

The Shape of Things to Come

Co-creating Learning

Demos Report for the DfES Innovation Unit

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Introduction

Imagine a school where every child sees themselves as an investor in their own learning. Older children frequently coach and mentor younger children. Those who are more advanced in a subject help those lagging slightly behind. The children help teachers design learning programmes. Their parents are parties to these discussions. The children see it as their responsibility to learn in their own time, often using online tools provided by the school. This is user driven learning. But the users are not passive consumers, picking lessons off a shelf. They have become investors in their own learning because how they learn and what they learn has been tailored carefully to their needs.

The education system's biggest untapped resource are the children themselves. The frontline of learning is not the classroom, but the bedroom and the living room. The biggest gains in terms of learning productivity will come from mobilising as yet under-utilised resources available to the education system children, parents, families, communities. That is the ultimate goal of personalised learning: to encourage children see themselves as co-investors with the state in their own education. This report is about how we can achieve that transformation.

Personalised learning is design to address three causes of personal under-investment in education:

- Children and parents that do not think education and learning are “for them”. Personalised learning should mean reaching out beyond school into families and communities to raise aspiration and ambition and to equip children from all backgrounds to want to make the most of their education. Raising investment in education from among poorer households should be one of the main goals.

- Children and parents who disinvest from education at some point during their schooling, perhaps because it seems less relevant or rewarding to them. Personalised learning plans should help avoid this by engaging children and families more in setting their own goals and targets. Smoothing the transition from primary into secondary and onto GCSE's should also help.
- Children who drop out of the system too early. Again this may well be caused by education seeming less relevant to them.

Education should encourage children and their parents to invest more in learning from an early age and to sustain that investment over a longer period. The goal of personalised learning is to raise the rate of personal investment in education.

The main message of this report is that personalised learning – learning tailored to individual need – is not utopian. On the contrary, it is a practical approach to motivate children to learn, which is being applied successfully in the leading edge of schools. The teachers pioneering personalised learning, who are the main protagonists of this report, are not starry eyed idealists. They are deeply pragmatic: they have adopted personalised approaches to learning because they believe it's the best way to engage children and families who have check out of learning. Personalised learning motivates children the current system turns off.

Personalised learning is not just for middle class families, able to articulate their needs. The biggest benefits of personalised learning go to those who find the current, standardised and academic system most difficult. All too often children who learn differently come to be seen as difficult because they cannot fit into the system. Personalised learning offers very practical routes to higher attainment for all children, but especially those who feel most de-motivated by the current approach.

After a period of relentless focus on standards, it's not just children who need motivating. The teaching profession, now in a much stronger position than it was a decade ago, also needs an inspirational goal to mobilise it. For the last decade teachers have felt driven, often by central target setting, to reach higher standards. Now we need to attract and inspire them with an account of what education is for which motivates them.

However personalised learning is not for the feint of heart. It requires schools to radically rethink how they operate. Many of the basic building blocks of traditional education: the school, the year group, the class, the lesson, the blackboard, the teacher standing in front of a class of thirty children become obstacles to personalised learning. Personalised learning means differentiated provision to meet differentiated needs. All the resources available for learning – teachers, parents, assistants, peers, technology, time, buildings - have to be deployed more flexibly. Personalised learning will only become reality when schools become much more networked, collaborating, not only with other schools, but with families, community groups and other public agencies. Our vast secondary schools are among the last great Fordist institutions, where people in large numbers go at the same time, to work in the same place, to a centrally devised schedule announced by the sound of a bell. In most of the rest of the economy people work at different times, in different places, often remotely and through networked organisations. In the last two decades private sector organisations have become more porous, management hierarchies have flattened, working practices have become more flexible, job descriptions more open and relationships between organisations, as suppliers and partners, more intense. The bounded, stand alone school, as a factory of learning, will become a glaring anomaly in this organisational landscape.

This project has been a search to find next practices: where the education system of the future is being created. Next practices – emergent innovations that could open up new ways of working – are likely to come from thoughtful, experienced, self-confident and skilled practitioners trying to find new and more effective solutions to intractable problems. The main protagonists in this report are grey-haired-revolutionaries: practitioners whose experience gives them the self-confidence to lead others to radical

innovation. These grey-haired-revolutionaries are a vital part of the distributed leadership of the education system as a whole. It is their work that this report dwells upon.

2. What is personalised learning?

Learning should be a deeply personal experience. Children have a huge appetite and capacity to learn yet all do not learn as enthusiastically or effectively at school. That may well be because the education system fails to understand and meet their particular needs and aspirations. Children come into education from different starting points, with different resources and expectations. They often learn in different ways, at different paces and styles. As they get older they forge different ambitions for the kind of person they want to be: not just the career they might follow but what interests express their sense of identity. A personalised education service should meet the different needs of learners: differentiated provision for differentiated need.

But personalised learning is not just about giving learners more choice. It means engaging learners in a highly interactive process of learning. Learning is not just the successful transfer of knowledge and skills. Learning comes through interaction in which the learner discovers for themselves, reflects on what they have learned and how. Effective learning has to be co-created between learner and teacher, in which both invest effort and imagination. As a result the learner becomes better able to self-manage their own learning and motivated to invest in it.

Too often in the current system children who learn differently come to be seen as a difficulty. A system that allows children to progress towards common standards but through different routes, employing different styles of learning and assessment, should be more inclusive and make more of the talents of all children.

