahead. Course design is a shared and jointly owned activity.

In all this, the relationships and the collaboration are more important than the technologies.

“Students with a stake in their education will contribute to its improvement. Co-construction benefits everyone – leading to more amicable classroom environments, to skill sets we will carry for life, a practical solution for both teachers and students.”

Year 11 student

Key factors in creating this environment included a vision for learning that devolves leadership of learning to the core of the institution, and students' concurrent shaping and development of a culture that aligns with the vision:

“I have often heard people talk about how engaging technology is for teenagers, but they're missing the point. It's not the actual technology that's engaging, but its use to create something valued by ourselves. In my view the overriding outcome of our co-construction process has been the transition of students to become the driving force for change rather than being the passive recipients of it.”

Year 11 student

The English faculty found the process revolutionary, and not without some initial discomfort:

“Our carefully organised lesson-by-lesson course they found inhibiting and would be much better constructed by topic so that the students had the freedom to work at their own pace. Our electronic documents took ages to open and save and would have been much better as webpages providing instant access. Our glossaries for reference would be much better as podcasts. We clearly had a lot to learn – and so began our exciting collaboration with Year 10 students.

Their commitment was unswerving and by the end of the project they were emailing us with action plans and timescales. Why had we spent so long second-guessing what would appeal to students when we could have asked them at the start and received such mature, considered and dynamic contributions?

This has opened the door for conversations that let us consult about a much wider range of issues. Empowering students and harnessing their creativity helps us move forward with confidence, at their pace, in a 21st-century learning environment.”

Box 5 continued

Wallington County Grammar School, Surrey

We believe that technology is a powerful tool that can be used to enhance the quality of learning experiences for students most effectively when it is used in a subject-specific context. Instead of being an insular academic discipline, the use of technology and computers permeates the world of work and so should do much the same across the school curriculum. We realise that the majority of teachers in secondary schools are not digital natives, who are in the main the students themselves. So we use those students with strong digital skills to teach others, which includes working with their teachers to create technology-focused lessons. This means pulling down the barriers between those who are conventionally the teachers and those who are identified as learners. Our digital leaders are a group of 30 students who not only lead on the use of the new technologies in self-managed clubs and societies, but also plan and run CPD opportunities for staff once a week after school. The digital leaders help plan learning activities with staff, co-constructing activities and even stepping in to support staff who want to increase the use of technology in their lessons with confidence, or even develop their own resources. Through such co-construction and putting the right people in the teacher's seat, the school is building an army of staff and students who will become ever more digitally literate.

In the happiest of analogies, innovative teachers work in much the same way as these obstetricians.

A model of professional development has to be grafted onto this natural tinkering: school improvement led by teachers has to be grounded in its inherent links to professional development. A common continuing professional development (CPD) model of recent years in England, namely the identification of research-based practices by the government followed by its dissemination to teachers at the hands of advisers and consultants, may have had some success, however limited, but it risks stultifying the Huberman-Sennett-Gawande approaches and thereby the potential of teachers to furnish the next generation of innovation. It is these approaches that need to be embedded in inter-school partnerships if professional development and school improvement are to become mainly school-based.

Remember, however, that a lively innovation culture can generate too many good ideas (the easy bit) but leave too little time and energy to develop and test them properly (the difficult bit). One task for leaders is to spot the ones that seem full of promise and are worth developing and then kill off the also-rans. Disciplined innovation means being hard enough to avoid chasing too many hares.

Questions: Is innovation grounded in teachers' natural tinkering that becomes formalised into joint practice development within and across schools? Does this turn classrooms into workshops where both staff and students become co-innovators of better teaching and learning? Do you know how to nurture the best ideas and prune the others?

3. Segmenting innovation is the third criterion of disciplined innovation.

Much educational innovation has hitherto been confined either to the individual working alone or to the individual school working in isolation. There are three disadvantages.

- Most innovation is inevitably minor, even trivial and never gets beyond the classroom of the innovator. In this respect an astonishing amount of interesting innovation remains private and never sees the light of day.
- Even when the innovation is shared more widely within a school, it tends to be restricted to one section of the staff, such as a subject department or some kind of team or informal group.
- This reliance on in-school innovation prevents exposure to what might be much better ideas in other schools. In the terms made famous by Henry Chesbrough (2003), the innovation system is closed when it needs to be open; that is, people must look for bright ideas outside their own organisation.

These disadvantages are overcome when innovation is rooted in an inter-school partnership, where the number of staff (and, of course, students) is sufficiently large for them to embark on an ambitious programme of innovation.

This is best accomplished if the innovation is **modularised**, that is, broken into subsidiary parts that can be pursued independently but then subsequently assembled into a coherent whole. An example is two schools that sought to use JPD-based innovation to implement assessment for learning, which is an innovation that is readily modularised into separate components, such as questioning techniques, student self-assessment, devising mark schemes and assessment criteria, use of techniques such as ‘no hands up,’ and so on. Departments paired across the two secondary schools developed the different modules, and the outcomes were later shared across other departments, with supportive mentoring and coaching from the original innovators. Note the built-in reciprocity: every department was both innovator-and-coach and learner-and-coachee.

Many innovations are essentially **combinatorial**, that is, two ideas or practices that originally were separate are combined in a novel way or moved to a novel context to produce a significant innovation. This is more likely to happen when teachers of different subjects, ages and experience are mixed in innovation teams: heterogeneous networks are more innovative than homogeneous ones. Partner schools often have different routines that they take for granted and mistakenly assume are commonplace. An inter-school partnership opens up possibilities of new combinations or new variants of such practices through JPD. Innovation networks across partner schools can share what they regard as their best innovations so that something much bigger and more complex, but hitherto unconsidered by either school alone, gets generated out of the integration. It is out of such novel combinations that major innovations – what are usually called **disruptive innovations** that introduce fundamental changes to accepted practice – are often born.

