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Research on the impact of the School Improvement Partnership Programme

Interim report

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1. Introduction

This interim report first briefly considers literature relevant to the research to provide a context and to inform the conceptual framework of the School Improvement Partnership Programme (SIPP) programme and associated research regarding school improvement and collaborative enquiry. This is followed by a summary of known developments and progress to date across those partnerships engaged with the Programme at the time of writing. The report then presents tentative emerging themes pertinent to the Programme's aims and highlights issues for consideration to inform the development of the SIPP.

1.2 The evaluation: aims and approach

In December 2013 Education Scotland commissioned the Robert Owen Centre for Education Change to evaluate the impact and to provide research support for the School Improvement Partnership Programme (SIPP) during 2013 and 2014. The overall objectives for the Centre's project were as follows:

- to provide tailored support to up to 10 individual partnership projects which are part of the SIPP
- to assess how well the overall SIPP, and each individual partnership project within it, have been initiated
- to assess the extent to which the SIPP has contributed to its intended intermediate outcome
- to make recommendations for the future development and potential scale-up of the SIPP.

In order to address the first of these objectives the research team worked collaboratively with stakeholders to help develop practitioner enquiry approaches across eight of the 10 originally planned partnership projects in different areas of Scotland during the period December 2013 to March 2014 (two partnerships were still to submit or agree finalised proposals at the time of writing). Prior to the involvement of the University team, the Partnerships had prepared proposals for their involvement in SIPP. Their respective focus and developments are outlined in Section 2. The remaining three objectives required the Robert Owen Centre to conduct an external evaluation of the SIPP. For this strand of the project the University team sought to:

- determine how well the overall Programme and individual partnership projects had been implemented to date
- assess whether the Programme as a whole has contributed to teachers' learning and development – particularly in the area of tackling disadvantage in Scottish education.

For the external evaluation a series of sub-aims and evaluation questions applied. These were:

1. How well was each partnership project initiated and could it have been improved?

2. How well was the overall programme implemented and could it have been improved?

3. Did teachers build effective working relationships, and what factors supported or inhibited this?

4. What forms of collaboration were most and least effective in identifying a focus for partnership projects?

5. Did teachers have an increased understanding of evaluation, and what factors supported or inhibited this?

6. Did teachers find out more about leadership development, opportunities to take on new roles and responsibilities, and effective teaching and learning approaches?

7. Do teachers have an increased understanding of disadvantage and its relationship with other factors such as health, wellbeing and student outcomes?

8. Are teachers using more effective teaching and learning approaches with learners from disadvantaged backgrounds?

1.3 Research methodology

The overall project evaluation methodology is detailed in Appendix 1. The main methods that have produced the findings for this interim report were:

- An on-line survey of teachers, local authority personnel and other stakeholders involved in the partnerships. This was conducted in February 2014. This included closed and open-ended questions to elicit information on reported progress to date in the respondent's SIPP project, perceived impact and comments on any challenges that had emerged to date. This provided base-line data on the overarching aims and objectives of the SIPP programme that will allow comparisons with data gathered using the same questions towards the end of the project.

- The survey was administered on-line with an email invitation being issued by the officer responsible for SIPP co-ordination in each participating local authority to those teachers and other authority colleagues known to be involved in the Programme at that time.

A total of 46 responses were received by mid-March:

West Dunbartonshire	20%	Orkney *	-
Renfrewshire	13%	North Lanarkshire *	-
Angus	4%	Midlothian	2%
South Ayrshire	2%	East Lothian	-
Edinburgh City	20%	Glasgow City	7%
East Renfrewshire	20%	Fife	2
Falkirk	2%	Inverclyde	2%
South Lanarkshire	2%		
Argyll and Bute	2%		

The respondents were mainly headteachers, local authority officers and class teachers involved in their partnership.

Professional title of respondents N=46	
Headteacher	32%
Depute Head Teacher/Assistant Head Teacher	12%
Principal teacher	10%
Class teacher	20%
Education Authority representative	23%
Other	4%

The majority of respondents were from the primary sector (44%) and almost all were active in one or more aspects of implementing the partnership work.

Role in the SIPP partnership N=44	
I am responsible for coordinating the partnership activity within my school	43%
I have a role in implementing the partnership activities	43%
I have a role in conducting research and enquiry regarding the partnership activities	23%
I have no active role within the SIPP	2%

- Informal and exploratory discussions with Local Authority personnel and teachers involved in the SIPP Programme during the period December 2013 to March 2014. These were conducted during researcher liaison, support visits and local and national SIPP partnership meetings and events.
- Insights and feedback from Education Scotland contacts working to support the partnerships.
- Observation of SIPP activity at local and national partnership meetings and events during the period December 2013 to March 2014.
- Examining partnerships' initial and developing documentation, plans and reports during the period December 2013 to March 2014

The considerable variety of partnership project designs and their foci as well as the differences in the length of time each had been running when the survey was conducted meant that evidence of progress available to respondents also varied. The research team's collaborative working with partnership teachers and local authority officers enabled valuable illuminative insights to be gathered on the processes and issues involved in establishing the partnerships and the associated practitioner enquiry activities. However, at the time of writing, the majority of information and data on progress and emerging impact was from those partnerships that were furthest ahead with their plans. Over the course

of the Programme, the external research will complement the partnerships' own evidence to provide formative and summative findings.