Personalised learning does not mean individualised learning. For some people, some of the time personalised learning could mean learning on their own – at home – or one-to-one with a peer or tutor. Learning stems from creative and social interaction.

Personalised learning is not cafeteria style learning: picking your own curriculum from a wider self-service menu. Personalised learning should equip children to make choices

about which subjects to study, what settings to study in, what styles of learning to employ matter. But choice is just a means to turn children into more engaged and motivated investors in their own education. The main goal is to encourage higher aspirations.

Personalised learning does not mean letting a thousand flowers bloom. Personalised learning is learner led learning, within a framework of standards. The goal is to motivate children and parents to become active investors in their own education.

What are schools like that are developing personalised approaches?

3. The Personalised Learning School

Imagine a school in which each child has a daily timetable, made up of different combinations of common building blocks. Some are short intense periods of study, others last much longer than the standard 50 minute lesson. Much of the learning is done in small groups, some as a class and other sessions are one-to-one. The way a child's learning is designed to progress has been discussed by staff, with the pupil and their parents. The child's personal tutor talks to parents, usually over the phone, at least once every two weeks. All children do sessions that build up their learning skills, to reflect on what they enjoy about learning and what they find hard. By years seven and eight they are doing seven hours of learning-to-learn a week, often working in small, self-managing groups, completing a task together, to a deadline. These provide skills in evaluation, analysis, creativity, reflection, which they can apply to all lessons. By the time they take GCSE's they are practised in a variety of techniques to accelerate their learning and make it more rewarding.

Teachers design the formal learning that goes on in the school but do not deliver all of it. Several grades of teaching assistants deliver different modules for different groups. That allows children who need more intensive attention to get it. Morning tutorial groups are not organised into year groups but around communities of interest such as dance and computer games led by older children. It is commonplace for older children to teach their peers and younger children. Other adults support children throughout the school – counsellors, artists, social entrepreneurs. This support means teachers are able to spend more time designing learning, liaising with parents, advising students one-to-one.

The school's technicians look after equipment, like video cameras and tape recorders, prepare materials for lessons and develop the school's intranet. Every lesson starts and ends with music downloaded from the Intranet. All lesson plans, complete with homework, are held on the Intranet. The children can follow what the teacher is doing on their wireless laptops which they get when they join the school. Children are encouraged to use different technologies and media to present their work - audio, powerpoint, video,

photographs. Electronic records make it easier for children to keep track of their performance, for the school to work out where it needs to deploy resources to address emerging problems and to share with its many partners.

Learning takes place in many different spaces across the school not just in classrooms. Teachers have rooms to prepare lessons, talk to parents and conduct one-on-one sessions with children. Many older children are learning, at other partner schools or with nearby employers and social enterprises.

The school works intensively with nurseries, communities services and families, to prepare children – and parents – for school. The school collaborates with local counterparts to share resources and make better use of specialist knowledge. Teachers often spend part of their week teaching in another school. When children move to secondary school their primary teachers will come with them for some of the time to ease the transition. As children get older the school becomes a gateway to a variety of courses in other schools, nearby colleges and with employers.

That school is not imaginary. It is a composite of ingredients drawn from several schools in England – primary, special, middle and secondary - which are at the lead in developing personalised learning. The schools that provided those ingredients – St Anthony's a special needs school in Chichester, Cramlington a comprehensive near Newcastle, Lipson a comprehensive in Plymouth, Larkside a primary in Luton – are innovating practical approaches to personalised learning. What can we learn from them?

Leadership

The leaders of these schools were grey-haired-revolutionaries. As Derek Wise, head teacher at Cramlington put it: “We are not just interested in doing a little better with the current system. We are interested in transformation. We want to do something radically different because that’s the only way to have a big impact.”

Staff in personalised learning schools share a clear vision of learning, which is embedded in practice throughout the school. They see learning as interactive and so believe it is vital to win the commitment of children and parents. They believe in learner led learning as the most sustainable route to high standards.

Leaders sanction a culture of innovation so that staff – and pupils – can devise better approaches to learning. Teachers have pride and confidence in their craft: they are constantly exploring more effective approaches to learning.

In Knowsley’s primary schools this has been semi-formalised with teachers acting as lead-learners spreading new approaches to learning-to-learn and assessment-for-learning.

The heads in these schools are non-heroic leaders. Their leadership style is often understated. They focus on drawing out contributions from others, rather than thrusting themselves into the limelight. They are the anti-thesis of the “super-head.” They do not compromise on a floor of high standards but they also believe learning must be motivated by a compelling goal.

Learners become investors

Personalised learning schools equip children to become more active, engaged learners, able to reflect on how they learn, what they find hard or difficult, how they best express themselves. At Cramlington for example years 7 and 8 do seven hours a week of learning to learn, through their information technology courses. Each week groups of children undertake different tasks and reflect on different ways in which they learned: through practice, peer-to-peer, from the computer, by drawing or writing, listening to the teacher.

Derek Wise explained: “Too much learning in school is left to chance: do you get the right teacher for the right subject. Learning to learn is about improving children’ skills as learners by giving them a set of qualities as learners - responsible, resourceful, resilient, reflective – they can apply to any subject. It also creates a common language about learning that the children can share with teachers. Each lesson they come to should be organised into a cycle of activities – show the point of the lesson, connect it to things the children have already learned, introduce new information, allow the children to process that through an activity and demonstrate they have ingested it, debrief.”