Steven Johnson (2012) points out that close to any practice are many possible new variants, what he calls the **adjacent possible**. The richer the mix of people engaged in JPD, the greater the number of potential adjacent possibles and the greater the likelihood that one of them will open the door to a significant innovation – provided, of course, that a culture of innovation encourages participants to explore the adjacent possibles that spring from any cross-fertilisation of ideas and practices. This is most likely to happen when teachers (or students) adopt a playful attitude in tinkering with their practices. As Ilkka Tuomi puts it:

Innovation is also driven by playful tinkering with the limits of possibility, in a process where new possibilities and new spaces for... practice are created. Sometimes, in other words, we do it just for fun.

Tuomi, 2002:26

It is widely acknowledged that Western nations need more innovative people and better innovation strategies, people to leave the education system with a capacity to be innovative in whatever occupation they choose (Kao, 2008). A good way to ensure that young people acquire a real grounding in innovativeness is, I believe, to bring them up in a culture of innovation during their school years, especially when they are active in innovation in teaching and learning, rather than merely learning about creativity.

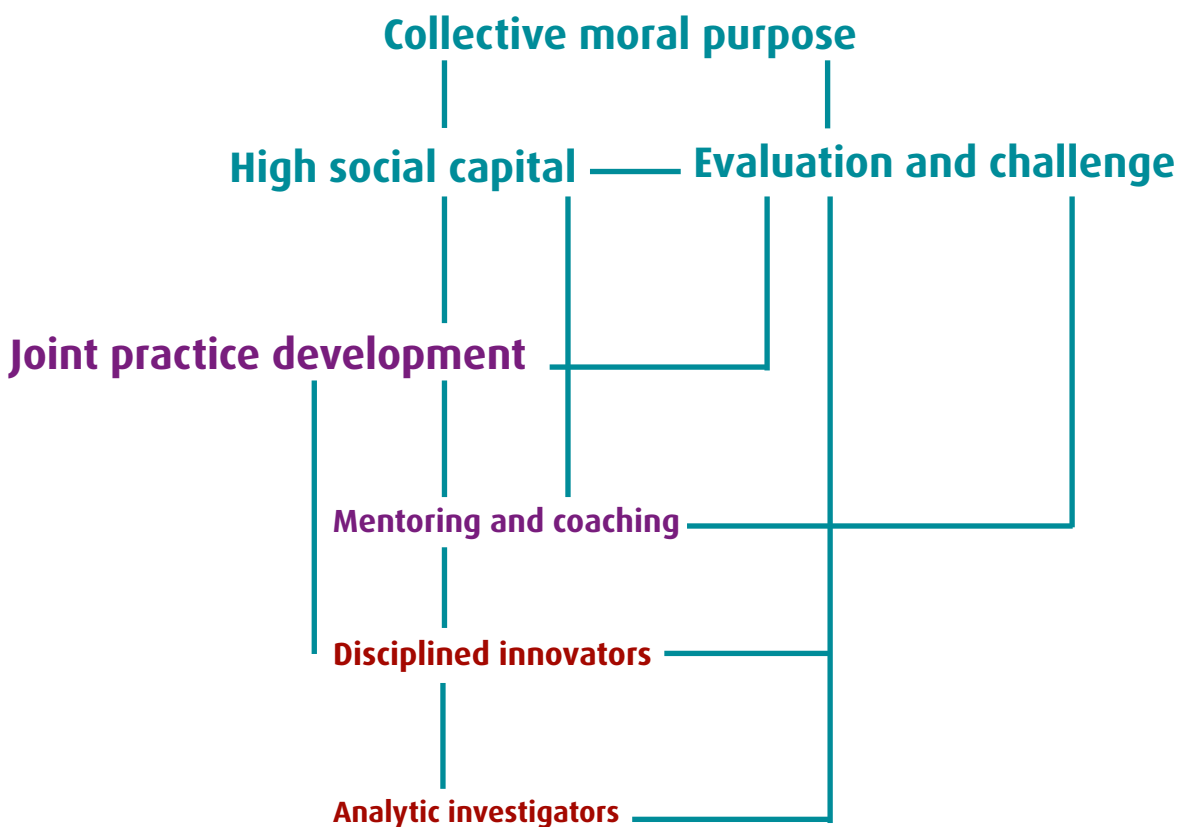
Questions: How ambitious is your programme of innovation? How successful have you been at modularising JPD-based innovation projects across schools? Have you created within the partnership a culture of innovation for both staff and students?

4. Devising an effective dissemination system is the fourth criterion of disciplined innovation.

Much school-led innovation fails to prosper because it lacks a distribution system in which people are motivated to share, as both givers and receivers of innovation. Existing self-improving systems, such as the open-source movement and the development of Linux, have this built-in dissemination system based on reciprocity and free sharing for the greater good of the community as a whole. This is what lies behind the spectacular growth of the new technologies over the last decade or so, and it has been well described in an accessible literature that carries many lessons for a self-improving school system (Raymond, 1999; Castells, 2001; Tuomi, 2002; Lacy, 2008).

JPD across schools, provided that it is linked to evaluation and challenge, high social capital and collective moral purpose, has a similar built-in dissemination system with the necessary motives for sharing (Figure 9). In these conditions, innovations can easily and rapidly migrate from person to person and from school to school, which simply does not occur in conventional school systems. It becomes more likely that teachers will readily accept Richard Elmore's (2008) proposal that their knowledge and skill should not be treated as private property but as a collective good that is freely shared by all.

Figure 9: Drivers of disciplined innovation



- partnership dimension
- professional development dimension
- collaborative capital dimension

Collaborative capital will be hard to achieve. 'Modern capitalism', writes Sennett (2012:129), 'has unbalanced competition and cooperation, and so made cooperation itself less open, less dialogic.' For inter-school partnerships to reach the stage of collaborative capital they must set themselves the self-conscious task of restoring that balance. Once the later stage of collaborative capital has been reached, the huge innovative potential of JPD can be more fully realised. Some of what began as small-scale incremental innovations expand into radical system reconfigurations, as mature innovation networks develop the confidence to share the costs and risks that radical innovation usually entails (Leifer et al, 2000). The construction of a self-improving system from below requires innovation of this exceptionally disciplined kind.

Questions: How successful are you at distributing innovation across the partnership? Does your approach to innovation meet all four criteria of disciplined innovation, and if not, what remedial action is needed in relation to each criterion?