1.4 Context and background

The School Improvement Partnership Programme (SIPP)

Scotland's education system performs well in cross-national comparisons, however there are enduring social inequalities in participation and achievement (OECD 2007, Machin et al. 2013, Russell 2013). Raising educational outcomes, especially in disadvantaged communities, requires the alignment of change processes in curriculum development, teacher development and school self-evaluation (Menter et al., 2010: 26). Devolution of responsibility and supported risk taking requires robust evaluation and capacity in the effective use of data to aid decision making at local level. Empowering Scotland (Scottish Government 2013: 54) recognizes the importance of evidence-informed decision making in 'closing the opportunity gap' and has pledged to 'continue to improve the level, focus and frequency of evidence used by education staff to improve standards and drive up attainment.' The school improvement partnering strategies at the heart of the School Improvement Partnership Programme (SIPP) aim to build on a body of international research that confirms the value of school-to-school networking and cross-authority partnership work as key levers of innovation and system improvement (Fullan 2013).

SIPP then, is a solution-focused approach to Scotland's attainment issues with a focus on innovating to tackle educational inequality. The Programme draws on a wealth of international educational research and practice demonstrating that the most effective school improvements are locally owned and led by teachers and school leaders working in partnership and collaboration with like-minded professionals and their learning community. The Programme's partnerships aim to develop a shared commitment to improving outcomes for all children and young people. The intention is that well supported partnerships will contribute to significant and sustained improvement and raised attainment. The Programme aims to encourage staff to embed action research to learn from each other, experiment with their practice and monitor and evaluate change. School Improvement Partnerships are an action research programme involving a process of collaborative enquiry which creates leadership opportunities and professional learning. The Programme seeks to promote focused innovation by fostering a culture of mutual respect, 'co-production' and partnership, rather than hierarchy (Commission on School Reform 2013:64).

The SIPP is also a natural development of the implementation of the Curriculum for Excellence, with its emphasis on social inclusion and also policies and approaches to career-long professional learning outlined in Teaching Scotland's Future (Donaldson 2010).

Partnership support

There is a range of external support available to the programme. The purpose of this support is to provide critical friendship, support the partnerships to build internal capacity for educational improvement and develop sustainable ways of working beyond the duration of the programme. Named individuals from

Education Scotland, Local Authorities and the University research team are working to support partnership activity. These support teams have been termed 'Trios'. Each trio will be able to provide their own critical reflection on the process of how the partnership project they are supporting contributes to the overarching programme enquiry. The SIPP Trios' level of input and support will vary depending on the requirements of each partnership.

Further support and sharing of ideas and practice is provided through informal monthly meetings for partnership colleagues and members of the SIPP Trios. In addition, there are regular national events to share experience and progress.

Conceptualising school improvement

School improvement can be approached from the level of the teacher, the school, the school operating within an educational system, or beyond the school. Change may be initiated at each of these levels such as at the level of the individual teacher regarding issues within the teacher's control. Similarly, changes in policy or leadership may affect change outwith the classroom. Most issues relevant to educational practitioners and policy-makers, however, involve the classroom, the school, and the educational system concurrently. It is for this reason that school improvement is most effective if it involves every level:

> '…working with politicians and policy makers to influence systemic change and working with schools and teachers are not mutually exclusive activities… a complex mix of top down and bottom up activity, tailored to specific contexts, is required to optimize improvement efforts (Chapman 2012: 43).'

This type of school improvement, involving different groups of people, requires cooperation on multiple levels and informed with a collaborative enquiry-based approach (Ainscow et al. 2012; Chapman 2008; Cochran-Smith & Lytle 2009). Collaboration between schools and between agencies, can be a means of solving problems by helping to "...reduce the polarisation of schools" (Ainscow et al. 2012: 204) and build a "…culture of mutual respect, co-production and partnership rather than hierarchy" (Commission on School Reform 2013: 64). Guidance from Education Scotland for potential partnership members draws on the research literature to provide core principles and a recommended framework approach for developing a partnership within the Programme. (Education Scotland 2013).

Collaborative enquiry to support school improvement and tackling disadvantage

A crucial component of an effective SIPP partnership is integral collaborative enquiry. The use of collaborative enquiry to inform school improvement for the purpose of tackling disadvantage is an approach which combines school-to-school collaboration with locally initiated bottom-up enquiry. The knowledge which underpins this approach has been generated from school-based networks such as: Improving Quality Education for All, Coalition of Research Schools, Schools of Ambition, Network Learning Communities Programme, Best Practice Research Scholarship programme, 20:20 Initiative, Manchester City Challenge, etc. For example, the findings from a three-year research

project involving 25 schools in England, suggested that collaboration between schools is more effective than if it is restricted to a single school because, "…deeply held beliefs within schools prevented the experimentation that is necessary" (Ainscow et al., 2012: 201). Similarly, competing beliefs or priorities were listed as an inhibitor to success in the Schools of Ambition 2009 report (Scottish Government 2009). The greater efficacy of teacher collaboration between partnered schools has also been reported by the National College for School Leadership's (NCSL) Networked Learning Communities programme. Their findings suggested that colleagues outwith their own school may be more likely to take risks revealing their own weaknesses and gaps in their knowledge than those teachers collaborating within their own school (DfE 2005).

Further benefits of school partnerships were found in the Manchester City Challenge when the collaboration extended beyond schools and across the boundaries of local education authorities. Partnerships between schools residing at greater distances appeared to benefit from the elimination of competition which exists between schools serving the same neighbourhoods (Ainscow 2012). Ainscow contends that these long-reaching partnerships "…allowed a wider range of pupils to benefit from best practices by both transferring and 'generating context specific knowledge' " (Ainscow 2012: 296).