Personalised learning schools also engage parents in learning. Sue Attard, head of Larkside primary in Bedfordshire put it this way: “The starting point for learning is whether a child feels safe and happy. Children and their parents must want to learn.”

People

A single teacher in front of a class of thirty children cannot personalise learning. Personalised learning schools mobilise people that are often overlooked, and deploy them flexibly to meet different needs. That requires a more strategic and planned approach to learning, so that all the participants – pupils, teacher, assistants, technicians, parents – have a clear idea of the contribution they could make. That means teachers need more time to devise learning programmes that others can implement.

Workforce reform enables personalised learning schools to make a more diverse offer to children. In classrooms at St Anthony's, a special needs school in Chichester, which caters for more than 200 children, several adults work with small groups of children. Very often no fully qualified teacher will be in the room. St Anthony's has four grades of teaching assistant who deliver many of the lessons. The learning plans are devised by fully qualified teachers, in consultation with other staff and parents.

At Lipson Community College in Plymouth, children are part of the school's productive resource. Lipson's lead-learner programme turns the recipients of learning into co-producers. Older children frequently help younger children and those slightly ahead in a subject often help others in their class. Bedfordshire LEA is sponsoring novel approaches to student involvement, including peer learning, mentoring and dispute mediation. The most effective solutions to bullying often come from other children.

Personalised learning schools mobilise resources beyond their borders, parents, local employers, libraries, arts organisations and voluntary groups. Pensnett School of Technology is engaging parents more in the school. Parents' evenings attracted only 45% of parents. Staff there created a review day for each year group, during which each pupil spends 15 minutes talking through their performance with their personal tutor, who they have throughout their time at the school. Then the child and teacher have 15 minutes with the parents. These sessions are used to jointly set targets for attendance, behaviour, homework and goals for each subject. The review day system of self-target setting is linked to much more transparent "ladders of progress" so that children know where they

are. Ten parents have been recruited as teaching assistants. School leavers are recruited as mentors. They get three days training as a mentor and are paid £5 an hour.

Places

It is difficult to personalise learning in a standard classroom, with a teacher standing in front of children in ranks of desks and chairs. In primary and specialist schools teachers divide up classrooms to provide different settings for people to learn and interact in different ways. In Nine Stiles school in Birmingham, for example, class rooms can be joined to create much larger spaces. This can then allow teachers and teaching assistants to spend more time with smaller groups. Primary schools are often adept at adapting corridors, store cupboards, the school hall and playground to promote learning. If teachers are to spend more time designing learning then they need space for preparation, away from the demands of the class. If parents, teachers and children are to have more conversations to agree individual learning plans, then they need meeting rooms. Secondary schools are increasingly orchestrating learning off-site, at home through virtual and distance learning and at workplaces. Vocational education will expand only if secondary schools can design and supervise learning away from school.

The physical design of schools reinforces deep-seated assumptions about how to deliver education: the classroom, the hall, the staff room. One reason why many children enjoy art, sport and drama is that they do not take place in normal classrooms. The Building Schools for the Future programme could be a huge opportunity to create environments designed for personalised learning. The danger is that they will be no more than smarter versions of traditional schools.

Time

The lesson is the basic unit of educational production. It is impossible to personalise learning in uniform 55 minute blocks. If some children learn more slowly than others the lesson may be too short. For those who are well ahead it may be too long.

Personalised learning schools break away from “the lesson” as the standard unit.

Larkside, the Bedfordshire primary, does literacy and numeracy in the morning, followed by themed work in the afternoon, in which children focus on a single subject for an entire week. Children struggling to grasp basic concepts have longer to grasp basic concepts. Those that want more challenge can be given self-directed projects. The teacher who specialises in the themed subject of the week has three or four weeks to design the programme. That allows teachers more time to think creatively about how to engage children. Teaching staff have every Friday afternoon free to plan, while teaching assistants organise the school in constructive play. Sue Attard, the head, devised this approach after spending five days following a group of five year olds who had five different lessons a day: “It wasn’t until I saw it from their point of view that I realised how chaotic their day must seem to them. This approach is much simpler and allows learning to accumulate more effectively.”

One of the most unsettling aspects of going to secondary school is being given your timetable, into which you have to fit. For a child the timetable embodies your lack of control. Some schools are experimenting with longer days and more flexible scheduling modelled on airports so not all the children have to be on the premises all the time. Many organisations – Borders bookstore for example - are open for work from early till late. Schools will not personalise learning within the confines of the standard, 8-till-5 working day. Extended hours, combined with teachers and teaching assistants working shifts, would help create the flexibility to personalise learning. Other organisations – such as BT - have adopted flexible extended schedules to suit the needs of workers who want to work different hours and to provide a differentiated service to customers.

The ability to fit into a timetable made sense for a world in which employers wanted workers to fit into a division of labour. In future, however, even work in larger organisations will require skills of self-organisation and self-scheduling. Schools will not develop these capacities with a timetable imposed from above.

Technology

In many schools the blackboard, the exercise book and the text-book are still the basic technologies for learning. At home children learn from the television, the computer, their peers and their games consoles. The technology of informal learning is more flexible, adaptive and often higher quality than the technology children use at school.

Personalised learning schools make much more flexible use of technology and tools, which the children regard as their property and so take responsibility for. At Cramlington, Derek Wise put it this way: “ICT should be a tool for everyone to use in every lesson. We would not dream of having a biro room or children sharing biros.” Information technology creates a shared platform for learning, linking school, home and community, in which learners and teachers work together far more collaboratively. That is the way leading edge businesses already operate. It should become the norm for schools.