At this stage, when many partnerships have achieved sufficient maturity, innovation becomes a system property, which is a necessary step for the school system to be truly self-improving.

If you take innovation seriously... it touches every aspect of how business is done. It's about leadership, organisational structure, knowledge management, corporate purpose and values, norms regarding collaboration, and strategy processes. The purpose of an innovation system is to embrace these different agendas and align them, building the linkages and frameworks that embed innovation... [It] touches everything.

Kao, 2002:278

Innovation has to build on and be aligned with many of the earlier strands in the maturity model if it is to be disciplined enough to become a system property.

Questions: Does your partnership have a lead person or head of innovation among senior leaders? If not, how is innovation monitored and supported?

Creative entrepreneurs

If JPD works well and improves the quality of learning and teaching, then the schools have to hand significant innovations that are worth passing to other schools. The fruits of disciplined innovators now need entrepreneurs, who have a different but complementary set of skills to make innovations available outside the immediate partnership and, where appropriate, to commercialise them. Sometimes one person can combine the roles of innovator and entrepreneur – think James Dyson – but often they are different people. Teachers are a generous profession and an astonishing amount of their innovation is given away free. Sometimes, however, there will be considerable costs for the innovators, such as the costs of:

- creating the innovation, including the innovators' time if they need to be brought out of normal teaching duties, as well as materials
- preparing materials in a form that is appropriate for a potential market
- supporting such customers, such as mentoring and coaching, which is desirable to ensure an effective transfer of a new practice

Charges for access to the innovation are perfectly reasonable. In many partnerships the lead person on the entrepreneurial aspects will be a business manager, and selling the innovations will help to offset the costs of appointing a business manager, especially where this role is shared among, say, a primary school cluster.

Teaching schools are encouraged to sell CPD in the new markets that spring up as many local authorities cease offering such services. Entrepreneurial action by schools and groups of teachers is very much in line with government policy that schools should take the lead in professional development. There is a danger here, of course, that the teaching schools adopt the older model of making CPD a simple one-day course,

with presentations from the school to a relatively passive audience, rather than the JPD-type models described above, supported by follow-up mentoring and coaching. If CPD were to be charged within a partnership, rather than to those outside it, this could compromise the reciprocity that is so crucial to the partnership's social capital.

Over the next few years many new non-profit organisations offering CPD and materials for use in inter-school partnerships will arise to complement existing provision by higher education institutions, local authorities and the existing commercial market. Here is an example of fierce competition that should drive up the quality of professional development.

Schools play an important role in teaching young people about entrepreneurship, but because of the new technologies young people can become entrepreneurs with minimal help from adults, since as Rob Salkowitz (2010: 40) points out, traditional barriers are weakening.

- Through the internet the young have independent and easy access to the global repository of business advice and best practice.
- Using social networks to make connections is for most young people already a mastered skill.
- By using the internet, a new business can succeed with little initial capital.

There are now opportunities for young people to form networks and co-operatives devoted to social innovation (Murray, 2012). Perhaps, especially when recruited by teachers as co-innovators, they can become a powerful entrepreneurial wing of school partnerships:

For the generation that grew up alongside the Internet, this networked mode of organising is the default, as opposed to the central command-and-control style that predominated in years past. As consumers, citizens and entrepreneurs, they exploit the possibilities of these platforms by creating self-organised communities to reduce costs, deliver critical information, develop open source software solutions, share business practices, and build bridges across geographic and social divides.

Salkowitz, 2010:68

Schools that have reached the leading stage or level in the disciplined innovation strand of the maturity model could offer other schools not only their innovations but also lessons in the art and craft of developing the innovativeness and entrepreneurialism that is inherent in the collaborative capital dimension for both staff and students.

Questions: Who are the entrepreneurs in your innovation system? What role does your business manager play here?

Alliance architects

What more needs to be said? If a cluster of schools in partnership can reach the leading stage in each of the above 11 strands of the maturity model, then they have built a highly successful alliance, with the capacity to help other schools to a similar achievement. They have become the successful alliance architects of the 12th strand.

Thus collaborative capital starts with a small group of schools in deep partnership, expands to the much larger group – an alliance, federation, trust, chain, local authority, etc – and from there potentially to a whole region and nation. At present many inter-school partnerships are based in a relatively small cluster of schools and I find that in many local authorities a form of tribalism is emerging, as these clusters become parts of larger groups, in the form of chains, teaching school alliances, faith schools within a diocese, and so on. In some local authorities there is among many headteachers a search for some form of what I might call collective tribalism. The fact of tribalism is accepted, but there is also a yearning for something above the tribes, a deep desire for the tribes to come together with a sense of place, often a town or a district in a

large local authority, in order to connect with a range of local social and children's services. It remains to be seen what new structures will emerge in the light of weakening local authorities and the rise of tribalism (Hill, 2012; Parish, Baxter & Sandals, 2012).

If school leaders are the people who will ultimately drive the system to the level of collaborative capital, they will need a narrative that captures the why and the how of a self-improving system. They need, in short, a theory of the case. Surprisingly, the leaders of highly effective school systems are often unsure about such matters:

During our interviews, the leaders of improving school systems all agreed that creating improvement required discipline and constant forward momentum. However, even amongst this august group, few were certain about why they had been successful: they often did not have a 'theory of the case' about why what they did worked. Even fewer had a mental map of how all the changes they made fit together as a coherent whole. Some even thought they had just been lucky.

Mourshed, Chijoke & Barber, 2010:7

Headteachers have always had a narrative about what they do with their schools. They need it as a sales pitch to attract parental choice, as a means of accountability, and as a way of celebrating the school's achievements. Hitherto such a narrative has been largely confined to the story of the individual school, not schools in partnership. A self-improving system based on inter-school partnership requires an extended narrative to explain and justify the partnership.

