The School Improvement Partnership Programme:

Using Collaboration and Enquiry to Tackle Educational Inequity

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Disclaimer

Please note that the views contained in this report are those of the authors, and do not necessarily represent the views of Education Scotland.

Contents

Executive summary

This latest report presents findings on the impact and progress of the SIPP to date and builds on and revises the previous evaluation reports. The previous reports and further details about the SIPP are available on-line from Education Scotland:
http://www.educationscotland.gov.uk/learningandteaching/partnerships/school improvementpartnershipprogramme/intro.asp

Background

In November 2013 Education Scotland commissioned the Robert Owen Centre for Educational Change at The University of Glasgow to evaluate and support the School Improvement Partnership Programme (SIPP). The overall objectives for the evaluation support for the SIPP 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.

The collaborative improvement strategies that underpin 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 (e.g. Chapman and Hadfield, 2010; Fullan 2013). Such research demonstrates 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.

Core principles that underpin the Programme are:
- Partnership work across schools and local authorities with a focus on exploring specific issues relating to educational inequity;

- The use of action research and evidence to identify key challenges, experiment with innovative practices and monitor developments;

- The creation of leadership opportunities and professional learning of staff at all levels;

- A commitment to reciprocity and mutual benefit for all involved;

- The development of arrangements to support long-term collaboration and new approaches to capacity building;

- Explicit links to strategic improvement planning in schools and local authorities;

The involvement of a diverse range of partners including schools, local authorities, Education Scotland and other agencies.

Guided by these overarching principles, the projects across the SIPP take into consideration in their conception, design and evaluation, the needs of children and young people from disadvantaged backgrounds. This long-term and challenging activity is undertaken working in partnership with Local Authorities (education and other services), Education Scotland, University of Glasgow researchers and other relevant partners in order to assess the needs of targeted pupils, develop appropriate data-informed approaches and evaluate impact.

To date, the SIPP has focused on eight partnership projects in different locations across Scotland and started to become operational from October 2013 with all being in place by March 2014. All partnerships have the common feature of tackling inequality but have taken this forward in different ways. Some involve partnerships within an authority with others involving schools from different authorities. Some are cross-sectoral whilst others involve different agencies. Descriptions of the focus of the Partnership projects follow in the report and can also be found, along with supporting resources, at: http://www.educationscotland.gov.uk/learningandteaching/partnerships/school improvementpartnershipprogramme/projects.asp

Partnership	Schools/ partners involved
West Dunbartonshire and Renfrewshire Councils	*Schools from West Dunbartonshire* St Joseph's Primary, Edinbarnet Primary, Ladyton Primary, Linnvale Primary, St Michael's Primary, Whitecrook Primary, Renton Primary, Haldane Primary. *Schools from Renfrewshire* Auchenlodment Primary, Cochrane Castle Primary, Fordbank Primary, Howwood Primary, Kilbarchan Primary, Lochwinnoch Primary, St Anthony's Primary, Thorn Primary
Angus, South Ayrshire and Edinburgh Councils	Arbroath Academy, Ayr Academy and Holy Rood RC High School
East Renfrewshire Council	Crookfur Primary School and Thornilibank Primary School
Falkirk Council	Falkirk High School cluster learning community and Grangemouth High School cluster learning community, including Community Learning and Development (CLD) services and Educational Psychological Services
Midlothian and East Lothian Councils	Six secondary schools from each local authority working as 4 sets of 'trios': 1. Knox Academy - ELC Newbattle Community High School - MC St David's High School MC 2. Dunbar Grammar School - ELC Penicuik High School - MC Preston Lodge High School - ELC 3. Dalkeith High School - MC Beeslack Community High School - MC Musselburgh Grammar School - ELC 4. North Berwick High School - ELC Lasswade High School Centre - MC Ross High School – ELC
Glasgow and Fife Councils	In Glasgow, there will be 8 LIGs across the City: 2 in the North West and 3 in the North East and 3 in the South. These encompass the previous 26 Learning Communities; There is currently one operational LIG in each of the 3 strategic areas of the city with development work progressing to initiate the others. In Fife, two LIGs are being formed with 32 schools – nursery, primary & secondary. The LIGs in Glasgow include: Heads of establishment; Quality Improvement officers; Educational Psychologists; Integration and inclusion staff; Area Partnership staff including 3rd sector providers; Glasgow Life staff; Education Officer and a Glasgow University researcher
South Lanarkshire Council	Trinity High School
Inverclyde and Argyll and Bute Councils	Clydeview Academy and Dunoon Grammar School

Research methodology

The research adopted a number of interlinked quantitative and qualitative methods including:

- Four surveys of the key representatives from all SIPP partnerships; these allow a longitudinal analysis of stakeholders' reported progress and issues;
- Secondary analysis of partnerships' own data, materials and reports on progress and impact;
- Individual interviews and focus group discussions across the partnerships;
- Researcher observation during support visits to schools and events;
- Evaluation feedback from monthly drop-in events/surgeries hosted by the research team at the University of Glasgow;
- Social Network Analysis (SNA) involving the software *UCINET* (University of California Irvine Net) to map and illuminate the structure and nature of the SIPP networks. This complemented the insights provided by other evidence.