In Knowsley’s primary schools children are encouraged to use video, audio tapes, photographs and painting to present their work. Children who find it difficult to express themselves through written work can use a range of tools. Technology allows children to explore different learning styles. At Lipson Community College peer-to-peer learning is most common in ICT lessons. Business will increasingly expect staff to use technology to work off-site. The ICT room, stacked with computers, may be exactly the wrong way to learn to use technology.

One estimate is that 90% of the content of the Sims – the world’s most popular computer game – is generated by users who create their own add-ons to the game. They devise this content with software tools provided to by the game’s publisher, Electronic Arts. The Sims is sustained by a massive community of users that shares its knowledge. Imagine

that model applied to learning. The teachers would provide the platform for the game and the tools users need to improve it. The children would not just play the game but also build upon it.

Box

At Cornwallis school in Kent Gerry Gray, a chemistry teacher has pioneered the use of tablet laptop computers for learning and assessment. Initially Gray only allowed existing lessons to be delivered more effectively: lesson plans were online, along with notes and homework guides. She found the technology took off once the children were given scope to use it creatively, to demonstrate their work. In the first lesson when that was allowed the first girl to complete the task displayed the results of her experiment with an animated cartoon. Soon the entire class were critiquing the science and asking the girl to show them how to do the animation: it triggered a process of peer-to-peer learning. Technology puts learning tools in the hands of children and so makes them more able to participate as learners. Another teacher at Cornwallis devised a computer game – litnum – to improve literacy and numeracy of children in Year 7. A player can only continue playing by answering academic questions correctly. Year 8s who want to continue to play the game have to act as mentors to Year 7s. The game is now available in Crosshills 23 feeder primary schools. About 80% of those that have played litnum have improved their test results in maths and English, compared with only 20% of those who do not play the game.

Impact

Engaging children as co-investors in learning helps to:

- Improve attendance and behaviour because children feel more engaged, committed and obliged to learn.
- Motivate children least motivated by traditional, academic approaches to learning.
- Raise standards of attainment and maintain momentum for improvement. Cramlington was a poorly performing school a little more than a decade ago. Now it gets more than 75% GCSE grades A-C. Personalised learning helped maintain the momentum for improvement once the school had already got the A-C pass rate above 50%.
- Engage parents to become constructively involved in their child's learning.

Personalised learning schools question how education is traditionally organised: the teacher, the classroom, the lesson, the blackboard, the timetable. Personalised learning puts more emphasis on the role of teachers as designers of learning with more of the delivery done by teaching assistants, peer learners, other adults and technology. Personalised learning means it is vital schools collaborate to provide additional resources and outlets for learning. To provide children with the different support they need, a school has to be able to draw on resources that lie beyond its walls. One of the most effective ways to widen the offer a school can make is to network with other schools, with different expertise. That allows a school to become the gateway to a larger set of shared resources that supports a wider range of choices. Innovating a personalised learning offer will only be possible with matching organisational innovations in how schools operate. Collaboration is key to that.

4. Collaboration for Personalisation

Personalised learning schools have a highly collaborative ethic. They foster a spirit of mutual self-help and self-evaluation, and engage in many kinds of networks. Some of those networks are vital to personalised learning.

Community links

Personalised learning works only if children see themselves as investors in their education. Yet children from distressed social backgrounds are much less likely to be self-motivated learners, they have fewer of their own resources to invest in learning and they have less confidence in voicing their aspirations for learning. A personalised approach to learning would not just personalise what is done in the classroom but take into account the backgrounds children come from. That is why the work of integrated children's services and trusts, that bring together health, early years, nursery provision and social services will be vital in readying children from all backgrounds for school. The biggest challenge is to persuade disaffected children that education is a personal project, for them, in which they should invest. Enhanced collaboration between schools, families and community services is critical to make the pathway to school more personalised.

Routes for parental involvement vary widely, from engaging parents as teaching assistants, family learning programmes, cafes for parents to drop into at school and talk informally to teachers. The underlying goal in all these is to deepen parental commitment to their child's learning. Enhanced parental commitment to learning often has the biggest impact in the most deprived communities where returns to investment in education seem most doubtful.

Box

In West Sussex the LEA has created 23 networks of primary and secondary schools. Staff working for integrated children's services – social and health workers, police and housing – will work as a team within these networks. Robert Back, director of West Sussex LEA explained: “We have to start seeing welfare and learning as part of the same story. If we

create networks of schools to deliver integrated children's services then it makes sense to do that for school improvement as well. So in addition to the networks of primary and secondary schools we are encouraging groups of seven or eight secondary schools to get together to make joint offers to groups of children, especially post-16."

David Sword, the head of school improvement in West Sussex puts the challenge this way: "We still want schools to focus on their core job – learning – but to take a wider view of how to achieve good results, what resources need to be mobilised to achieve that and which partners need to be engaged. Schools must be led by a learning agenda, but they must collaborate with welfare and social programmes to achieve that, especially for the most disadvantaged." The challenge of leading a school will become more complex. A successful school needs a distinctive ethos and identity. Yet it also needs to collaborate with others to achieve its goals. Managing the relationship between independence, distinctiveness and collaboration will be central to the job of a head teacher.