This new narrative must inevitably focus primarily on collective moral purpose, the shared commitment to the achievement and success of all the students in the partnership, with a supportive narrative about how high social capital, joint practice development and evaluation and challenge – though expressed more simply – play their roles in realising the vision of collective moral purpose. The new narrative will also need to incorporate:

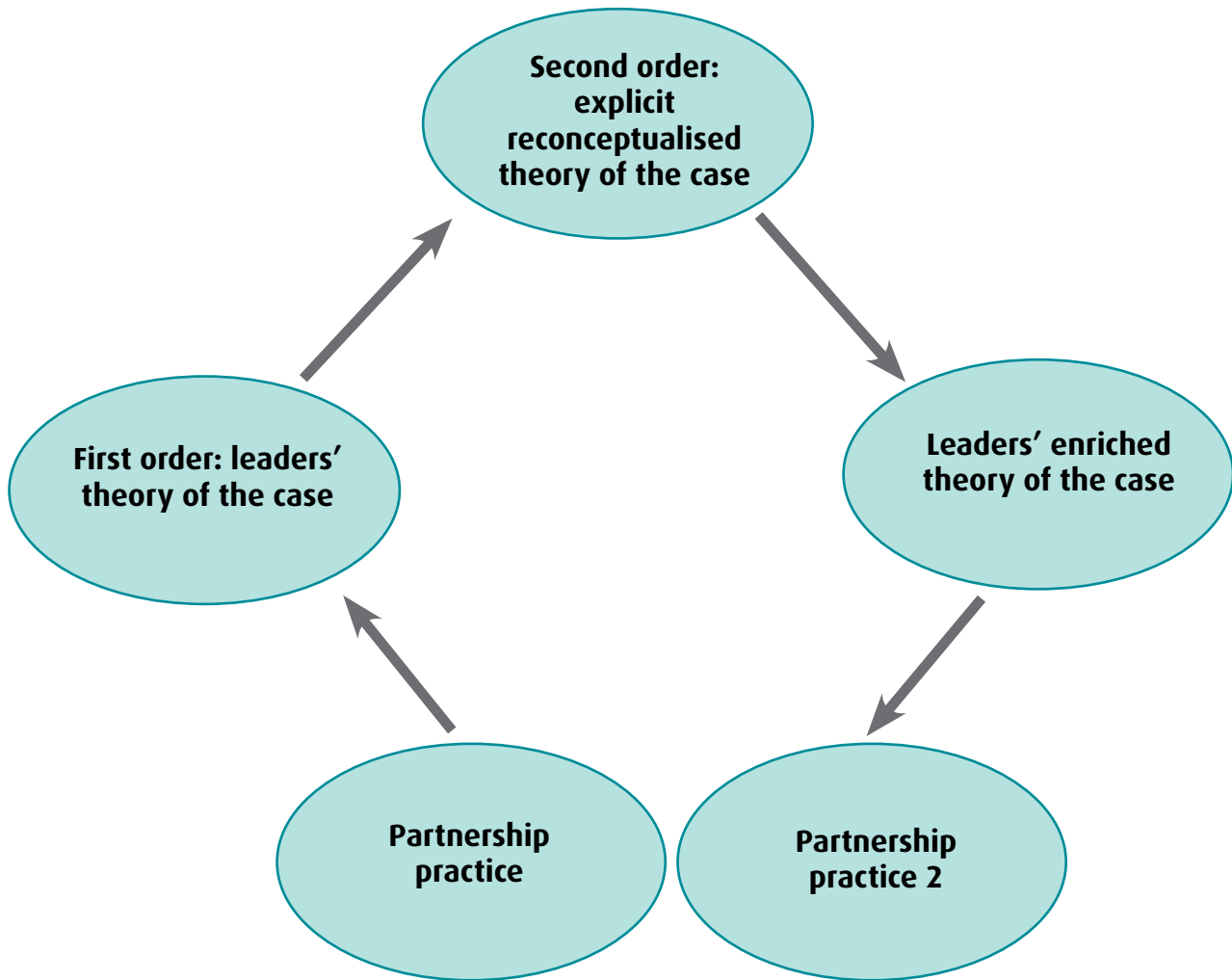
- **collective reporting**, to tell the story of the partnership and the benefits it brings
- **collective accountability**, to report on the responsibilities and achievements of the partnership
- **collective celebrating**, to honour those who have contributed to the partnership's collective outcomes

This new narrative is, in my view, more important for headteachers than it is for politicians and policymakers, because school leaders have to inspire and inform their staff, their governing bodies, and their students and their parents. Achieving a self-improving school system entails a radical shift in our notion of a school system, and school leaders will constantly have to persuade and explain what is happening and why. Politicians, of course, also need a new narrative about accountability and the role of Ofsted. In the new narrative, as Christine Gilbert (2012) has so eloquently argued, accountability is extended to embrace the partnership, without undermining that of the individual school. At the same time, Ofsted has a critical role to play in strengthening a self-supporting and self-improving system and this needs a new explanatory narrative from ministers and from HM chief inspector.

Collaborative capital, the state when the partnerships that are the building blocks of a self-improving system become mature, is an ambitious goal, but my judgement is that we could move towards it at a much faster pace than I imagined two years ago. This must, however, be accompanied by an increasingly compelling and coherent narrative from school leaders about partnerships and how they create a self-improving school system.

The process of the four thinkpieces is illustrated in Figure 10. I started with what school leaders were already doing about partnerships and how this experience might be the basis for a self-improving system. These leaders had a narrative – a theory of the case – but much of the theory was implicit, rather than explicit. I sought to turn these first-order theories into a more explicit form by conceptualising them in a different, more economical and more thought-provoking second-order theory of the case. As this was fed back to school leaders through the thinkpieces and workshops, this influenced their theories of the case and they altered some of their practice accordingly. This cycle (though not these thinkpieces) should continue for some time, as the theory of the case becomes more refined, more persuasive and more widely shared. This is the challenge for the school leaders who are passionate to create a self-improving school system in England.