Attributes of effective networks and partnerships

Social network theory, actor-network theory and constructionist organisational theory can each be used to examine the various means of transferring, sharing, or generating knowledge within a school partnership. Accessing this new knowledge requires a highly functional partnership in which various attributes are in place. Nine core attributes of effective networks have been identified as the result of a review of different forms of network and learning communities (Kerr et al. 2003) and are particularly pertinent to SIPP. These core attributes are listed with key questions below:

1. Participation – Are key forms of participation being combined and sustained?

2. Relationships and trust – Are 'soft' structures, such as trust, being developed?

3. Coordination, facilitation and leadership – Does the network have both vertical and horizontal forms of coordination, facilitation and leadership to keep people engaged and moving in a common direction?

4. Communication – Are there any barriers inhibiting effective communication?

5. Structural balance – Is there a balance between network processes and structures? Too heavy a structure can drain initiative and strangle the dynamism of a network; too light a structure creates confusion and inhibits the growth of depth and reach in a network.

6. Diversity and dynamism – Is the network bringing together disparate people and ideas? Are there indications of volunteerism?

7. Decentralisation and democracy – Is there enough decentralisation to allow participants to address local interests and issues while still operating a collaborative environment that encourages inclusive and transparent decision making?

8 Time and resources – Does the network design include succession planning to prevent member burn-out?

9 Monitoring and evaluation – Is there evidence of participants taking part in reflection and enquiry (to highlight 'what works and why)?

This list is a starting point to be applied to networks seeking to make a difference in their community. With each SIPP partnership having to deal with a particular context and needs, particular 'tools' will need to be developed to inform and promote collaborative enquiry and partnership working. Hadfield and Chapman (2009) provide a number of instruments based on reflective questions for school staff to help identify what types of networking and collaborative working best suit their school context and capacity (see Hadfield and Chapman 2009:40-44). The University research team and their SIPP partners will draw on such research to support efforts to address the local objectives. Further relevant insights from the literature regarding concepts and theories that will inform our analysis are provided in Appendix 3.

2. The Partnerships: Progress and emerging themes

There are a number of different kinds of partnerships developing within and across education authorities. Some involve partnerships within an authority and others involve schools from different authorities. Some are cross-sectoral whilst others involve different agencies. Appendix 2 provides a summary of the current SIPP partnerships and their respective partners and aims at the time of writing.

It is important to note that the partnerships have developed at quite a different pace to one another and this has been reflected in the amount of information and evidence available on progress. However, as detailed in Section 1, there is sufficient information available to the evaluation to highlight examples of interesting practice and to identify some emerging issues that can inform the development of the overall Programme. These tentative and emerging findings are arranged under the main external evaluation aims.

2.1 Aims 1 and 2. How well was each project initiated and implemented and how could these have been improved?

From the various evidence sources it is clear that the partnerships have taken time to develop and agree their proposals and then had to invest time to establish lines of communication to facilitate the organisation and operationalising of the partnerships. This activity has been particularly important where there are many schools and organisations involved and more than one local authority. The role and commitment of the local authority coordinator, school management and those with responsibilities for developing and running the various partner initiatives has been crucial.

The supporting SIPP Trios have taken some time to establish and function as a unit in supporting their respective partnerships. Here, taking time to establish rapport and relationships with key stakeholders in the partnerships has proven important. An example of where this is working well is the West Dunbartonshire and Renfrewshire partnership where the local authorities have provided substantial guidance and support to the partnership teams as well as time to

meet and plan. Here, the SIPP Trio has worked as an integral component to guide both the educational and research developments.

The developing action research and enquiry strand of the partnerships means that there is process of on-going reflection and refocusing to best meet their respective aims. This has emphasised the need for the SIPP Trios to maintain their collaborative working and to employ a mix of reactive and proactive advice and support.

2.2 Aim 3. Did teachers build effective working relationships, and what factors supported or inhibited this?

As with Aims 1 and 2, there is evidence of local authority coordinators and partnership leaders recognising the importance of developing effective working relationships in establishing the partnership teams. Where local authorities have brought the key personnel together at the start of the process to plan and discuss their activity this has proven crucial in helping to focus the vision of the various initiatives and to build networks within and across partner establishments and organisations to drive and sustain their activities. Parents and pupils have generally not been consulted during the planning phase across the partnerships. However, staff across the partnership schools were typically consulted and involved in the setting up process (only 6% and 3% of respondents respectively reported that this had not happened in their partnership). As the research proceeds, we will be able to assess whether and how the partnerships foster effective working relationships and consult more widely with their communities.

2.3 Aim 4. What forms of collaboration were most and least effective in identifying a focus for partnership projects?

At this stage in the research there are some emerging indications from the more established partnerships that that there are forms of collaboration that reflect what is known from the literature about effectively developing a focus and system for activity. For example, in three partnerships we can see that the local authority has been instrumental in fostering networks that are in line with those identified by Wohlstetter (2003) in her study of Los Angeles networks that drew schools together into networks that facilitated joint problem solving;

> 'A network… is a group of organisations working together to solve problems or issues of mutual concern that are too large for any one organisation to handle on its own (Mandell, 1999). Applied to schools, the idea of networks suggests that schools working together in a collaborative effort would be more effective in enhancing organisational capacity and improving student learning than individual schools working on their own (Wohlstetter & Smith, 2000).'

> (Wohlstetter et al., 2003, p.399)

In such cases, during the crucial early stages the local authority contacts have worked across their authorities to provide a stimulus, guidance and ensure time was available for teachers to build their capacity to plan and implement their projects and interventions. This process has been informed by conceptual and methodological guidance from the University team. The partnership teams have then been working collaboratively to put working groups in place with

responsibilities to develop aspects of their intervention, develop enquiry and evaluation and share lessons learned across the partnership.

The baseline survey also indicates that there are initial developments regarding the Programme's impact on promoting opportunities for teachers to collaborate and share ideas. Table 1 shows that the majority of respondents believe that the Programme has fostered collaborative activity across their partnership.