Participants by Local Authority for each of the 4 waves

Local Authority	Number and percentage of participant respondents			
	Wave 1 Feb 2014	Wave 2 June 2014	Wave 3 Nov 2014	Wave 4 June 2015
Angus	2 (4)	-	1 (2)	1 (3)
Argyll and Bute	1 (2)	2 (4)	-	1 (3)
East Lothian	-	7 (13)	8 (14)	1 (3)
East Renfrewshire	9 (20)	7 (13)	3 (14)	4 (3)
Edinburgh City	9 (20)	3 (6)	2 (3)	1 (3)
Falkirk	1 (2)	2 (4)	11 (19)	12 (33)
Fife	1 (2)	1 (4)	-	-
Glasgow City	3 (7)	4 (8)	2 (3)	-
Inverclyde	1 (2)	3 (6)	1 (2)	1 (3)
Midlothian	1 (2)	6 (11)	6 (10)	2 (6)
Renfrewshire	6 (13)	4 (8)	7 (12)	2 (6)
South Ayrshire	1 (2)	1 (2)	1 (2)	-
South Lanarkshire	1 (2)	3 (6)	5 (9)	5 14)
West Dunbartonshire	9 (20)	10 (19)	11 (19)	6 (17)
Total	45 (100)	53 (100)	58 (100)	36 (100)

Summary of findings

The cumulative evidence indicates that, overall, the partnership initiative has had a positive impact regarding its stated objectives including:

- Fostering collaborative working to tackle educational inequity;
- Developing capacity at school and local authority level to effect positive change, including improving enhanced leadership opportunities at all levels;
- Building teachers' knowledge, confidence and skills to challenge inequity;
- Improving teachers' understanding of evaluation and practitioner enquiry;
- Increasing learners' aspirations and achievement.

How well was each project and the overall programme initiated and implemented?

- Most partnerships took time to develop and agree their proposals with Education Scotland. The setting up of partnerships was typified by professional dialogue and professional involvement. School staff and other partner professionals were substantially more likely than parents and pupils to have been engaged in tasks associated with the setting up of the SIPP.

- Feedback from local authority representatives and teachers attending national events and research support visits indicated that the programme had been well supported and well conducted at local and national levels. As the various partnership projects matured, partnership members found that organisational issues improved as roles and lines of communication became better established.

- While organisational systems to implement the SIPP improved over time, all partnerships, to a greater or lesser extent, had to address challenges of time constraints, teacher cover issues, personnel changes and resources during their project work. However, generally, partnership teams with the support of local authority and school managers developed creative ways to tackle challenges and sustain measures. These included: forward planning, sharing tasks across the team and, initially team members working outside normal hours.

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

- The SIPP initiative has facilitated greater professional dialogue, collegiality and networking across professionals involved in the partnerships. This has helped drive the work of the partnerships and led to sharing of ideas and practice relevant to the specific project aims as well as broader teaching and learning. Ninety percent or more of survey respondents indicated that collaborative working across the

partnership increased collegiality between colleagues and created more opportunities for teachers to share their ideas and plans with colleagues. Collaborative working across the partnership has increased from 64% in the first survey to 100% in the fourth. Partnership working across schools and local authorities with a focus on exploring specific issues relating to educational inequity rose from 70% to 88%. The involvement of an appropriate range of partners to support the partnership's activities rose from 51% to 80%. Evidence indicates that colleagues outwith the schools have become increasingly important as the initiative has developed.

- Respondents have increasingly noted that the University team and Education Scotland have been major sources of support in the development of their partnership.

- Qualitative insights found very few inhibitors to working relationships apart from time constraints from other commitments to meet and plan. However, participants reported such barriers were usually overcome through the support of managers and commitment of staff.

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

- Staff indicated that working teams, constituted to develop the various SIPP projects and activities within each partnership, were important in promoting the sharing of ideas for teaching associated with the SIPP aims and also helped develop new skills, including research capacity and leadership opportunities. This process also promoted confidence and motivation among teachers.

- Research support events facilitated by the local authorities, the University, and Education Scotland staff were seen as valuable support for helping partnerships to develop their collaborative enquiry capacity.

- The National SIPP events provided those involved in SIPP initiatives with opportunities for cross partnership sharing of ideas and demonstration of progress.

- Although, relatively rare, where highlighted, least effective aspects of collaboration, or particular challenges to collaboration, were those that involved confused aims and communication, a lack of a co-ordination, staff changes and lack of team working. Such factors were largely successfully addressed as the partnerships matured.

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

- The research team observed a high level of teacher engagement with the collaborative enquiry process in operationalising their specific partnership plans. Despite varying levels of research expertise and experience, the surveys revealed an increase in teachers' understanding and use of research and enquiry in their practice, with over 90% stating that their evaluation skills had been enhanced. In

addition, the production of practitioner enquiry reports was further evidence of increased capacity.