School-to-school collaboration

The small scale of most primary schools is often regarded as a strength: they provide a more intimate environment in which children can learn. But they lack access to the range of specialist expertise that might be available in a larger unit. Collaboration offers a way to overcome these limitations.

One of the most powerful examples of collaboration among primary schools is in Knowsley, near Liverpool, where primary schools have been grouped into three collaboratives with about 25 schools in each. Each collaborative involves all the head teachers and is led by a facilitator they appoint from within. The LEA plays an advisory role as a “co-leader”. The collaboratives, which grew out of looser forms of networking, are intended to become the primary vehicle for school improvement, by utilising peer-to-peer learning and mobilising shared resources. They meet formally once a month, but informal discussions and project meetings take place daily.

Collaboratives such as Knowsley’s generate four main benefits for personalised learning:

- They reduce duplication of resources, such as IT support and make better use of common resources. Instead of each school trying to devise an IT strategy the collaborative as a whole can delegate that task to its members with the greatest skills.
- Schools make better use of specialist teachers. Instead of children, only having access to the specialist skills among the staff of the school, through the collaborative they have access to a wide range of expertise and talent. It is common practice, for example, for a specialist teacher at one school to visit several others to support teachers in devising learning plans.

- Focus resources on schools that need most support. In one collaborative each school had been granted £2,500 for a standards initiative. Rather than spread the money thinly over all schools, the collaborative decided to pool the funds – about £50,000 – and invest £10,000 in just five schools where that investment would make a significant difference.
- Collaboration can accelerate the spread of innovation. In the past if a teacher at a Knowsley school developed a more effective teaching practice the idea would remain trapped within that school. The collaborative provides a mechanism for emerging practices to be shared, making it easier to spread the benefits to all schools.

Cross phase

One cause of children disinvesting from their education is the disruption of passing from a small primary school, which feels like a close-knit community, to a large secondary school, that seems harsh, impersonal and faceless. In this hiatus many children, particularly boys, seem to decide to reduce their investment because education becomes far more system-driven, less personal and aspirational.

Education should be personal journey which the learner can shape. All too often it feels like a series of loosely connected key stages, levels of attainment and year groups that the learner only dimly understands. Collaboration at transition from primary to secondary is vital to make the learner's journey more joined up and to help schools tackle shared problems. Secondary schools often have to cope with problems – for example with literacy and numeracy – which started in primary school. Improved collaboration at transition should help schools on both sides to improve the experience for the child.

Box

One of the most ambitious attempts to address these issues through collaboration is being made in Bedfordshire where 224 schools have been grouped into seven learning communities. The initiative came from Bob Clayton, head of school improvement. Clayton's role is to design frameworks for collaboration that drive up school performance.

Frustrated by sluggish improvements in standards Clayton laid out some simple rules. Every school had to join a learning community. Membership of the communities was decided centrally. The communities had to work cross phase, because many of the issues secondary schools had to deal with started in primary school. The communities decided which aspects of performance they would focus on. The authority challenges the communities to set stretching targets. For example one community is focussing on boy's performance in maths and English. Information on pupil attainment showed that many of the difficulties these boys had at GCSE started in primary school. The secondary school in the community is working with all its feeder primaries to help it reach its target of moving from a 49% A-C pass rate at GCSE to 62%.

Clayton believes it is now becoming clearer when collaboration can deliver tangible improvements in performance: "You need strong shared purpose among the schools; good data that is shared so everyone can see where the problems are; an honest dialogue that allows problem solving to be shared and challenge from the outside to make the network set stretching targets."

Secondary collaboratives

Collaboration between secondary schools should bring many of the same benefits as primary schools: less duplication, better use of shared resources, more flexible deployment of resources where they can have greatest impact. Groupings of secondary schools should be able to support a wider range of options, for example in niche subjects, which might be uneconomic within a single school. Children can have their horizons expanded by moving between different schools and styles of learning. It is difficult for

children to become self-aware about how they learn unless they are exposed to different approaches, which allows them to make comparisons. As the director of one local education authority in the north east put it: “We want to get our children moving around between schools because one of our problems is that people will not travel a few miles to go to work. We have to get children used to moving around.” Work, enabled by smaller, more powerful, lighter technologies, will increasingly be mobile. It is increasingly rare for large numbers of people to go to work, at the same time in the same place. Schools stand out as among the last mass institutions of work and learning where people leave the gates enmasse, at the same time to the sound of a bell. If schools cannot match the organisational innovation and creativity of the business sector then there is little chance they will match it for innovation and customer service as well.

Effective Collaboration

Practitioners and policy makers need better tools to understand when it works and when and how to invest in it. The case for deeper collaboration and networking cannot be solely that it is a corrective to silo based public services. Collaboration will only deliver if it becomes more radical and ambitious. It is not an attractive add-on, but a different way to do the school’s core job. That means collaboration has to be more effective than a stand alone organisation in mobilising resources and deploying them more flexibly to meet need more effectively.

As Diagram One below shows standard, professional service organisational models in the public sector tend to go up the 45 degree line: to get more output and better outcomes, you have to invest more money to employ more teachers. Standard approaches to productivity improvement – deploying new technologies, cutting costs, streamlining procedures – might move the line fraction so that less resource input is required for the same output. The challenge is to bring about a step change in impact, to move to the space on the right hand side of the diagram below the line: it is in this space that resources get used far more effectively to generate better outcomes. Getting into that space requires radical organisational innovation to mobilise more resources – like the commitment of pupils, parents and partners.