Table 1: Reported impact on partnership and networking

Development and impact	To a large extent	To some extent	A little	No change	Does not apply	Don't know
Partnership and networking (n=34)						
More opportunities for teachers to share their ideas and plans with colleagues across the partnership	38%	35%	9%	3%	12%	3
Increased collegiality between colleagues across the partnership	41%	32%	9%	-	15%	3
Partnership working across schools and local authorities with a focus on exploring specific issues relating to educational inequity	38%	32%	15%	-	12%	3
The development of arrangements to support long-term collaboration and new approaches to capacity building.	24%	41%	9%	6%	15%	6%
The involvement of an appropriate range of partners to support the Partnership's activities.	15%	36%	19%	-	15%	15%
Collaborative working across the partnership	36%	29%	21%	-	12%	3

2.4 Aim 5. Did teachers have an increased understanding of evaluation, and what factors supported or inhibited this?

As with many of the research questions and indicators, it is too early to gauge the full extent to which the Programme has fostered an increased understanding evaluation and collaborative enquiry. This will become clearer as the research and Programme progress. The partnerships received initial documentary guidance and workshop input from the research team and the Trio partners to highlight principles and approaches regarding collaborative enquiry and action research. At present the University team has observational evidence and planning documents that show the establishment and composition of enquiry working groups at school level across the partnerships and their developing focus. These enquiry systems are at various stages of developments and are also fluid, developing to reflect context and initial findings. Clearly, the external research will gather further and more diverse evidence to assess the extent to which the collaborative enquiry is sustained and its impact within the Programme.

To date, the research team has seen a high level of engagement by teachers with the collaborative enquiry process in those partnerships that have shown progress in operationalising their plans and have brought staff together to develop their initiatives. Despite varying levels of research expertise and experience, observation of SIPP workshops reveals teachers' commitment to work with the research team to develop their own research and enquiry systems. The baseline survey also reveals that the majority of respondents

believed that the Programme was already having positive impact on participants' self-evaluation and enquiry:

Table 2: Reported impact on teachers' understanding of evaluation

Development and impact N=27	To a large extent	To some extent	A little	No change	Does not apply	Don't know
Increased teachers' reflective practice and self-evaluation	29%	32%	12%	3%	12%	12%
The use of systematic enquiry and evidence gathering to inform practice and monitor developments	24%	27%	15%	9%	15%	12%

2.5 Aim 6. Did teachers find out more about leadership development, opportunities to take on new roles and responsibilities, and effective teaching and learning approaches?

At this stage in the development of the partnerships and research it is too early to assess the extent to which the programme has fully facilitated leadership development opportunities. However, there are interesting early indications of this in the initial development stages. For example, the baseline survey indicates that there has been some development in the creation of leadership opportunities and a commitment to developing leadership opportunities.

Table 3. Initial Partnership impact on leadership development

N=33

Development and impact	To a large extent	To some extent	A little	No change	Does not apply	Don't know
Leadership						
The creation of leadership opportunities and professional learning of staff at all levels.	30%	36%	-	12%	18%	3
A commitment to developing leadership opportunities	37%	37%	-	9%	12%	3

2.6 Aim 7. Do teachers have an increased understanding of disadvantage and its relationship with other factors such as health, wellbeing and student outcomes?

Aim 8. Are teachers using more effective teaching and learning approaches with learners from disadvantaged backgrounds?

The aims, 7 and 8, are essentially outcome questions that the research will be able to answer towards the end of the study. However, initial insights from our work with the partnerships and the baseline survey reveal that those involved in the partnerships are focusing on the nature of disadvantage in education and the inter-related factors and reflecting these in their teaching and learning strategies.

In the baseline survey, open-ended responses revealed that partnerships are developing specific learning and teaching approaches strategies and

developing assessment that better recognised disadvantaged learners, promoting higher order thinking skills. Often these were embodied in interventions to improve achievement and attainment in mathematics and literacy. Some referred to using improvement science methodologies to identify approaches to supporting young people to achieve positive outcomes.

Some of the initiatives or interventions focused on gender and ethnicity but most of these frequently and explicitly recognised and took into account social and economic disadvantage and the link with reducing inequalities.

Often the development of specific learning and teaching approaches to address disadvantage was linked to measures to engage with parents, hoping to enlist them as collaborative partners in their children's learning.

The survey also showed that the majority of responses thought that their project work was making an initial positive impact on staff awareness of effective teaching and learning approaches with learners from disadvantaged backgrounds and their ability to respond to such needs (Table 4a).

Table 4a. Impact on staff awareness and approaches to address inequality

Development and impact	To a large extent	To some extent	A little	No change	Does not apply	Don't know
Impact on staff awareness and skills to address inequality (N=34)						
Increase in teachers' <u>knowledge</u> of approaches to address inequality in education	26%	35%	6%	9%	12%	12%
Increase in teachers' <u>skills</u> to address inequality in education	21%	35%	12%	9%	12%	12%
Increase in teachers' <u>confidence</u> to address inequality in education	12%	44%	12%	6%	15%	12%

The majority of survey respondents also indicated that their partnership work was beginning to influence broader awareness and structures to tackle inequality (Table 4b)

Table 4b. Broader impact on addressing the 'inequality agenda' across partnerships

Development and impact	To a large extent	To some extent	A little	No change	Does not apply	Don't know
Broader impact on addressing the 'inequality agenda' across partnerships (N=34)						
Implementing more approaches to address inequality in education across your school	15%	36%	7%	12%	21%	9%
Increased teacher networks addressing inequality in education	15%	39%	7%	15%	18%	6%
Increased understanding across staff of disadvantage and its relationship with other factors such as health, wellbeing and pupil outcomes	9%	33%	19%	12%	18%	9%
Introduction of particular teaching and learning approaches for learners from disadvantaged backgrounds	12%	33%	9%	18%	18%	9%
A commitment to reciprocity and mutual benefit to all involved.	39%	12%	12%	7%	21%	9%

Implementing approaches to address inequality in education across your school	17%	31%	6%	19%	22%	6%
Focusing on closing the achievement gap	38%	18%	12%	6%	18%	9%

While the respondents were able to indicate certain broad impact within their partnerships, almost all of the open-ended responses were cautious and stressed that the programmes were at an early stage and this meant that it was not possible to provide details of outcomes regarding their main objectives.

