Working Paper 1

Bridging the Knowledge Gap

A study of knowledge exchange schemes between schools and universities

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Working papers

1 Bridging the Knowledge Gap

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Purpose

This report is designed for people who are either involved in a partnership between a university and school(s) or are considering setting one up. It offers ideas about ways of thinking about such a scheme and practical advice based on a study of a range of existing schemes in a number of European countries.

Background

Historically practices in schools have tended to develop through the sharing of experience between professionals within and between schools. In recent decades, however, doubt has been cast on whether such peer-to-peer approaches are sufficiently reliable as a basis for decision-making and investment at school level. It is often not easy to know whether one practice is likely to be more effective than another or whether a practice believed to be effective in one situation will transfer to a different one.

These doubts have given rise to a growing interest in the use of research evidence to inform practice. This trend is reflected in many branches of public services, including healthcare, social care, education and policing and also in many countries of the world. However, the communities responsible for producing research and those responsible for running schools have developed quite separately historically and, in many countries operate under quite different conditions. As a result it is not in general easy for people involved with schooling to find and make use of research evidence unaided. Likewise researchers may not find it easy to organise, fund and carry out the kinds of research that produce the knowledge that schools most urgently require. For these reasons (and others) partnerships have sometimes been developed between universities and schools with the intention of overcoming some of these difficulties.

A number of individuals in several European countries recognised the importance of these partnerships and came together in 2011, as part of the EIPPEE network, to explore ways in which they might learn from each others' experiences. The result is an ongoing study of School- University Knowledge Exchange Schemes upon which this guide is based. A complementary academic paper, as yet unpublished, discusses theory-based modelling of the process. Contact the author for details.

The study

The study comprises three elements. First: an online survey in which thirteen examples of schemes were identified in six EU countries and their key features compared[1]. Second: a workshop in Frankfurt in 2013, at which the results of the

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[1] *School-University Knowledge Exchange Schemes:* report of a survey presented at the EIPPEE conference in Frankfurt 2013. Available on request from Andrew morris ajmorris@blueyonder.co.uk

survey were discussed with members of a Special Interest Group within the EIPPEE network[2]. Third: an analysis of four particular schemes in greater depth and the development of theory-based models to help interpret them. A paper based on this was discussed at a workshop in 2014 to which the leaders of several schemes contributed[3]. The idea put forward in this booklet are based on a synthesis of these three elements.

Beliefs

There is a strong belief amongst those involved in such schemes that use of research evidence is the key to long-term sustainable improvements in educational practice and policy. It ought to become a central feature of normal professional practice. This means that ordinary decision-making, both in day-to-day classroom practice and in the development of strategy at institutional level, should draw on research evidence. At the same time, few of our informants believe that research evidence should direct practice; rather it should inform it, while recognising the crucial element of agency in a teacher's day-to-day practice.

As this report is based on case studies and discussion rather than rigorous trials of the impact of such schemes, the points below are to some extent subjective, though they draw on both empirical evidence and theoretical concepts.

Findings

Types

The study shows that many different kinds of school-university knowledge exchange scheme have developed and they exist in several countries of the European Union. Some, such as Menntamidja in Rekjavic are developing online spaces for knowledge sharing amongst school and university communities. Others, such as the Talent scheme in Rotterdam, provide an ongoing forum based on a municipality, in which school practitioners, university researchers and municipal officials all participate. Some focus on a specific problem by bringing together research-based experts with people involved in school leadership, regional policy and local practice. An example is the Essunga partnership in Sweden which addresses the issue of mainstreaming pupils with special needs. Others, by contrast, are developing an ongoing relationship between the university and schools, building trust and ways of working in order to tackle a variety of issues.

Circumstances

Just as there is great variety in the type of scheme so there is variety in the circumstance of each one. The case studies[4] show that the same practice applied in different contexts can produce different results. They show that the impact of a school-university collaboration depends on the precise conditions locally and the quality of relationships between the collaborating parties. A key factor is whether

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[2] Conclusions of SUKES workshop at EIPPEE conference Frankfurt 2013

[3] *School-University Knowledge Exchange Schemes*. Paper presented at EIPPEE conference in Oslo 2014

[4] *School-University Knowledge Exchange Schemes*. Paper presented at EIPPEE conference in Oslo 2014

the practice problem has been clearly indentified and the particular need for knowledge to help address it has been clarified.

Process

Based on the cases studies a sequence of stages in the process of studying and acting on problems of practice has been identified.

1. *Starting with how it is.* Experience in the various case studies shows the importance of starting a collaboration by recognising the actual situation as it is on the ground. The implication of this is that each party may have to dispense with their default starting point: it shouldn't be how you wish the situation to be, or what previous experiences tell you it might be or what your pre-existing concepts or ideologies suggest. Each party starts with an open-minded exploration of how it is.