Figure 10: Practice to theory to practice cycle



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References

- Axelrod, R, 1984, *The Evolution of Cooperation*, New York, Basic Books
- Axelrod, R, 1997, *The Complexity of Cooperation: agent-based models of competition and collaboration*, Princeton NJ, Princeton University Press
- Bowles, S & Gintis, H, 2011, *A Cooperative Species: human reciprocity and its evolution*, Princeton NJ, Princeton University Press
- Castells, M, 2001, *The Internet Galaxy: reflections on the internet, business and society*, Oxford, Oxford University Press
- Chen, M, 2010, *Education Nation: six leading edges of innovation in our schools*, San Francisco, Jossey-Bass
- Chesbrough, H, 2003, *Open Innovation*, Boston, Harvard Business School Press
- Covey, S, 2006, *The Speed of Trust: the one thing that changes everything*, London, Simon & Schuster
- Elmore, R, 2008, Leadership as the practice of improvement. In B Pont, D Nusche & D Hopkins (eds), *Improving School Leadership, 2*, Paris, Organisation for Economic Cooperation and Development
- Fielding, M & Bragg, S, 2003, *Students as Researchers*, Cambridge, Pearson Publishing
- Gawande, A, 2007, *Better: a surgeon's note on performance*, London, Profile, Book
- Gilbert, C, 2012, *Towards a self-improving system: the role of school accountability*, Nottingham, National College for School Leadership
- Hardin, R, 2002, *Trust and Trustworthiness*, New York, Russell Sage Foundation
- Hargreaves, D H, 1999, Schools of the future: the key role of innovation. In D Istanc, (ed), *Innovating Schools*, Paris, Organisation for Economic Cooperation and Development
- Hargreaves, D H, 2010, *Creating a self-improving school system*, Nottingham, National College for School Leadership
- Hargreaves, D H, 2011, *Leading a self-improving school system*, Nottingham, National College for School Leadership
- Hargreaves, D H, 2012, *A self-improving school system in international context*, Nottingham, National College for School Leadership
- Hill, R, 2011, *The importance of teaching and the role of system leadership*, Nottingham, National College for School Leadership
- Hill, R, 2012, *The Missing Middle: the case for school commissioners*, London, Royal Society of Art
- Hippel, E von, 2005, *Democratizing Innovation*, Cambridge, Mass, Massachusetts Institute of Technology (MIT) Press
- HM Government, 2010, *The Importance of Teaching: The Schools White Paper 2010*, CM7980, Norwich, The Stationery Office
- Huberman, M, 1992, Teacher development and instructional mastery. In A Hargreaves & M Fullan (eds), *Understanding Teacher Development*, London, Cassell & Teachers College Press, 122-42
- Johnson, S, 2010, *Where Good Ideas Come From: the natural history of innovation*, London, Allen Lane

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- Kao, J, 2002, Reinventing innovation: a perspective from the idea factory. In F Hesselbain, M Goldsmith & I Somerville (eds), *Leading for Innovation*, San Francisco, Jossey-Bass, 273-84
- Kao, J, 2008, *Innovation Nation*, New York, Free Press
- Kropotkin, P, 1902, *Mutual Aid: a factor in evolution*, New York, Dover Publications
- Lacy, S, 2008, *Once You're Lucky, Twice You're Good: the rebirth of Silicon Valley and the rise of web 2.0*, New York, Gotham Books
- Leifer, R, McDermott, C, O'Connor, G, Peters, L, Rice, M & Veryzer, R, 2000, *Radical Innovation*, Boston, Harvard Business School Press
- McEvily, B & Zaheer, A, 2004, Architects of trust: the role of network facilitators in geographical clusters. In R M Kramer & K S Cook (eds), *Trust and Distrust in Organizations*, New York, Russell Sage Foundation
- Mourshed, M, Chijoke, C & Barber, M, 2010, *How the world most improved school systems keep getting better*, London, McKinsey & Company
- Murray, R, 2012, *The New Wave of Mutuality*, London, Policy Network
- Nørretranders, T, 2002, *The Generous Man: how helping others is the sexiest thing you can do*, New York, Thunder's Mouth Press
- Oppenheimer, T, 2003, *The Flickering Mind: the false promise of technology in the classroom and how learning can be saved*, New York, Random House
- Pagel, M, 2012, *Wired for Culture: the natural history of human cooperation*, London, Allen Lane
- Parish, N, Baxter, A & Sandals, L, 2012, *Action research into the evolving role of the local authority*, London, Department for Education
- Pinker, S, 2011, *The Better Angels of our Nature: the decline of violence in history and its causes*, London, Allen Lane
- Raymond, E, 1999, *The Cathedral & the Bazaar: musings on Linux and open source by an accidental revolutionary*, Sebastopol, CA, O'Reilly
- Ridley, M, 1996, *The Origins of Virtue*, London, Viking
- Rudduck, J, Chaplain, R & Wallace, G, 1996, *School Improvement: what can students tell us?* London, Fulton
- Salkowitz, R, 2010, *Young World Rising: how youth, technology and entrepreneurship are changing the world from the bottom up*, New Jersey, Wiley
- Seybold, P, 2006, *Outside Innovation: how customers will co-design your company's future*, New York, Collins
- Sennett, R, 2008, *The Craftsman*, London, Penguin Books
- Sennett, R, 2012, *Together: the rituals, pleasures and politics of cooperation*, London, Allen Lane
- Solomon, R C & Flores, F, 2001, *Building Trust: in business, politics, relationships and life*, Oxford, Oxford University Press
- Tuomi, I, 2002, *Networks of Innovation: change and meaning in the age of the internet*, Oxford, Oxford University Press
- Turkle, S, 2011, *Alone Together: why we expect more from technology and less from each other*, New York, Basic Books
- Wheatley, M, 2002, We are all innovators. In F Hesselbain, M Goldsmith, & I Somerville (eds), *Leading for Innovation*, San Francisco, Jossey-Bass, 11-22
- Wright, R, 2000, *Nonzero: history, evolution and human cooperation*, London, Abacus

Annex 1: Examples of trust audits

Note: These audits are merely suggestions. Each item focuses on one particular aspect of trust. The audits should be adjusted for content and style and made appropriate to their context of use. New audits, eg staff trust in governors or parental trust in staff, are easily devised.

How much trust do staff have in the head/senior leadership team?

The head has the support of most of the staff.

Agree strongly Agree Disagree Disagree strongly

The head is doing a first-class job in leading the school.