- Teachers' survey responses and accounts gathered during national and local events, focus groups and interviews, highlighted the role of the University team in helping to develop their capacity and skills regarding collaborative enquiry. In addition, inputs from local authority personnel, particularly educational psychologists, were valued in supporting the research capacity of partnerships.

- Practitioners were observed collaboratively designing, modifying and accessing a wide range of evaluation methods for determining attainment gaps, identifying target groups, and assessing improvements after implementing interventions. (For more details see Appendix 4.)

- Partnerships faced a number of challenges in developing their evaluation capacity; this included finding time and resources to develop new research skills. Partnerships required specialist expertise to support the often complex analysis of their data to address their research questions. For example, teachers needing to compare pre and post scores to assess a significant change over time.

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

- High percentages of SIPP survey respondents indicated that the SIPP had a positive impact on leadership opportunities and developments within their partnerships. Eighty eight percent of respondents in the wave four survey indicated that involvement with the SIPP had resulted in the creation of leadership opportunities and professional learning of staff at all levels. This compared with two thirds of respondents (66%) reporting this at the wave one stage.

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

- There was a clear indication from the surveys and other evidence that partnerships have had a positive impact on teachers' understanding of disadvantage and aspects of the inequality agenda. Almost all wave four responses (97%) compared to 55% of those in wave two suggested that SIPP activity had sharpened practitioners' focus on closing the achievement gap

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

- Analysis of survey data between the first and fourth survey rounds indicated that partnerships had: begun implementing approaches to address inequality in education across schools; increased understanding across staff of disadvantage and its relationship with other factors such as health, wellbeing and pupil outcomes; seen the

introduction of particular teaching and learning approaches for learners from disadvantaged backgrounds.

- Since the previous report there has been a notable increase in partnership members reporting being more aware of appropriate methods to use to tackle educational inequality and disadvantage. Eighty percent of wave four and 54% of wave one respondents agreed that SIPP developments had increased teacher networks' capability to address inequality in education

Impact on pupils

- There is growing evidence from survey responses that the SIPP initiative has begun to impact on pupils. At the wave one stage just under a third of respondents (31%) indicated that SIPP involvement had had a positive impact on pupil aspirations. However, by the fourth wave survey this figure had risen to 94%. Similarly while 34% of responses to the initial survey indicated that the initiative had increased pupil achievement, by the fourth round of survey all respondents (100%) reported this. This is corroborated by empirical evidence in the partnerships' own project reports. These have demonstrated partnerships' use of a range of increasingly sophisticated practitioner enquiry approaches to assess and understand impact.

Conclusions

- After two years of development and implementation, the available evidence from the external evaluation and the partnerships' own evaluative findings strongly indicates that the SIPP is now having an impact regarding its stated objectives and, importantly, on attainment and other student outcomes.

- Overall, the SIPP initiative has continued to promote collaborative approaches that have also positively impacted on personnel in the participating schools, local authorities and partner agencies/ services. The processes involved in establishing and sustaining the partnerships have facilitated improvements in learning and teaching, assessment, joint working to tackle student needs, engagement with families, leadership and professionals' motivation.

- Crucially, the partnerships are increasingly able to demonstrate, via their own research, measurable impact on students' attainment and other outcomes such as engagement with learning, learning strategies and confidence to learn.

- The range of positive developments and impact demonstrates that the underlying principles for collaborative partnership working and enquiry to tackle educational inequity are sound. Indeed, progress and impact has been most evident in those partnerships that have been able to adapt and apply the principles and core concepts underpinning the SIPP to their own context.

- The majority of the partnerships report that lessons learned are being reflected in school and local authority planning and practice to sustain approaches that have proven effective.

- The support from the Robert Owen Centre and Education Scotland has been valued across the partnerships. There has been an increase in sharing of ideas and lessons learned across the whole programme. There is evidence that this is now influencing developments more widely across the participating local authorities and the education system as a whole.

- The SIPP has introduced new ideas and processes into the system that have resonated with those involved. It has provided a model with a flexible but rigorous framework that has supported localised capacity building and ownership of the initiative which supports those involved in experimenting, taking risks, reflecting on, and monitoring developments and outcomes.

- Where there have been challenges of limited time, funds and resources, most partnership teams have worked creatively to overcome impediments and implement their plans and sustain action. Practitioners have been motivated to sustain and develop their strategies where impact has been demonstrated and this success has often persuaded other colleagues to adopt the approaches.

- However, across the individual partnerships the pace of progress has been uneven. A minority of partnerships have taken longer to put their plans in place and demonstrate their full potential. This mainly reflects variations in organisation and internal and external factors in the partnerships and their particular projects. Nevertheless, even where progress has been slower, important lessons have been learned, not least because of the collaborative enquiry integral to the partnerships. Such insights appear to be informing strategies to improve approaches in these partnerships.