During support visits, verbal feedback from staff involved in those partnerships that had made progress in developing their strategies, interventions and enquiry approaches, indicated that the main progress at this stage had been getting their collaborative plans in place. Indeed, for some the greatest achievement to date had been establishing lines of communication with their partnership colleagues and disseminating plans and strategy to staff across schools. As one responded commented:

> *'Collaboration with another authority was slow to get started and there was a lot of repetition of initial information. Everything has been made clearer only latterly'.*

Often, staff stressed that their objectives to make a difference to inequalities in education and to engage parents were a challenging and that making an impact would likely take a long time.

2.7 Issues and tensions

The main issues and tensions to emerge to date from our feedback can be summarised as:

- communication: a) local authorities understanding the proposal process and deadlines and the levels of funding available and b) by local authorities and others of SIPP project aims across stakeholders in the respective partnerships;
- issues of the SIPP planning and budget timing not always matching the planning timetables of schools and local authorities;
- finding time for partnership planning activity;
- synchronising SIPP Trio activity and diaries to match the needs of the schools.

In most cases, it would appear that these challenges are being successfully addressed but there are two cases where interested local authority partners applied for funding but, because of differences in planning systems and timetables, were unable to take up the opportunity for the first tranche of partnership activity. It is hoped that both will be able to participate in the next tranche of the Programme.

3. Conclusion

The interim findings reveal two key findings; firstly, the Programme has stimulated the imagination and creativity of a number of local authorities and their schools and often their other agencies to devise often diverse and complex partnerships and programmes to tackle inequality in education. Secondly, there is already evidence that some of the partnerships are becoming established and putting in place interventions that reflect principles of effective collaborative enquiry and practice.

The Programme is also facilitating collaborative networks that are, in the words of one participant, helping to 'establish a wiser 'professional learning community in order to develop teachers' confidence in using a variety of teaching strategies and working at inter-authority level'.

The diversity and varied contexts and complexity of the partnerships and their interventions have also brought with it certain challenges and has meant that progress has been uneven. It is arguable that such cross-authority and cross-sectoral innovations are ambitious and unique in Scotland regarding their scope and vision and that we should anticipate protracted partnership inception in some cases. There is evidence that the setting up process has also been influenced in some cases by issues of communication which again most likely reflects the complexity of the Partnerships but also the pace and timing of the funding process. Given the ambitious aspirations and goals of the SIPP, the partnership leaders were also wary about demonstrating impact within their original budget timetable. Such perceptions are now becoming more tempered as the idea that many of their goals are long-term but can only be realised by putting in place robust and effective systems and associated enquiry; which is the focus of their current work. Above all, the Programme can be seen as an ambitious experiment and a learning experience that will require participants receiving appropriate and timely support and encouragement if they are to rise to the goals they have set.

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Appendix 1: Project evaluation methodology

Introduction

It is important that measuring the success of the partnerships goes beyond using only traditional attainment data, particularly in the short-term. Therefore, each partnership will be asked to indicate what success will look like and from this appropriate measures will be developed. This could be a mixture of quantitative data such as attendance or exclusion figures and a qualitative assessment of engagement levels regarding a target group of young people. It may also include evaluating a new approach to learning and teaching and what have been the subsequent outcomes and developments.

The success measures therefore are likely to be different for each partnership reflecting their particular circumstances and objectives. However, we would suggest that while schools will have specific criteria for success grounded in their plans, we will look for more general criteria of progress regarding school improvement. These include:

- evidence of distributed leadership where more staff take up leadership activities to operationalise and manage their school plan;
- developments in attitudes of staff towards their roles;
- developments in the curriculum to better address the needs of young people;
- changes in staff awareness and knowledge regarding the needs of the target groups;
- increased levels of staff confidence to try new approaches etc, and, particularly, developments in learning and teaching approaches;
- a shift in children and young people's engagement with learning;
- a shift in young people's confidence and satisfaction with their learning;
- increased partnership working with other schools and, where appropriate, other agencies.

Longer-term success criteria will likely include:

- improved attainment and achievement for the target groups evidenced by a wide range of national qualifications and accredited programmes now available to schools and community partners;
- increased positive destinations;
- evidence of cultural and organisational change in the partnership schools.

It is also important that each partnership construct a narrative drawing on the accounts of school and partnership representatives, including young people's views of developments in the programme such as what they feel has worked or is beginning to work, what has been less successful and the reasons for success or otherwise. This qualitative evidence will provide explanatory information to help understand the processes involved across the partnerships.

Methodology for the partnership support and external evaluation

To effectively address the research objectives and questions and taking into account the particular issues and context across the partnerships the evaluation adopts a two-strand approach. Strand 1 supports partnership teams to develop and deploy their own action research enquiry/ evaluation. Strand 2 entails an external, yet collaborative, evaluation that assesses progress across all of the partnerships to understand the effectiveness of the overall project.