Agree strongly Agree Disagree Disagree strongly

The head is generally honest and open with the staff.

Agree strongly Agree Disagree Disagree strongly

I feel I can rely on the head to make the right decisions for the school.

Agree strongly Agree Disagree Disagree strongly

If I had a serious professional problem, I could discuss it with the head.

Agree strongly Agree Disagree Disagree strongly

The head takes a personal interest in me and my welfare.

Agree strongly Agree Disagree Disagree strongly

The head knows how to develop the staff and help them improve professionally.

Agree strongly Agree Disagree Disagree strongly

I respect the head.

Agree strongly Agree Disagree Disagree strongly

The head consults the staff on key policy issues.

Agree strongly Agree Disagree Disagree strongly

The head is a person of integrity.

Agree strongly Agree Disagree Disagree strongly

How much trust do staff have in one another?

The staff here are like a family and we value and support one another.

Agree strongly Agree Disagree Disagree strongly

There is very little backbiting or plotting among staff.

Agree strongly Agree Disagree Disagree strongly

Hardly anyone here would care if I left tomorrow.

Agree strongly Agree Disagree Disagree strongly

I feel I can rely on my colleagues for their professionalism.

Agree strongly Agree Disagree Disagree strongly

If I have a professional problem, there is someone on the staff I can turn to for help or advice.

Agree strongly Agree Disagree Disagree strongly

If I have a personal problem, there is a colleague that I can turn to in confidence.

Agree strongly Agree Disagree Disagree strongly

Colleagues almost never follow through with their promises and commitments.

Agree strongly Agree Disagree Disagree strongly

When we discuss things, I feel I can usually give my own honest opinion.

Agree strongly Agree Disagree Disagree strongly

Colleagues here typically look out for one another.

Agree strongly Agree Disagree Disagree strongly

Staff here respect one another.

Agree strongly Agree Disagree Disagree strongly

How much trust do pupils/students have in staff?

My teachers want me to do well and be successful in school.

Yes, this is true No, this is not true I am not sure about this

When I have a personal problem, there's a teacher I can talk to in confidence.

Yes, this is true No, this is not true I am not sure about this

When a teacher tells me my work is poor, I know it's honest feedback to help me, not just getting at me.

Yes, this is true No, this is not true I am not sure about this

My teachers believe that I can do well at school if I really want to.

Yes, this is true No, this is not true I am not sure about this

When I find work difficult, I know I can ask my teachers for help.

Yes, this is true No, this is not true I am not sure about this

You know where you are with my teachers.

Yes, this is true No, this is not true I am not sure about this

My teachers would be concerned if they thought I was unhappy at school.

Yes, this is true No, this is not true I am not sure about this

My teachers know how to get the best out of me.

Yes, this is true No, this is not true I am not sure about this

My teachers keep their promises.

Yes, this is true No, this is not true I am not sure about this

The teachers are open and honest with students.

Yes, this is true No, this is not true I am not sure about this

Annex 2: The maturity model (mark 2)

Note: The maturity model was originally sketched in Hargreaves (2011) for use by the newly designated teaching schools, which were encouraged to modify the details to fit their own circumstances. This revised model has been adjusted to apply to any schools in partnership. Again, the model may be modified by the addition or deletion of strands. The three dimensions remain the same, but order of the strands is slightly different from that in the original version.

The professional development dimension's strands are:

- joint practice development (JPD)
- mentoring and coaching (M&C)
- talent identification and development through distributed leadership
- distributed staff information

The partnership competence dimension's strands are:

- fit governance
- high social capital (HSC)
- collective moral purpose (CMP) (formerly distributed system leadership)
- evaluation and challenge (E&C)

The collaborative capital dimension's strands are:

- analytic investigation
- creative entrepreneurship
- disciplined innovation
- alliance architecture

Professional development dimension: strand 1: joint practice development (JPD)

Beginning	Developing	Embedding	Leading
<p>The school encourages staff in principle to share good practice, as well as in practice on professional training days and sometimes after attendance on external courses. Staff development is not seen as a high priority in the school. Most staff do not see professional training days as important to their professional development, which is seen as the responsibility of individuals.</p>	<p>The school has instituted peer observation sessions, encourages coaching and engages in learning walks for staff and students, thus moving steadily towards a model of CPD that focuses more on the improvement of classroom practice. Pairs and triads of staff engage in JPD projects within the school.</p>	<p>The school has evolved its CPD close to the practice model, with regular mutual observation of lessons, followed by coaching sessions as routine as well as on professional training days with partners. JPD pairs and triads work across schools in the partnership. Students are becoming involved in JPD as co-constructors of better teaching and learning.</p>	<p>The school has a highly sophisticated model of professional development that integrates initial teacher training (ITT) and CPD into a coherent whole, in which leadership development begins in ITT and progresses to senior leadership roles and succession planning. JPD is embedded in all professional development and applies across partnerships. Staff are skilled in the design and management of innovation and the school serves as an innovation hub.</p>

Professional development dimension: strand 2: mentoring and coaching (M&C)

Beginning	Developing	Embedding	Leading
<p>There is some mentoring and coaching among staff but it is unsystematic, driven by enthusiasts.</p>	<p>The school is devising a policy for M&C linked to performance management and leadership development. There is no sharp distinction between mentoring and coaching. Some M&C occurs among students, but a coherent policy for its development is lacking.</p>	<p>The school has a systematic M&C policy and training as part of its professional practice model of professional development. The distinction between mentors and coaches is made in allocating roles. M&C among students is common, especially with vertical tutoring and the vertical curriculum.</p>	<p>The school contributes to external courses on M&C within CPD and has experience of the use of external mentors and coaches (eg from business and industry) for both staff and students. The school devises new approaches to M&C, eg a system of online student-to-student M&C – or digital mentors.</p>

Professional development dimension: strand 3: talent identification and development through distributed leadership