The SIPP has tended to have most traction where a group of committed practitioners, supported by school and local authority leaders, is quickly established to drive the project and has then been able to engage other staff and expand the influence of the Programme to affect behaviours more widely across schools and partnerships. This is challenging and complex territory but this type of work is crucial in developing a robust Scottish approach to move the education system forward.

The policy and social landscape in which the SIPP is operating is changing. During the lifetime of the initiative there has been an increasing focus from Government on tackling the attainment gap, with further resources being deployed. The SIPP is well placed to continue to inform these national developments, providing examples of 'what works' and supporting this with detailed insights on why certain approaches work in particular contexts. The emerging evidence from within the SIPP, combined with the literature that underpins this approach, suggests that, with further support combined with longer-term strategic planning, the SIPP has an increasingly important role to play in supporting national efforts to combat educational inequity.

Commentary

Our work over the first two years with the SIPP has provided evidence of the Programme's efficacy and identified areas for development, and approaches that have potential to inform change efforts across the Scottish education system. Our analysis has identified a number of issues and opportunities that have implications for policy and practice, these include:

- The previous evaluation report (Nov 2014) argued for the case for Innovation Hubs. Since then Education Scotland has established an Improvement Hub, We suggest this Hub has three key dimensions:

    1. **A curriculum dimension** focusing on what does, and does not work in closing the attainment gap in different contexts around the system. These efforts should focus on the key areas of Literacy, Numeracy, Health and Wellbeing and STEM*.*

    2. **A research and development dimension** to develop practitioners' capability in enquiry approaches that are informing and developing practice across the SIPP, i.e.: Collaborative Action Research (CAR), Lesson Study, Improvement Science, and Instructional Rounds.

    3. **An evidence for improvement dimension** that builds a robust evidence base underpinned by a myriad of data sources including those within the recently announced National Improvement Framework and increases expertise in the use and interpretation of improvement and contextual data.

    All three dimensions will demonstrate a strong commitment to professional learning and leadership development that articulates directly with policy developments within key agencies and policies (e.g. SCEL, RAFA and the Attainment Challenge Fund).

- Linked to the ideas outlined above, there is scope for the SIPP to inform the development of Initial Teacher Education (ITE) by aligning the three key dimensions (curriculum, research and development and evidence for improvement) to the ITE curriculum. The power of SIPP then moves from within service professional learning to impact on pre-service learning.

- One implication of the improved sophistication and capacity regarding practitioner enquiry across the partnerships has been the need for correspondingly sophisticated analysis of data. Currently there is a need for focused support from the university team to support the partnerships in further building their evaluation capacity and conducting aspects of analysis that they are not yet equipped to do.

In summary, SIPP has achieved much over that past two years in line with its stated objectives. How this is embedded and enriched within the emerging educational landscape will be the challenge over the forthcoming period. If SIPP's principles and achievements can be woven into the broader educational policy narrative, promote coherence and provide a lasting legacy there is cause

for optimism that educational outcomes can be enhanced for all our children irrespective of their background.

1. Introduction

In March 2013 Scottish Government announced six key areas of focus designed to support the development of a more equitable Scottish education system. One of Education Scotland's responses to these announcements was to develop the School Improvement Partnership Programme (SIPP). In doing so it commissioned the Robert Owen Centre for Educational Change in November 2013 to assist in the design and implementation of the programme to ensure that it is underpinned by the best available international research evidence.

The design and underpinning principles of the SIPP reflect international educational research and practice, including learning from London and the City Challenge programme, Ontario, Chicago and New York, all of which demonstrates that the best and most positive collaborative school improvement efforts are locally owned and led by teachers and school leaders working in partnership and collaboration with like-minded professionals and other stakeholders (Ainscow et al. 2012; Chapman 2008, 2014; Chapman 2012; Cochran-Smith and Lytle 2009; Earl and Katz, 2006; Hadfield and Chapman 2009; Kerr et al. 2003). Such research also highlights the value of school-to-school networking and cross-authority partnerships in generating innovation and co-ordination.

This report presents findings on the impact and progress of the SIPP to date and builds on and revises the previous evaluation reports. The previous reports and further details about the SIPP are available on-line from Education Scotland

http://www.educationscotland.gov.uk/learningandteaching/partnerships/school improvementpartnershipprogramme/intro.asp

The report is structured around the external evaluation questions. These are:

- How well was each project initiated and could it have been improved?
- How well was the overall programme implemented and could it have been improved?
- Did teachers build effective working relationships and what factors supported or inhibited this?
- What forms of collaboration were most and least effective in identifying a focus for partnership projects?
- Did teachers have an increased understanding of evaluation and what factors supported or inhibited this?
- Did teachers find out more about leadership development, opportunities to take on new roles and responsibilities, and effective teaching and learning approaches?
- Do teachers have an increased understanding of disadvantage and its relationship with other factors such as health, wellbeing and student outcomes?
- Are teachers using more effective teaching and learning approaches with learners from disadvantaged backgrounds?

- What has been the initial impact of SIPP activity on learners?