These two complementary and related strands will ultimately:
- support action research and enquiry across the partnerships;
- map and monitor the development of relationships, networks and practices within partnerships;
- identify and examine emerging key themes, patterns and trends including encouraging emerging practice within partnerships (e.g. the types of activities that are effective in addressing their objectives);
- identify and examine developments and intermediate outcomes in line with planned objectives emerging from the initiative;
- identify and examine facilitating and inhibiting contextual conditions within partnerships;
- provide formative feedback with implications for policy and practice including initial indications of the impact of partnerships and their potential for developing more equitable educational outcomes in Scotland.
- provide support to build capacity for self-evaluation across the partnerships.

Strand 1: Supporting partnerships to evaluate their activities

To be effective the School Improvement Partnerships require an approach based on action research and the process of collaborative enquiry. Strand 1 will, therefore, develops stakeholders' confidence and expertise in action-research and collaborative enquiry to gather the types of evidence required to address their evaluation objectives. The research team provides support to the partnerships as they use the processes of enquiry to move thinking and practice forward. The research team will work as an integral part of the support network provided by individuals from Education Scotland and Local Authorities to provide critical friendship, support the partnerships to build capacity for educational improvement and develop sustainable ways of working beyond the duration of the programme. The nature of the support activity provided by the research team will evolve over time as the needs of the partnerships develop but will involve:

- supporting workshops for each partnership team in order to strengthen their skills in using evidence and sharing each others' experiences to drive improvement efforts;
- providing direct support (using email, telephone and face-to-face) advice to the schools in designing and carrying out their inquiries in relation to their enquiry agendas;
- linking the work of the partnerships to relevant development and research activities nationally and internationally;

- occasional meetings with head teachers and senior staff in order to explore strategic implications of the findings of the research activities;
- supporting the teams in writing evaluative accounts of these processes.

The researchers will also analyse and document processes and outcomes of activity and impact in each of the partnerships they support. In this way they will produce detailed evaluative evidence that can be used to inform developments of future activity within the Programme and in other contexts, both in Scotland and internationally. This data and evidence will also inform Strand 2, the external evaluation.

Each member of the research team has been assigned to two or three partnerships and works collaboratively with the local authority officers and Education Scotland teams assigned to support each partnership. This approach and process also builds the evaluation skills of the authority officers and Education Scotland personnel and promote professional dialogue.

The partnerships work on a collaborative enquiry approach guided by an overarching framework comprised of eight broad overlapping phases:

1. analysis of context;
2. agreeing enquiry questions;
3. agreeing purposes;
4. making use of the available expertise;
5. collecting data;
6. making sense of the evidence;
7. deciding on actions to be taken;
8. monitoring outcomes.

These eight phases together make up a cycle of reflective action research. The insights and findings from Strand 1 will allow partnerships to understand the extent of their progress and the factors involved. The findings across the partnerships will also feed into the external evaluation's overall assessment of impact and progress (Strand 2).

Strand 2: External evaluation approach

This strand primarily addresses the second and third project aims, i.e.: 'to determine how well the overall SIPP programme and each individual partnership projects have been implemented and to assess whether the Project as a whole has contributed to teachers' learning and development – particularly in the area of tackling disadvantage in Scottish education'.

Whereas Strand 1 involves directly working with the individual partnerships to support them in devising, refining and conducting their own evaluations, Strand two of the evaluation will involve the aggregation of the individual partnership evaluation findings along with our own primary data collection to provide a coherent overview of the SIPP impact.

The research team's strong involvement in the design and implementation of Strand 1 ensures that the evaluation plans and programmes devised and operationalised by the different partnerships are sufficiently robust and valid to support the additional analysis carried out by the research team in Strand 2.

Moreover, direct involvement with partnerships will help them maximise the formative element of the action research.

Strand 2 has four main components (detailed below). Components i-iii will be based on a selection of partnerships while component iv will be applied to all partnerships. This is designed to give a balance of in-depth and overview findings:

(i) Identifying a cohort

The research team works in collaboration with Education Scotland and other key stakeholders to develop a rationale and sampling framework that facilitates the selection of partnerships to explore in detail using exploratory qualitative methods.

(ii) Mapping and monitoring the partnerships

The research team will a range of approaches including surveys and Social Network Analysis (SNA) to baseline partnership activity in the partnerships. A second data collection point towards the end of the Programme will enable the team to identify any shift in relationships within the partnerships.

(iii) Developing accounts of practice

This strand of activity involves developing case studies of the sample partnerships. The case studies will identify key structures put in place and processes within the partnerships and the outcomes they expect to generate. The research team then develops an appropriate logic model to understand the relationships between the preconditions and resources inputted and the inter-connected activities, outputs and outcomes of the programme. While causal relationships would be difficult and inappropriate to identify, this *Theory Of Change* approach looks at outcomes and applies critical thinking to the design, implementation and evaluation of the Project and support change in the various contexts (Vogel 2012). This allows the research team to track developments and practice in the field and identify critical incidences that facilitate or impede the development partnerships and their expected outcomes.

The design of the case studies will be informed by the initial and base line analysis involves site visits to each school in the partnership, documentary analysis, interviews with key stakeholders and observations of partnership meetings and activities. The analysis will identify key themes, patterns and trends both within and between partnerships.

(iv) Overview of all projects and synthesis

This part of Strand 2 involves a number of activities designed to collect additional data and produce a synthesis of findings with a distillation of the major lessons from all of partnerships. The evaluation will gather together individual partnership evaluations and their respective data to produce an overview of findings. Although each partnership is likely to have different aims and/or emphasis in their work e.g. gender equality, improving transitions, looked after and accommodated children, we expect the individual evaluations to reflect the overall research questions detailed in Section 3. This 'framework' will support the aggregation of findings and the discussion of experiences to

allow:

- collation and analysis of relevant documentation, evaluation findings, and summary reports generated across all of the partnerships;
- secondary analysis, where required, of available partnership data relating to their respective objectives.