The challenge is to accelerate how collaboration develops to generate a bigger impact more quickly on performance, attainment and school improvement. Many of the networks we examined had taken two or more years to develop, mainly through discussions once a month among a group of heads. If collaboration is to deliver systemic change, fast, then ways have to be found to accelerate this process.

Effective collaboration requires a mix of top-down and bottom-up. Without commitment from the participants there will not be the culture of trust needed to make collaboration work. Without a sense of strategic ambition, to take on bigger challenges, collaboration will often fall short of its full potential.

Collaboration delivers when :

- Participants have a shared sense of direction that everyone buys into. In Knowsley, for example, schools have signed up to common policies on exclusion, admissions and holidays.
- Information about performance, staffing and budgets is shared openly. Only then can a collaborative have an open debate about where extra resources should be invested.
- Schools have a distinctive sense of identity. Collaboration does not mean amalgamation or merger, although it could mean several schools sharing a common infrastructure, back office facilities and even having a shared management.
- Facilitators help participants to collaborate in between formal meetings. That facilitation can come from an outsider but is much more likely to come from a member of the collaborative who is assigned to the task.

- Participants have a sense of ambition. They are not content to restrict themselves to low-level collaboration. They want to tackle larger and larger challenges.
- That ambition comes from leadership. The leadership of an effective collaborative seems to be shared among a small group of people.
- Collaboration becomes a way to reorganise the use of their core resources rather than as a way to attract additional investment targeted particularly at promoting networks. In Knowsley the in 2005 the first groups of schools were starting to set joint targets and work out how to use their pooled budgets to hit those targets.

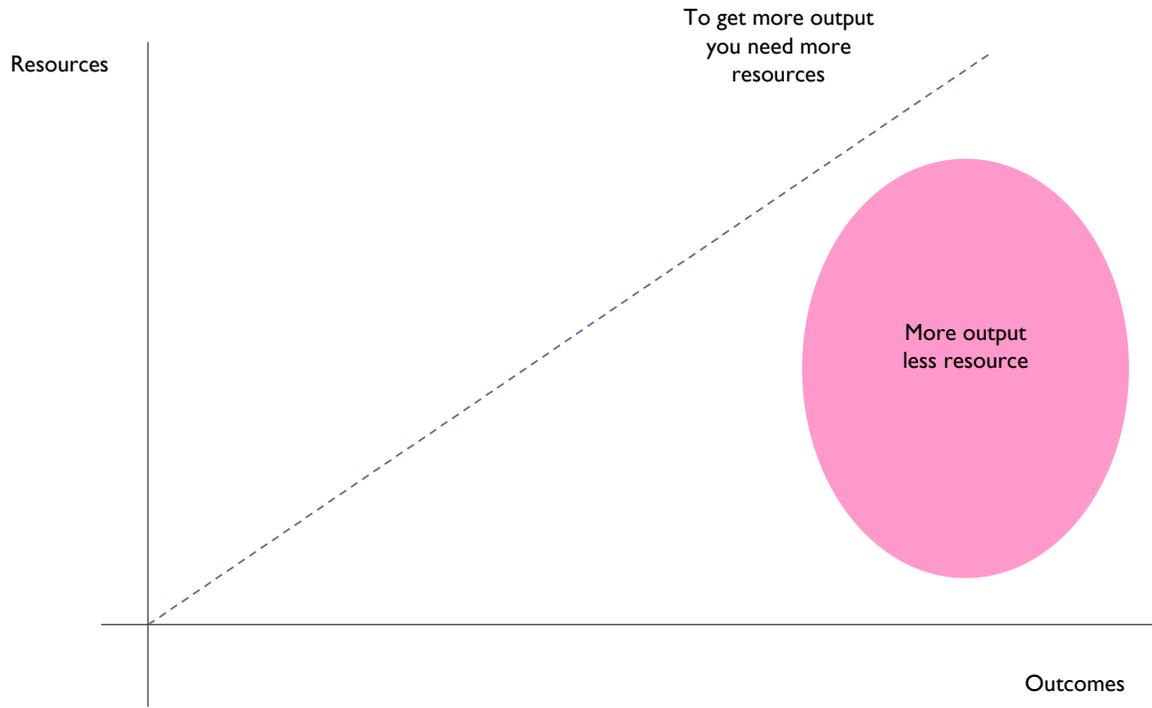
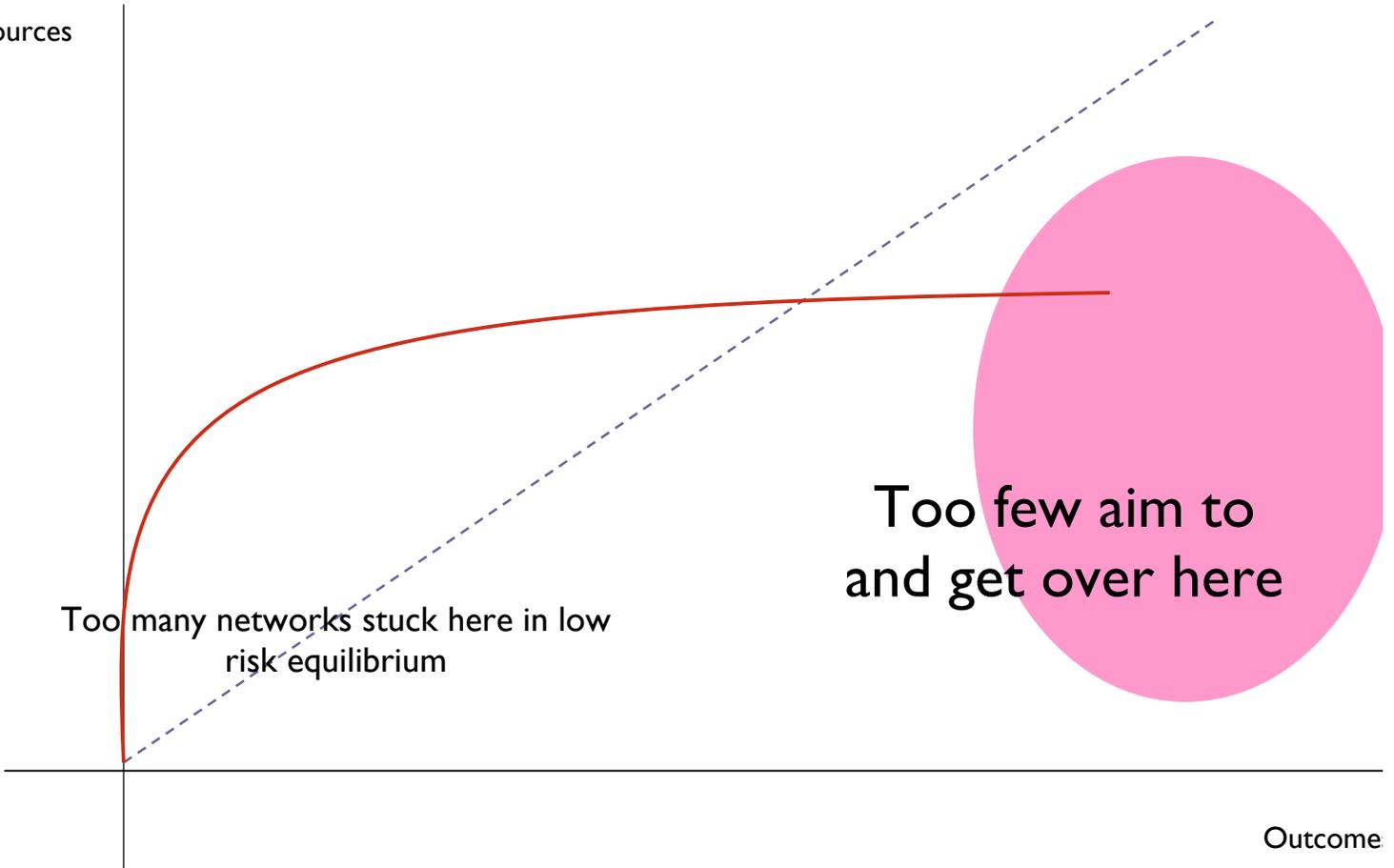