2. *Exploring why it so.* Each party listens very carefully to what others are saying. This may involve some people who might be less confident stepping forward to express their insights. Others who are more accustomed to analytical thinking and expression may need to hold back to encourage other, more hidden perspectives through. The aim is to seek out deeper reasons for an imperfect situation; this may well involve people having to face up to facts or interpretations that implicate them, require them to change or make them feel uncomfortable.

3. *Developing an idea of change.* Even when a clear understanding of a problem and its causes has been established and accepted among the various parties, the change process may still not be explicit. A collaborative and sensitive approach is needed to thinking through a change process. This might involve very practical considerations such as finding the resources to retrain people or reorganise activity as well as conceptual ideas about how change happens.

4. *Working out what knowledge is needed.* Sometimes people feel they know what needs to be done and it's just a matter of getting on with it; others may feel the opposite – there is no basis to choose which path to take. Critical discussion is needed between the parties to identity precisely what needs to be found out, perhaps about the issues in hand or maybe the effectiveness of alternative strategies; perhaps it may about the change process itself. Either way the group will need to explore whether the knowledge needed is already available through previous studies or whether a new study needs to be carried out within the project. Cleary both the university and school perspectives are critical in this phase.

5. *Making the necessary changes.* Within the constraints of the school system changes need to be planned on the basis on the knowledge gained in

previous stages. The balance of decision-making may shift towards the practitioners and leaders at this stage.

6. *Assessing the outcomes.* Crucially important for the future success of any intervention is a carefully planned assessment of its outcomes. Again both parties have crucial inputs to make at this stage. Assessment tends to be independent of the wishes and hopes of the practitioners but also well tailored to the actual situation so that its findings are of real value in shaping future interventions.

Relationships

Both personal accounts given in the seminar group and evaluations of particular schemes (where they exist) often refer to the cultural and professional differences between the various communities involved in collaboration. In particular, differences are apparent in the planning approaches, timescales, modes of communication and incentives associated with universities, schools and municipal offices. These are serious, deep-rooted differences that will not simply be obliterated through goodwill. Academics need to publish papers in learned journals and compete intellectually, school leaders need to solve present problems for teachers and parents and officials need to satisfy politicians answerable to the electorate. Differences need to be accommodated in the design of a collaborative scheme in such a way that each party sees some pay-off for their community, while the project as a whole produces value for learners.

The interests of teachers and researchers need to be aligned and trust between the actors is the foundation of successful partnerships. This is not simple to achieve: it requires explicit attention and takes time to develop. A safe environment needs to be created to enable the actors to let go of their routines. One way into this is to develop an understanding on all sides that that the competences of each groups are complementary to one another, not in competition or ranked. Thus some players will be more skilled in project management others in statistical analysis; some will favour scepticism in the interpretation of data, others optimism about the possibilities of improvement. All are needed at some point in the process. There are many stages in the full process of evidence informed change. One community will lead on the specification of the problem, another on the design of a study; one is skilled in research methods, another in managing behavioural change; both are essential to the interpretation of results and drawing out of implications for practice. Each actor plays some kind of role at each stage of the process but assumes a leading role at the point at which their particular expertise is most needed. None of this is easy: it requires an insight into each others' way of working and a readiness to accept leadership from outside one's own community at some point in the process. It is for

this reason that the effort taken to build trust in the early stages pays huge dividends in the long run.

Knowledge and uncertainty

Though there may be a wish by practitioners on the ground and their counterparts in the municipality for knowledge that provides solid answers to clear-cut problems, rarely does this prove possible. Problems may not be so clear-cut in reality and knowledge derived from studies tends to be conditional, hedged around with caveats. This may be because the study was small-scale, using methods that yield less reliable results or it may be because results gained in one context cannot be securely transferred to another. There is an inherent uncertainty in much knowledge, even when gained through research.

An important message from our case studies is that uncertainty needs to be distributed between all the actors, it should not just be the researchers who entertain it; teachers, leaders and officials also need to. We should not continue with the tradition that teachers deal with fixed, codified procedures whereas academics entertain doubts, nuances and ambiguity. A major strategic problem arises with politicians who necessarily look to public opinion as well as research evidence. For them expressing uncertainty is particularly difficult. It many cases it is equally hard to persuade funders to back a project in which uncertainty is openly discussed.

The usefulness of evidence for practical purposes is not only constrained by the uncertainties inherent in it, it is also limited by its applicability. After all, evidence is simply information; it is not in itself a guarantee of successful change. To turn it into the kind of knowledge capable of altering practices and behaviour human brains are needed. In particular brains that can weigh up costs and benefits, judge when to invest in reform and present ideas persuasively so that resistance to change is overcome. For this to happen the concept of knowledge needs to be broad; the experience and know-how of practitioners needs to interact with evidence from research so that workable plans for improvement action can be drawn up. This is not easy; it inevitably involves professionals from quite different spheres working together, even though the rewards and incentives that motivate their work may differ starkly. For this reason, for effective school-university partnerships, attention needs to be paid to the development of strong professional relationships within the collaborating community

Models and perspectives

Fortunately the field of evidence utilisation is no longer itself an evidence-free zone! There are Centres that study the issue and several useful models and theoretical perspectives have emerged that help us understand the process. In applying some of

these to the school- university schemes we have looked at it has become clear that no single model suits all situations. Three theoretical approaches to evidence-use that we have found useful are:

- *Evidence based practice*, in which mediators translate findings from high calibre research about what is effective and practitioners then make informed decisions about their provision in the light of them

- *Research development diffusion*, in which practice-oriented researchers draw on theories and de-contextualized research, and mediators translate this into reports, policies, teaching materials and professional development programmes for practitioners.