In addition to gathering and analysing partnership data, a number of primary data gathering research activities will also be conducted with the main methods being:

- questionnaire survey of all relevant staff and young people involved across the partnerships (early in development of initiative and later in programme);
- targeted interviews and focus groups conducted with staff, young people and those at strategic level to discuss and reflect on emerging themes from the evaluation. This will occur towards the end of the initiative;
- A brief literature review of research on school improvement initiatives which will inform the analysis and provide a wider perspective.

Table A1 provides a summary of the proposed methods, rationale and expected outputs for this component.

Table A1. Summary of the Strand 2 (iv) methods, rationale and expected outputs.

Activity	Rationale	Expected Output
Analysis of partnership documentation, evaluation findings, and reports.	Identification of partnership aims, methods of working, key issues, successes. Provides complementary external component to internal partnership evaluations.	Contribute to the overview of projects, aims, methods of working, identified successes, and issues concerning sustainability
Secondary analysis of partnership data	Further analysis (where possible) of existing partnership data. Aggregation of individual partnership data should improve the robustness and generalisability of data. Provides complementary external component to internal partnership evaluations.	Provide generalised and more comprehensive findings. Will contribute to the indication of overall success. Identification of key drivers of success and an indication of overall sustainability.
Questionnaire survey (on-line) of **head teachers, local authority staff, key teachers and other staff and learners** involved across the partnerships (early in development of initiative and later in programme)	Supports the identification of initial initiative impact. Provides complementary external component to internal partnership evaluations.	Quantifiable indication of the specific and aggregated impact of the initiative over a fixed period of time using broader criteria of success.
Focus group interviews with staff, young people involved in a sample of the partnerships and strategic stakeholders (e.g.: ADES, COSLA, AHDS, SLS) (Approx. 40 interviews and 10 focus groups)	In-depth material to help identify the impact of the partnership towards the end of the evaluation Reflection and validation of emerging external findings. Provides complementary external component to internal partnership evaluation	Qualitative dimension to the impact of the initiative. Material will support the generation of cases studies and specific examples from practice.

Appendix 2: Overview of the SIPP partnerships

	Partnership	Establishments involved	Draft outline of Project
1	West Dunbartonshire and Renfrewshire	**Schools from West Dunbartonshire** • St Joseph's Primary • Edinbarnet Primary • Ladyton Primary • Linnvale Primary • St Michael's Primary • Whitecrook Primary • Renton Primary • Haldane Primary **School from Renfrewshire** • Auchenlodment Primary • Kilbarchan Primary • Lochwinnoch Primary • St Anthony's Primary • Thorn Primary	Specific areas for improvement include: • learners' attainment in numeracy/ maths and literacy • pedagogical skills of practitioners, • leadership of the agenda to raise attainment by Head Teachers and across schools. It currently includes 13 primary schools from across the two EAs and will involve building partnerships across sectors (including pre-5 partners).
2	Angus, South Ayrshire and Edinburgh	• Arbroath Academy • Ayr Academy • Holy Rood RC High School	The three secondary schools are collaborating to improve attainment of young people through improving the quality of feedback, attendance and parental engagement. The action research enquiry questions are: • Will regular feedback, both oral and written, result in raising attainment? • Does improvement in attendance result in improved attainment? • Does providing parents with clear expectations regarding parental engagement raise parental aspirations? / Does involvement in parental engagement result in improved attainment?
3	East Renfrewshire Council	• Crookfur Primary School • Thornilibank Primary School	The partnership involves two primary schools with a focus on raising attainment in maths with boys and learners from minority ethnic backgrounds through improved learning experiences. Evaluation will include impact on learners, parents and staff involving Psychological Services. The key focus will be:

			• To what extent has gender and EAL impacted on attainment? • What learning and teaching approaches would improve attainment for boys and pupils using English as an additional language? • How can schools further engage these learners and their parents?
4	Falkirk Council	• Falkirk High School cluster learning community • Grangemouth High School cluster learning community	The action research would be targeted at the current P6 stage for those children with low attainment in literacy, and would form part of an extended transition across P6-S1. The action research would consider multi-agency and cross-service aspects, such that the interventions are as holistic and effective as possible. This would include targeted and sensitive interventions to support family literacy, involving schools, parents, CLD and family support workers.
5	Orkney	Withdrawn from current SIPP stage	
6	North Lanarkshire Council	Withdrawn from current SIPP stage	.
7	Midlothian and East Lothian Councils	**Mid Lothian Schools:** • Beeslack HS • Dalkeith HS • Lasswade HS • Newbattle HS • Penicuik HS • St David's HS **East Lothian Council:** • Musselburgh GS • North Berwick HS • Preston Lodge HS • Ross HS • Knox Academy • Dunbar GS	The grouping targeted in the planned project would be children and young people who face the greatest levels of socio-economic challenge. The principal focus of this would be around transitions, and in particular, transition from P7 to S1, from the BGE to the Senior Phase and from school to positive destinations. This focus will allow the authorities to develop cross-sectoral work, enhance 'early intervention' and 'open up the learning' through developing the involvement of a wide range of interested partners and professionals.
8	Glasgow and Fife Councils		Local Improvement Groups will be set up as a key driver of improvement. There will be increasingly bespoke solutions to local priorities for improvement. There will be increasingly proportionate/flexible quality visits and models of