Diagram One

Resources



Too many networks stuck here in low risk equilibrium

Too few aim to and get over here

Outcome

Policies for Collaboration

Personalised learning is possible only if we can deploy more resources, more flexibly to meet the different needs of different children. Collaboration will be vital to achieving that. A purely laissez-faire approach which leaves it up to groups of schools to decide whether they will collaborate, how and what for, will probably work only in a few places. Effective collaboration requires an upfront commitment of resources for leadership and facilitation. No single school is likely to take the lead on that. However giving too much money distorts incentives for collaboration: people form partnerships simply to get their hands on the cash. The point of collaboration is not to spend additional resources but to devise a new way to spend existing resources more effectively.

The DfES should encourage schools and LEAs need to be encouraged to explore collaboration with compelling evidence of the impact collaboration can have on core tasks like school improvement and spreading innovation.

Collaboration requires design. When it is well designed with the right kinds of governance arrangements, goals and incentives it works well. Bob Clayton, in Bedfordshire, is a collaboration designer: he has created a framework in which schools are expected to collaborate and find it easy to do so. The skills of collaboration design need to be more widely understood and spread.

Collaboration can be held back by regulation, inspection and funding regimes that encourage schools to think of themselves as autonomous, stand alone units. The development of New Relationship with Schools offers an opportunity for schools to develop new models of accountability and school improvement that should include collaboration.

The DfES should provide appropriate incentives for schools to collaborate. One possibility would be an approach akin to Public Service Agreements where groups of schools are invited to sign up to programmes of collaborative improvement which they are resourced to achieve. Another option would be to set outcome goals which are

difficult to achieve without collaboration, for example encouraging early years learning among children from poorer backgrounds.

5. Co-Creating Education

Personalised learning is a different account of how value is created within education. The traditional account is that value is created through send-and-receive, as knowledge and skills are transferred from teachers to pupils through good teaching. Personalised learning puts the emphasis on learning through interaction and co-creation: children learn more effectively by participating more fully in their learning.

Co-created products and services come about by users and professionals interacting creatively. That puts a premium on how they can communicate, whether they share information, how they voice their views and how they listen to one another. It's much more like a process of dialogue or conversation. To create value you need to create more of these conversations, not in formal settings of consultative committees and bodies, but within everyday business processes of design, innovation and delivery. These conversations need to embrace not just producer and user, in a bilateral relationship, but also users with one another, peer-to-peer. The aim is not just to serve a passive consumer but to equip users with tools and resources so they can start to self-manage and help themselves. The goal is to turn learners into investors in their own education.