Beginning	Developing	Embedding	Leading
<p>Most leadership is distributed to senior and middle leaders, who have been sent on relevant external courses. Identifying talent among staff is at an early stage and rests with the headteacher in consultation with senior leaders. Those identified are given opportunities to attend relevant external courses. The headteacher has devolved responsibility for this whole area of professional development to a deputy or assistant headteacher. There is a general reluctance to discuss differences among staff in their classroom effectiveness.</p>	<p>Leadership opportunities are being extended to all staff. More attention is being given to the in-house development of leaders. Potential conflict between goals in the partnership and between individual and organisational goals is being recognised. Identifying talent is put on a systematic basis, with regular reviews linked to performance management. Those identified are also given in-house opportunities for leadership. Most staff are aware of the identities of the most effective teachers, but there is no acknowledged way of spreading their skills to other staff, either within schools or across the partnership.</p>	<p>Goals between and within partners are aligned and goals of individuals and teams are aligned with partnership goals. Leadership is distributed and its development is inherent in all professional development work and closely tied to practice through mentoring and coaching. Pairs and trios of staff on JPD projects are used to raise everyone's level of classroom effectiveness. Student leadership is cultivated. Talent identification and leadership development are integral to performance management and professional development. The headteacher takes overall responsibility for professional development, devolving detail to accountable senior staff. New staff are inducted into the processes of career development that includes talent identification and leadership development.</p>	<p>The importance of goal alignment is understood and applied. Leadership development is integrated into all professional development for staff, who are also offered stretching assignments in partner schools. JPD projects are a key method of CPD. Leadership development for students is at an advanced stage. Senior staff contribute their experience to external courses on leadership as well as within partnership schools. The school is skilled in talent identification and leadership development and has undertaken work with other schools and partners to develop its own systems. It has produced atypically large numbers of staff who have moved on to senior leadership posts in other schools.</p>

Professional development dimension: strand 4: distributed staff information

Beginning	Developing	Embedding	Leading
The headteacher and SLT know the identity of the best teachers over a range of topics, but this is not collected or reviewed on a systematic basis beyond what comes to light through performance management and Ofsted inspections.	The headteacher and senior staff collate and review their knowledge of staff qualities, including the capacity to work well with colleagues. This is used in the identification and deployment of mentors and coaches and the formation of JPD projects.	Staff data is used to support professional and leadership development and the identification of mentors and coaches. It is assumed that all staff will be supported to develop the skills of both mentors and coaches. A parallel policy for student development is being developed.	Staff data is distributed among partners who explore ways of maximising the use of such data-sharing without breaching confidentiality or undermining personal integrity. The most outstanding teachers in every subject are identified and used in professional development across the partnership.

Partnership dimension: strand 1: fit governance

Beginning	Developing	Embedding	Leading
The partnership covers a small range of issues, and this is mainly decided by the headteachers, who meet to discuss on a regular basis. There is insufficient attention to ensuring net benefits, and some staff, as well as some governors, are sceptical about partnership benefits.	Senior staff acquire greater skill in ensuring the various governance elements are taken into account in planning and monitoring the implementation of partnership activities. Governors and parents see the first set of benefits from partnership activity. Memoranda of understanding and similar instruments set out the partnership arrangements. All the partnerships are still shallow, but steps are taken to deepen one or two of them.	Most staff understand the concept of fit governance, so the partnership is now extensive in scope and involves many staff and students. The focus of partnership activities varies according to changing priorities. Staff are skilled in assessing the benefits and transaction costs of partnership. Governors are now partnership enthusiasts. The schools have exit strategies for partnerships that reach the end of their useful life. The right balance between deep and shallow partnerships has been struck.	Ensuring fit governance is a standard procedure for establishing different partnerships. Particular emphasis is placed on the impact of partnership activities on the improvement of teaching and learning. The partners are skilled in the processes of establishing, maintaining (including monitoring and repairing) as well as terminating partnerships. Staff serve as mentors to other schools in the early stage of partnership-building and as consultants to partnerships in trouble.

Partnership dimension: strand 2: high social capital (HSC)

Beginning	Developing	Embedding	Leading
<p>There is limited experience of building trust across schools at headteacher and senior leader levels in a few areas. Goodwill exists on all sides, but relationships are not yet sufficiently open and honest. There is belief among one partner's staff that the partnership is about a one-way transfer of professional knowledge and skills. There is anxiety among staff of the other partner(s) that they are treated in deficit terms, or 'we're being done to'. Governors are wary of partnerships, seeing more costs than benefits.</p>	<p>Trust, with openness and honesty, have been established at SLT level and are now being established among all other staff across schools. There is agreement at SLT level that all sides have something of value to offer to other partners. Action is taken to identify what each partner and each member of staff can offer to the other(s) and what might be sought from the other(s). Governors remain divided on the benefits of the partnership. Some cross-partnership governors have been created.</p>	<p>Trust is well established among staff and increases among governors and key stakeholders. Trust audits take place from time to time. Action to strengthen trust among students across schools has begun. Reciprocity in action exists at all levels, including students, with high levels of satisfaction at mutual gains. Partners do things <i>with</i> each other, not <i>to</i> each other. Most governors now support the partnership and recognise the benefits. When a new partnership activity is mooted, the question 'How will it boost our collective social capital?' is always asked.</p>	<p>High levels of trust are now well established and at each level there is sufficient confidence and experience to advise and support other partnerships in the art of establishing and sustaining trust. Success in effective reciprocity is validated and quality assured externally. Staff have experience of supporting other schools in how to establish the principle of reciprocity and operate it in practice to improve teaching and learning.</p>

Partnership dimension: strand 3: collective moral purpose (CMP)

Beginning	Developing	Embedding	Leading
<p>Teachers direct their moral purpose at the pupils in their immediate care. As the school enters into partnerships, there is a growing commitment to care about the success of partners and the linked achievement of their students.</p>	<p>The headteachers and senior staff have accepted the philosophy and practice of system leadership and are now taking action to distribute the ideas of system leadership to other levels in the school, leading to a growing sense of collective moral purpose.</p>	<p>The principles and practice of system leadership are now well developed among the whole staff and action is being taken to extend it to governors and students. Progress is being made in transferring the philosophy of collective moral purpose to partner schools and to parents.</p>	<p>The principles and practice of system leadership are fully distributed within all partner schools. Collective moral purpose boosts collective capacity for school improvement. Staff are now able to induct other partnerships in the art of achieving collective moral purpose.</p>