The report then reflects on the findings to consider the characteristics of successful collaborative partnerships regarding tackling educational inequity and addressing the attainment gap.

The School Improvement Partnership Programme: Key principles

The SIPP is tackling the Scottish attainment gap through collaborative action research while supporting innovation across classroom, school and local authority boundaries. The SIPP aligns with and reinforces a number of key educational policies and programmes, including *Curriculum for Excellence*, *Teaching Scotland's Future, the SCEL Fellowship Programme* and *Raising Attainment for All.* All of these are underpinned by the same key concepts of co-production, professional learning and enquiry as the broader *Scottish Approach* to public service reform. Specifically, the School Improvement Partnership Programme is underpinned by seven core principles:

- **Partnership working** is promoted across schools and local authorities, with a focus on exploring specific issues relating to educational inequity.

- **Action research and evidence** are used to identify key challenges, experiment with innovative practices and monitor developments.

- **Leadership opportunities** are created, alongside the **professional learning** of staff at all levels.

- **Reciprocity and mutual benefit** to all involved underpin planning and implementation.

- **Planning for collaboration** encompasses the development of arrangements to support long-term collaboration and new approaches to capacity building.

- **Strategic improvement planning** in schools and local authorities is explicitly linked to SIPP activity.

- **Partners** are diverse and include schools, local authorities, Education Scotland and other agencies.

Since the SIPP's inception in spring 2013, these key principles have provided an overarching framework that has ensured a programme coherence from which systemic lessons can be learned, whilst retaining the flexibility necessary for the development of local, context-specific arrangements to tackle the attainment gap.

1.1 Context: The SIPP

Scotland's education system performs relatively 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 the

ability to use data effectively to aid decision making at local level. Empowering Scotland (Scottish Government 2013: 54) recognises 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 collaborative improvement strategies that underpin 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 (e.g. Chapman and Hadfield, 2010; Fullan 2013). Research has demonstrated that the most effective school improvements are also locally owned and led by teachers and school leaders, collecting and using data appropriately, enquiry, and working in partnership and collaboration with like-minded professionals and stakeholders (Ainscow et al 2012; Chapman 2014, 2008; Chapman 2012; Cochran-Smith and Lytle 2009; Earl and Katz, 2006; Hadfield and Chapman 2009; Kerr et al 2003). Such research also highlights the value of school-to-school networking, collaborative enquiry and cross-authority partnerships as levers of innovation and education system improvement.

The SIPP is driven by collaborative enquiry. This involves the partnerships drawing on a range of methods including lesson study, collaborative action research and instructional rounds that have been shown to provide effective processes for supporting change and improvement. This approach combines school-to-school collaboration with locally initiated bottom-up enquiry. The knowledge which underpins this approach has been generated over decades of development and research activity including *Improving Quality Education for All*, *Coalition of Research Schools*, *Schools of Ambition*, *The Networked Learning Communities Programme*, *The Best Practice Research Scholarship programme*, *The 20:20 Initiative*, *City Challenge* etc. For example, the findings from a three-year research project involving schools in England suggested that collaboration between schools is more effective than if it is restricted to within 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 (NCSL) *Networked Learning Communities* programme. Their findings suggested that colleagues, outwith their own school, might be more likely to take risks, revealing their own weaknesses and gaps in their knowledge, than teachers collaborating within their own school (DfES 2005).

Further benefits of school partnerships were found in *City Challenge* when the collaboration extended beyond schools and across local education authorities where schools were grouped as families. Partnerships between schools located further apart appeared to benefit from the elimination of competition that exists between schools serving the same neighbourhoods (Ainscow *et al* 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 *et al* 2012: 296).

The best examples of collaborative improvement strategies tend to align a so-called "bottom up" approach with national co-ordination. Where there is a shared commitment to improving outcomes for all children and young people then well supported partnerships can lead to significant and sustained improvement and raised attainment. Long term partnerships where schools tackle issues of mutual concern bring mutual success – especially where this forms part of existing improvement planning.

The SIPP, then, can be seen as a 'solution-focused approach'[1] to Scotland's attainment issues, with an emphasis on supporting innovation and promoting sustainable collaboration across classroom, school and local authority boundaries to tackle educational inequality. The features of this approach align with the education system outcomes identified within Education Scotland's Corporate Plan 2013/16 (Education Scotland 2013) − specifically that educational outcomes for all learners must improve and inequality in educational outcomes needs to be eradicated. It also sits with Education Scotland's third strategic objective to build the capacity of education providers to continuously improve their performance, to move from self-evaluation to self-improvement and so change the focus of organisational change. The SIPP is seen as a natural development of the implementation of the *Curriculum for Excellence*, with its emphasis on social inclusion and the policies and approaches to career-long professional learning outlined in *Teaching Scotland's Future* (Donaldson 2010).

The Programme aims to encourage staff to embed collaborative enquiry to learn from each other, experiment with their practice and monitor and evaluate change. The partnerships also aim to promote leadership opportunities and professional learning at all levels. The Programme seeks to promote focused innovation by fostering a culture of mutual respect, 'co-production' and partnership, rather than replicating traditional hierarchies.