Co-creation should underpin the learning ethic of the whole system not just the relationship between children and teachers. Inspectors and heads should conduct inspections jointly, sharing learning. Schools should draw up their development plans as a process of co-creation with their partners, through the single conversation. Collaboration will put much more emphasis on peer-to-peer learning among teachers. The traditional approach, reinforced by recent reforms, emphasises the school as the basic unit of the system. Collaboratives of schools and children's services providers should become the basic building blocks of the system: employing staff, deploying them, planning provision, making admissions, offering choice, sharing platforms and services.

There should be renewed focus on the whole resources a child has available for learning. The approach of the past 15 years has stressed teaching as the focal point. Personalised

learning should give more weight to the variety of formal and informal resources available for learning at school, at home and in the community.

Self-evaluation is at the heart of personalised learning: learners must become more engaged in thinking about what they want to learn and how. Self-evaluation is central to school improvement process, with schools working with inspectors to devise improvement strategies.

All this means the school system should be animated by decentralised initiative within a framework of standards. That does not mean that there will be no top down direction or challenge. Collaborative self-help only emerges with careful design. Schools need a framework of central rules and incentives that are designed to encourage bottom up innovation. Personalised learning should engage students far more in shaping their own learning programmes, setting their own targets and pace. The New Relationship with Schools should give schools more responsibility for setting their own targets, development plans and budgets. Targets for the national education system should emerge from the interplay of central direction and local and personal target setting.

Education policy has to reconcile two different views of the value of learning. One vantage point is macro: the performance of the system as a whole measured in international league tables of attainment, to the society that funds the system through taxes. The other point of view is micro: education is a deeply intimate experience of anxiety, humiliation, success, triumph and pleasure. For each of us education – for good or ill - is a deeply personal and foundational experience. The challenge for education policy is how the macro and micro feed one another.

At the moment we an unappetising choice between two options. The first starts with the macro and works down. Top down, challenging targets drives up performance of the system as a whole. That delivers better outcomes for more people passing through a better functioning educational machine. The downside is that the more the centre mandates outputs, processes and methods, so the scope for decentralised initiative and

investment becomes more limited. Test results may improve but education is still something done to you – albeit more efficiently – rather than something you do yourself.

The second approach starts with the micro. If children and particularly parents are given more choice over where they want to go to school, if not what to study, this should introduce more competition. If money follows those choices then a failing school will be one that fails to attract enough customers. Good schools should expand and bad schools should close. The system as a whole should improve by responding to customer choice. There are a number of drawbacks with this approach, not least the very long time it still takes for supply to respond to demand. Choice can amplify existing inequalities if supply does not expand and diversify to meet need and as good schools get oversubscribed,

Personalised learning offers a different approach: seeing learners as co-investors in education. The goal of policy is to maximise that personal investment to match the public investment put into the buildings, teachers and technology. Public investment provides a platform for learning, personal investment – from children and families – largely determines how well the public investment is used. That would require every child entering education to see it as a deeply personal project that they can shape to their ends.

Making an offer of that kind to every child entering the education system may seem like a tall order. For schools conceived and organised as they are now, it would be. The traditional Fordist school, based on the 50 minute lesson, the teacher, the class, the classroom, the blackboard and exercise book, would be capable of creating personalised learning only at great cost. We will only innovate a new kind of service to children if we innovate in the kinds of organisations that provide it. EasyJet turned flying to Europe for the weekend into a mass activity with a low-cost, no frills model established airlines could not contemplate. In 1995 eBay had 122 users. A decade later it had 122m, thanks to a radical innovation no retailer could contemplate: letting users negotiate their own prices for goods they put on sale and ship themselves. Napster, Kazaa and other music sharing systems have disrupted the traditional business models of the music business by revolutionising how music is distributed. Zara has revolutionised high street fashion

retailing with an organisational model that allows it to respond to changes in fashion almost week-by-week. Mobile phones have become a mass consumer product in little more than a decade largely on the back of new entrants Vodafone, Orange, Nokia with new services and business models – such as texting and pay-as-you-go.

Education will only provide a personalised experience, which engages individual commitment, if the places where learning takes place rethink and remake themselves. Some of that innovation may come from new entrants into education, for example media companies and others using new technologies for mass, peer-to-peer distance learning and private education providers setting up new schools. Some may come from social enterprises seeking to innovate new approaches to community based learning. But much of it must come from state schools finding new ways to organise themselves often through collaboration, to allow more networked, flexible and adaptive forms of organisation to emerge. If education follows the path of most other industries then giant Fordist factories of learning – mass secondary schools – should be replaced by networks of much smaller institutions, which overcome the limitations of their small scale by sharing resources. In education, as in so many other fields, product innovation depends on organisational innovation. We have only just begun.

The Research

Over the Autumn of 2004 we visited several LEAs and within each authority several schools, as well as federations, leading edge partnerships and individual schools recommended by their peers. Details of which schools we visited can be found in the appendix. We set out to explore a number of questions about personalised learning hoping that the next practices we uncovered might better inform the dialogue between policy-makers and practitioners.

- What does personalised learning mean to those trying to make it a reality in schools?
- How do schools need to change how they work to make personalised learning possible?
- What are the implications of personalised learning for collaboration between schools and with other partners outside education?
- What kinds of collaboration are most effective in supporting personalised learning and how are they funded and lead?
- How does personalised learning and collaboration feed improvements in education across the system as a whole and what is the role of the centre in propagating change?