Partnership dimension: strand 4: evaluation and challenge (E&C)

Beginning	Developing	Embedding	Leading
As the extent of the partnership is limited and under the close control of the headteacher and senior staff, the need for processes of monitoring and evaluation is limited. The idea of evaluation and challenge between headteachers provokes anxiety and defensiveness. The partners do not see challenge as inherent in deep partnerships and so do not challenge one another at any level.	The ability to judge the benefits of partnership activities and calculate transaction costs is being developed among senior staff as appropriate processes of monitoring and evaluation are devised. As the social capital (trust and reciprocity) between partner headteachers grows, they begin, somewhat tentatively, to challenge each another and enjoy the benefits.	The skills of monitoring and evaluation of partnership activities are well distributed among staff, as is the skill of maximising benefits whilst minimising transaction costs. Reciprocal challenge is firmly established among senior leaders. To improve the quality of JPD activities, E&C are being developed at all levels of staff and students, as social capital steadily increases.	The partnership has built the skills of monitoring, evaluating and quality assuring partnership activities into all its leadership development activities and is using this experience to support other schools and partners. Reciprocal challenge is treated as a key feature of a self-improving partnership and is built into all leadership and professional development.

Collaborative capital dimension: strand 1: analytic investigation

Beginning	Developing	Embedding	Leading
The headteacher and senior leaders have gained some skills in self-evaluation and the design of strategies for school improvement, but have little or no experience of making sound judgements about the quality of other schools.	Senior staff have become more experienced in undertaking school self-evaluation and in designing effective action plans for school improvement. Mutual evaluation and challenge by senior staff across partner schools is being explored. Ofsted and other schemes of peer review validate the quality of this work. As a result, there is a growing confidence that the strengths and weaknesses and planned improvements of other schools can also be accurately estimated.	Through active working with partners, and sustained experience of reciprocal evaluation and challenge, headteachers and senior colleagues have become skilled at making quick and reliable diagnoses of other schools, based on visits, on the study of data and documents, and on discussions with relevant staff and students. They can specify the action needed to remedy identified weaknesses and mobilise the resources to help partner schools in the process of improvement.	The school can field experienced teams to make sound diagnoses of other schools and to identify and help to implement remedial measures, based on skilful assessment of change capacity within partnerships. Staff can capture a partner school's overall quality, whilst also detecting detailed areas that need to improve. The staff have recognised experience in evaluation and challenge and peer review. The team helps teams in other schools to develop such skills.

Collaborative capital dimension: strand 2: creative entrepreneurship

Beginning	Developing	Embedding	Leading
<p>The school has some experience of applying for grants. Success in this regard has been variable, and the grant-supported activities have usually faded when the extra resources have run out. There is recognition that other schools are better at these processes.</p>	<p>Each school in the partnership has a related business plan, all of which are then aligned in a partnership business plan. The school has a high success rate in applying for grants and for generating additional funds from a variety of sources. Processes for brokering and contracting are being established. The business manager plays a critical role within schools and across the partnership.</p>	<p>The partnership has well-established processes of:</p> <ul style="list-style-type: none"> — business planning — raising additional funds — deploying funds effectively within the partnership in the light of agreed needs and priorities — routinising newly funded activities so they endure beyond start-up funding <p>The partnership offers a range of services beyond the partnership, with clear charging systems to ensure continuing generation of funds.</p>	<p>The partnership now has fully embedded systems for income generation and distribution, co-ordinated by the business manager(s). Horizon-scanning for funding opportunities is undertaken by many staff, who show creativity in spotting and exploiting new opportunities. The school is able to sell its innovations in local and national markets. The partnership offers advice to new partnerships on all that has been learned about entrepreneurship.</p>

Collaborative dimension: strand 3: disciplined innovation

Beginning	Developing	Embedding	Leading
<p>The school gains some private (one-sided) benefits from partnership and is offering some complementary benefits to other schools as part of an agreed exchange. As JPD is not well established within or between schools, there is little systematic school-led innovation in teaching and learning. Individual staff members tinker with innovation as a private activity.</p>	<p>Schools in the partnership are moving beyond exchange to the shared development of innovation designed to generate common benefits to all partners. JPD is now being established within each school, and cross-school JPD within the partnership is under development, supported by enhanced mentoring and coaching and visits by staff and students to other partners. There is enthusiasm about innovation but it remains relatively undisciplined.</p>	<p>The partner schools have devised methods for agreeing priorities for innovation to improve teaching and learning. Through shared JPD within and across schools, all partners make gains from common benefits. Some ambitious JPD projects are modularised across partner schools. Students are engaged in innovation in learning, sometimes as part of JPD activities, but also in other areas, particularly the new technologies. The outcomes of innovation are fed into CPD to ensure transfer.</p>	<p>The school has a local and national reputation for the quality of its innovations and has been involved in national and international innovation networks. The school advises and supports other partnerships in the development of innovation.</p>

Collaborative dimension: strand 4: alliance architecture

Beginning	Developing	Embedding	Leading
<p>Most schools in the partnership have limited experience of partnership-building and existing partnerships are shallow.</p>	<p>The partnership is gaining strength. After some early difficulties and tensions, clarification of the terms of the partnership and allocation of roles and responsibilities restore confidence in the partnership. Means of future conflict resolution have been agreed among school leaders. Attention is being paid to the interactions of the four key strands: JPD, social capital, collective moral purpose and evaluation and challenge.</p>	<p>The partnership has now extended well beyond senior leaders and has become part of the partner schools' normal and natural ways of working at all levels, including governors and students as well as staff. Conflicts and problems are now relatively rare and are quickly identified and resolved. Collective moral purpose means the partner schools have taken ownership of all students in all the schools. How the four key strands interact is understood by all senior staff, which helps to shape policy development.</p>	<p>The school knows how to build and sustain effective partnerships, including how to bring a partnership to an agreed end where and when this is appropriate. The school offers a service (advice and active support) to schools that either embark on new partnerships or find themselves in difficulties with an existing partnership.</p>

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- Enabling leaders to work together to lead improvement
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