The SIPP, therefore, places an emphasis on understanding and learning from similarities and difference across the partnerships and articulates this process within the wider policy and research context. The Programme targets a number of beliefs about the education system:

- The Scottish education system has untapped capacity to improve itself;

- Strengthening partnership and collaboration between schools and across local authorities is crucial to releasing this potential;

- Schools and their partners have the expertise and experience to tackle the challenging circumstances they find themselves in by sharing and working together;

- Schools and partner agencies working together can promote an even deeper understanding of their collective responsibility to Scotland's children and young people;

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[1] The Solution-Focused model was originally developed in psychological therapy approaches but has since been applied more widely, including in organisational change. It is based on a collaborative, personalised, approach that focuses on positives rather than deficits. It is characterised by enquiry, building on strengths and what is working well to develop action plans that work.

- The Programme is about systemic improvement of education provision that provides opportunities, through the Programme, for spread and sustainability beyond the individual partnerships;

- The Programme will support the implementation of other national priorities including *Teaching Scotland's Future* and *Curriculum for Excellence.*

To tackle education inequity the SIPP is based on the following seven core principles

- Partnership work across schools and local authorities with a focus on exploring specific issues relating to educational inequity;

- The use of action research and evidence to identify key challenges, experiment with innovative practices and monitor developments;

- The creation of leadership opportunities and professional learning of staff at all levels;

- A commitment to reciprocity and mutual benefit for all involved;

- The development of arrangements to support long-term collaboration and new approaches to capacity building;

- Explicit links to strategic improvement planning in schools and local authorities;

- The involvement of a diverse range of partners including schools, local authorities, Education Scotland and other agencies.

These principles provide an overarching framework giving coherence across the Programme from which systemic lessons can be learned while retaining the flexibility necessary for localities to develop arrangements that are matched to their specific contexts.

The challenge of making a difference to outcomes for disadvantaged pupils is acknowledged across the partnerships and this involves developing particular approaches but also an awareness of the wider inequality issues and how they affect pupils' learning and opportunities. Working in partnership with Local Authorities, Education Scotland, University of Glasgow researchers and local multi-agency teams, the SIPP partnership projects have worked to assess the needs of targeted pupils, develop appropriate data-informed approaches and evaluate impact. Given the nature and scale of the challenge, this is a long-term process but the SIPP is fostering a culture and facilitating strategies to make a difference to the lives of disadvantaged children and young people.

The SIPP partnerships

To date the SIPP has focused on eight partnership projects in different areas of Scotland during the period December 2013 to June 2014 (two further partnerships were unable to submit finalised proposals during this period). Prior to the involvement of the University team, the partnerships had prepared proposals outlining their plans and had these assessed by a panel that included Education Scotland and other key stakeholders.

The SIPP involves a range of stakeholders in schools, local authorities, Education Scotland, the University of Glasgow and other key partners. There is a range of partnerships emerging within and across the SIPP partnerships. Some involve collaboration within a local authority and others involve schools from different authorities. Some involve partnerships from the same phase of schooling while others are cross phase. Some have a tight focus on teaching and learning whilst involving multi-agency approaches. All have the common feature of focusing on tackling educational inequality.

Appendix 2 provides a summary of the current SIPP partnerships with summaries of their progress since inception to June 2015. Here we present an overview of the partnerships, their main objectives and approaches:

1. West Dunbartonshire and Renfrewshire Partnership Project

This partnership project currently includes 13 primary schools from across the two education authorities and involves building partnerships across sectors (including pre-5 partners). The specific areas for improvement include:

- Learners' attainment in numeracy/ maths and literacy;
- Pedagogical skills of practitioners;
- Leadership of the agenda by Head Teachers and across schools to raise attainment.

The partnership is informed by national data (e.g. Scottish Survey of Literacy and Numeracy 2013) and local data, including that used in raising attainment strategies, analyses of school level writing scripts and maths tests. This has revealed that pupils from the most deprived areas performed less well than those from the least deprived areas at all stages. The focus of the partnership across the two Local Authorities specifically targets schools in the most deprived catchment areas that share similar characteristics and challenges.

2. Angus, Edinburgh City and South Ayrshire Partnership Project

This partnership includes Arbroath Academy, Holy Rood RC High School and Ayr Academy that are collaborating to improve the attainment of young people in S4-S6, identified through analysis of the Scottish Index of Multiple Deprivation (SIMD) and other data including Free School Meal Entitlement (FSME). The partnership strategies that the three schools have focused on include improving the quality of feedback to pupils, attendance and parental engagement. Their collaborative enquiry/ research 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 improved parental engagement result in improved attainment?