			engagement with/between establishments. Diverse and outcome focussed links between groups of establishments. Learning communities will still exist as key partnership organisers. There will be an increased role for Leaders of Learning in supporting aspects of school improvement and in modelling good practice in learning, teaching and assessment. There will be further development of Trio support activities and VSE processes conducted in partnership with/between establishments. There will be a greater focus on wider intra, and inter authority, partnerships (e.g. Fife) to support school improvement.
9	South Lanarkshire Council	Trinity High School	Utilising School Improvement Partnership funding South Lanarkshire aims to drive forward a number of aspects of the wider closing the gap agenda through the use of an Improvement Science model to further review, evaluate and develop strategies to close the gap between the bottom 20% of pupils and their peers. Working initially in one targeted secondary school: Trinity High School, with the aim of applying small tests of change, evaluating their impact of a caring significant adult in improving outcomes for individual young people and then modelling these (scaling up) across other secondary schools across the authority in the longer term.
10	Inverclyde and Argyll and Bute Council	• Clydeview Academy • Dunoon Grammar School	Both establishments are keen to close the gap between their high attaining students and those of lower ability. Both schools feel that there are opportunities to make a positive impact on the achievement of students through developing increased confidence in numeracy. It is felt that one of the vehicles to develop this confidence is the regular use of profiling and the

			celebration of student achievement. The focus of the action research will be: • Does the identified profiling champion with responsibility for a group of young people lead to improvements in their achievement? • Will the sharing of student progress through the use of profiling, lead to improved achievement for young people? • Will increased regular professional dialogue focused on profiling, within and across establishments, lead to improved progress for young people?

Appendix 3: Generating context-specific knowledge to inform school improvement

The generating of knowledge through participation in a network can be further examined through the lens of constructivism. Effective networks, such as successful school partnerships, are able to construction new knowledge and new language. Constructionist organisational theory suggests that "…collaborating organisations need to have sufficient cognitive distance for new insights to emerge but at the same time need to be similar enough for dialogue to be possible and constructive" (Nooteboom, 2004 quoted in Muijs et al. 2010: 10). The construction of new understandings within an educational network prevents individual schools or organisations from becoming myopic (Muijs et al. 2011: 19). Dialogue and the articulation of new language for the purpose of communicating new knowledge takes place when people are interacting socially with one another.

The knowledge constructed collaboratively within school partnerships, however, is not limited to knowledge constructed as a result of human interactions. Within successful partnerships, participants also engage with evidence (such as data), policies, curricula, standards (e.g. professional standards), or other documents to aid in evidence-informed decision making. These interactions can result in behavioural changes in people, but also changes in the nature of the documents and how they are enacted. Examining the interactions which involve both human and non-human entities requires a theoretical approach which can hold these entities within the same realm, rather than separating them into the material realm and the representational realm. Constructionist organisational theory does not allow this.

An alternative and more flexible approach is needed which can consider not only an entity's ability to construct knowledge, but more broadly its ability to exert force resulting in flux which can lead to knowledge construction. As each human or non-human entity acts on a document, changes occur in both the actor and the actant. This requires a framework which can be used to examine the sources of power and the forces which are continually acting on and changing either human or non-human actors in the network.

Identifying role and interplay of non-human entities

A framework suited to this type of examination of human and non-human entities is Actor-Network Theory (ANT). ANT is most commonly used with an ethnographic approach. It focuses on, rather than trying to deny, the details of the continual changes and interactions between both human and non-human actors.

Fenwick and Edwards (2012) describe the changes occurring within a network from the ANT perspective:

> …any changes we might describe as learning, such as new ideas, innovations, changes in behaviour…emerge through the effects of relational interactions that may be messy and incoherent, and spread across time and space (p.xviii).

In this context agency is attributed to both human and non-human entities allowing multiple realities to exist simultaneously. Using an ANT approach, minute relations and negotiations at the interactions of the nodes of the network are illuminated.

Examining the interactions at the nodes is significant, but the regions of space and time between nodes are also significant. For example, Fenwick (2010) points out that there are spaces between educational standards and the "…press of everyday demands and priorities in educational practice…These spaces are generative opportunities where invention and adaptation emerge" (p.123). It is ANT that suggests a means of magnifying and examining the conditions which allow such invention to emerge.

Despite the suitability of ANT for investigating non-human aspects of a network, there is a disadvantage of using ANT. It does not provide a structured theory. Rather than a theory it is a collection of possible perspectives to use when following the movement of actors within a network. It is only by combining ANT with other, more structured theories that clear guidance can be found for analysing educational networks.

Sharing and transferring of knowledge

Social network theory is a more structured theory which can be applied to the sharing and transferring of knowledge within networks. It is a theory which is suitably applied to educational networks because it frames learning as a flow of information through network ties. Social network theory can help to identify "...what flows through those ties in the way of information, advice, problem solving, material resources, interpretation, and influence" (Daly 2010: xii).

One of the strengths of social network theory is its ability to illuminate "…emergent social phenomena that have no existence at the level of the individual" (Muijs et al, 2011: 24). As a result, the autonomy of individuals is never absolute creating a scenario in which assessment of an individual's knowledge is partially an assessment of the individual's ties within the network. Using social network theory this interconnectedness can be analysed by examining an individual's ties. This aspect of social network theory can aid in illuminating some of the characteristics of effective school networks, however, social network theory does have limitations. One of the limitations is its inability to "…capture detail on incommensurate yet meaningful relationships" (Ball & Junemann 2012: 13). Daly (2010) suggests other disadvantages include the fact that "…one cannot be certain whether or not a respondent-centred network study actually reflects the social interactions" (p.244). For these reasons other data such as ethnographic data, archive records, or email flow information should be triangulated with social network theory data (Daly 2010; Ball & Junemann 2012). Regardless of these limitations, social network theory contributes a framework with which to examine the transferring and sharing of knowledge between human entities.