- *Knowledge communities*, in which traditional roles are maintained as a diverse group of actors are mutually engaged in a partnership of knowledge exchange in which they work collaboratively to address an educational issue.

We have found that the actual schemes considered in our study have aspects of all three of these approaches. In considering the design of a new scheme these three perspectives may be helpful in analysing what is expected to be achieved and how collaborative relationships might best be developed.

Teachers become the learners

For an experienced teacher, long after they were initially trained, it can be hard to relinquish their pre-eminent position as 'the one who knows'. However, this is just what is required if teachers are themselves to become the learners, responding to the messages from research. These may contradict a teacher's past experience or conflict with their habitual ways of teaching and, understandably, this may provoke resistance. But if absorbing evidence from research places the teacher in the role of learner, perhaps some aspects of the learning theory they normally apply in relation to students may prove helpful applied to themselves. For example, just like their students, teachers need to be supported in expressing their prior understanding of a teaching practice before being expected to give it up in favour of one they have not tried before. And, just as in other aspects of life, they will require strong evidence before being persuaded to change the habits of a lifetime. As with any other learning the evidence being presented will need to be relevant to the actual context of practice.

Tools to help teachers

As with any other kind of change teachers are expected to make, evidence-based changes benefit from clear incentives and constructive support. In a number of countries resources are gradually appearing which help guide the practitioner

through evidence-based changes. For example websites have been developed that identify the relative effectiveness of various pedagogic practises and offer guidance about using them. The *Toolkit for Teachers* developed at Durham University for the Education Endowment Foundation in the UK is one; another is the *Best Evidence Synthesis* from the New Zealand ministry of education. Other websites offer guidance and training materials for people wishing to start using research evidence for practice improvement. Even more helpful for new evidence users can be examples of centres and networks that are already making explicit use of research evidence and providing support for the practitioners involved. A list of organisations that participated in the survey is given at the end.

Challenges

Our study suggests that however strong one's belief in the value of evidence is and however enthusiastic one's supporters are, there are nevertheless many challenges inherent in collaborating across the knowledge and practice domains. Leaders of existing school university knowledge exchange schemes in different European countries have identified some of these in the course of this project. As one of them pointed out, it can be all too easy to lose sight of the original goal of an initiative in the excitement of collaboration. Perhaps more troublesome is the repeated experience of scheme leaders from different countries that shifts in national and local policy occur too frequently. This makes it hard to make justifiable funding proposals for evidence-based approaches that operate over the long term. As a result activity may be biased towards shorter term issues.

A further challenge arises once funding for an evidence based initiative has been secured. Funding bodies may be looking for some kind of universal guidance to emerge as a product of an evidence-based enquiry. With the variations in context with schools of different kinds, operating in different social and economic circumstances it can prove very hard or even misleading to produce guidance that is applicable to all. An overriding message from this study is that in general "no one size fits all" when using research evidence to improve practice.

Further information

The study on which this Guide is based is part of an ongoing collaboration between partners in four EU countries. A Special Interest Group of the EIPPEE network is associated with the study and members receive occasional updates and invitations to international workshops. If you would like to be added to the mailing list for this, please contact the coordinator, Andrew Morris at ajmorris@blueyonder.co.uk

Organisations that participated in the survey

Country	Institution	Name of Scheme	Focus of Scheme
Iceland	The Education Center, University of Reykjavic	Menta Mioja	A framework for forums for research and development projects across different sectors and educational issues
UK	Institute for Effective Education, University of York	The Yorkshire Informed Practice Initiative (YIPI)	A school engagement process for selecting and implementing evidence-based programmes
UK	Coventry City Council and CfBT Education	The CfBT/Coventry Anti Bullying Project	Tackling bullying in Coventry schools
Netherlands	RISBO Research, Training & Consultancy Agency, Erasmus University, Rotterdam	Rotterdam Talent Knowledge Network	Building a community of local educational expertise that supports policy development and educational practice in Rotterdam
Sweden	National Agency for Special Needs Education and Schools (SPSM) in Sweden, & Borås University College.	Essunga Municipal School: Inclusion and goal attainment	Use of research evidence to create a culture of inclusion in the poorest goal attaining municipality
Sweden	12 municipalities and their schools, supported by National Agency for Special Needs Education and Schools (SPSM) other national Education Agencies and the university College of Malmö	Creating Inclusive Learning Environments	Creating more inclusive learning environments, using research as an impetus for change and for creating new knowledge through the project