3. South Lanarkshire Partnership Project

This project aims to drive forward a number of aspects of the wider 'closing the gap' agenda through the use of an Improvement Science model[2] to further review, evaluate and develop strategies to close the gap between the bottom achieving 20% of pupils and their peers. In this partnership, the project's focus on disadvantage entails addressing the needs of vulnerable young people who, for a variety of reasons, lack the necessary skills and behavioural attributes to access and achieve in lifelong learning. These include young people who:

- Are most at risk of suspension and exclusion
- Have educational ability below that of their peers and consistent placement in the bottom 20% of achievers
- Often have multiple deprivation hits (5+)
- Have been looked after away from home;
- Have experienced abuse/neglect;
- Have English as an additional language;
- Are school refusers;
- Practice self-harm;
- Require Learning support;
- Present behavioural challenges.

The young people are identified from a range of data including information from Social Workers, Home School Partnerships etc. The project involves working initially in one targeted secondary school, Trinity High School, with the aim of applying small tests of change, evaluating the impact of a caring significant adult in improving outcomes for individual young people and then modelling these (scaling up) nurturing approaches across other secondary schools across the authority in the longer term with the particular aim of improving the attainment, attendance, exclusion rates and leaver destinations for these young people

4. Glasgow City and Fife Partnership Project

This collaboration between Glasgow City and Fife involves Local Improvement Groups (LIGs) set up as key drivers of improvement. Across Glasgow City, many schools face challenges in promoting attainment and achievement that reflect severe socio-economic inequality in their communities. In Fife, schools with similar challenges are involved in exploring and sharing strategies to tackle these challenges. The emphasis is on early intervention and prevention.

Each LIG is identifying, using the various data and intelligence available to it, a series of key priorities for the grouping of establishments, with the LIG grouping

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[2] The Improvement Science approach has been popular in health services and typically involves using the PDSA approach to enable stakeholders to test out new ideas on a small scale before wider implementation: *Plan* - the innovation, *Do* – conduct a pilot or small-scale version of the innovation, *Study* – gather evidence to assess impact and lessons learned and *Act* − plan the next cycle of PDSA, scaling up the innovation.

bringing together a wide range of expertise and knowledge to identify priorities and develop tailored and bespoke solutions. The LIGs draw on rich data including: SQA; attainment data; pupil progress data at establishment level; attendance and exclusion data; inspection reports and the views of pupils, parents, staff and other stakeholders.

The ethos of this approach is to devolve decision-making and responses that utilise a more intelligence led and increasingly proportionate approach to support and challenge at establishment level. There is an increasing emphasis on validated self-evaluation exercises reflecting each establishment's priorities as identified through their enquiry processes.

There is a greater focus on wider intra and inter authority partnerships to support school improvement that fosters the development of increasingly bespoke solutions to local priorities for improvement. It includes an increased role for Leaders of Learning in supporting aspects of school improvement and in modelling good practice in learning, teaching and assessment.

5. Falkirk Partnership Project

This project involves Falkirk High School and the Grangemouth High School community learning clusters. The partnership's action research is targeted at the P6 stage (session 2014−15) for those children who have the highest SIMD profiles within the authority area and low attainment in literacy, and forms part of an extended transition across P6-S1. The learners have been identified via local and school level data and the project involves multi-agency and cross-service aspects, such that the interventions are as holistic and effective as possible. This includes targeted and sensitive interventions to support family literacy, involving schools, parents, Community Learning and Development (CLD) and family support workers.

6. Midlothian and East Lothian Partnership Project

This project involves six secondary schools from each local authority working as sets of 'trios'. As with the other SIPP partnerships, the project here has used available SIMD, authority-level and school-level data to identify groups of students where levels of attainment and achievement have been an issue. The 'trios' are exploring the level of need and developing responses on the basis of socio-economic deprivation, emotional/ psychological issues and Additional Support for Learning (ASfL) that are consistent with a commitment to *Getting It Right For Every Child* (GIRFEC). The projects also have a particular focus on transition points in the learner's education journey. Each 'trio' has agreed areas of focused improvement which include:

- Tackling inequality by improving learners' experiences;
- Improving monitoring and tracking;
- Improving the delivery of the Curriculum for Excellence (CfE) entitlement to 'personal support';
- Improving use of data, intervention and assertive mentoring and improved feedback.

7. East Renfrewshire Partnership Project

This partnership involves Crookfur Primary School and Thornliebank Primary School collaborating with a focus on raising attainment in maths for boys and learners from minority ethnic backgrounds through improved learning experiences. While economic disadvantage is one criterion for the focus of the project, in this partnership the criteria for disadvantage also includes those young people found to face challenges because of their ethnic background (for example, those with English as an Additional Language (EAL) needs). A key approach is using Lesson Study to assess the impact of Cognitively Guided Instruction (CGI) pedagogy. Evaluation includes impact on learners, parents and staff involving Psychological Services. The collaborative enquiry/ research questions are:

- To what extent has gender and EAL impacted on attainment?
- What learning and teaching approaches, including CGI, would improve attainment for boys and pupils using English as an additional language?
- How can schools further engage these learners and their parents?

8. Inverclyde and Argyll and Bute Partnership Project

This project involves Clydeview Academy and Dunoon Grammar School collaborating to close the gap between their high attaining students and those of lower ability The partnership uses SEEMIS and other available data to identify pupils across the S3 year group who are lower achievers in numeracy. Both schools involved in this partnership, in particular Clydeview Academy, have learners from deprived areas and these are over-represented in the pupil groups that experience confidence and learning issues in numeracy. The premise for the project is that greater engagement and attainment in numeracy can be promoted through improving pupils' confidence to learn. The focus of their collaborative enquiry/ research is:

- Does the identified profiling champion with responsibility for a group of young people generate 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?

All of the eight partnerships share common aspirations that reflect the SIPP beliefs and principles and mean they are characterised by:

- A desire to tackle the achievement gap with a commitment to long-term sustainability beyond the time-frame of the project;
- Creating leadership opportunities and professional learning for staff, involving students and the community;
- Building trust and relationships and confidence to take risks and innovate;

- Drawing on a range of expertise from different parts of the system with commitment from schools, Local Authorities, Education Scotland and The Robert Owen Centre at The University of Glasgow;

- Using systematic focused enquiry to develop innovative practices and monitor the impact of their development;

- A commitment to reciprocity and mutual benefit for all involved.

1.2 Supporting the SIPP and assessing its impact

In November 2013 Education Scotland commissioned the Robert Owen Centre for Education Change at The University of Glasgow to evaluate the impact and to provide research support for the School Improvement Partnership Programme (SIPP) during 2013/14 and again for 2014/15. The overall objectives for the evaluation support for the SIPP 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.

To address the evaluation objectives and questions set out previously in Section 1: Introduction, the evaluation adopted a two-strand approach.

Strand 1 addressed the first objective and involved the University team working with local authority colleagues in each partnership area, alongside a designated individual from Education Scotland, to support partnerships to develop and deploy their own enquiry approaches that would accurately assess the progress and impact of their activities. These support teams have been termed 'trios'. The SIPP trios' level and timing of support has varied to reflect the requirements of each partnership. The purpose of this support is to provide critical friendship to advise on:

- Collaborative enquiry approaches;

- Specific curricular and pedagogical knowledge relating to the particular activities;

- Building internal capacity for educational improvement;

- Developing sustainable ways of working beyond the duration of the Programme.

This support is primarily for practitioners and is most often requested when they are planning the integral evaluation as part of their partnership activities. The trios have provided support in the form of: input to cross-local authority full and half-day events for partnership teams; input during national feedback events and bespoke participative input in schools upon request. One particular

important source of support and cross-fertilisation of ideas and practice has occurred during monthly 'drop-in' meetings hosted at the University for partnership colleagues.

In addition, the trios have supported partnership teams during the three national events held to share experience and progress during 2014/15. Here, practitioners and local authority personnel have also provided advice and support to colleagues within their own partnership and across the SIPP in general. The most recent of these in June 2015 saw management and practitioner representatives from all partnerships meet with Education Scotland and the University team to share accounts of progress and discuss their work, which provided an important forum for Programme-wide learning and reflection.

In practice, it proved challenging to deploy all members of each trio at the same time in particular partnership meetings or events. Therefore, the individual members of the trios liaised with one another to ensure that the most appropriate person(s) was available. Given practitioners' needs and emphasis on building their research capacity, the University team was frequently deployed to partnerships' sessions.

With each SIPP partnership having to deal with a specific context and needs, particular 'tools' in the form of various guidelines, research templates and exemplar case studies have been developed to inform and promote collaborative enquiry and partnership working. This has been informed by the work of Hadfield and Chapman (2009) who 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 (Hadfield and Chapman 2009: 40-44).

Strand 2 entailed the University team conducting an external evaluation that assessed progress across all of the partnerships to understand the effectiveness of the overall Programme. Whereas Strand 1 involved directly working with the individual partnerships to support them in devising, refining and conducting their own evaluations, Strand 2 of the evaluation involved the aggregation of the individual partnership evaluation findings along with our own primary data collection to provide a coherent overview of the SIPP impact.

1.2.1 Research methodology

A detailed account of the research methodology and methods is provided in Appendix 3. Given the nature of the Strand 2 research questions, a mix of quantitative and qualitative research methods was deemed appropriate. In particular, it was necessary to gather data on key indicators across the partnerships using a series of surveys throughout the Programme to monitor any progress. To complement this evidence, a range of qualitative information was gathered to provide illustrations of impact, insights regarding the processes influencing progress and to better assist the interpretation of survey findings and themes emerging from teachers' own enquiry and accounts.

The research, therefore, adopted a number of interlinked but largely concurrent quantitative and qualitative research strands including:

I.   Four surveys of the key representatives from all SIPP partnerships. The first survey was administered near the start of the Programme in February 2014; the second was conducted when partnership representatives met again during a national SIPP event in June 2014, the third survey-taking place in November 2014 and the final survey administered at the national event in June 2015. Details of the numbers and types of respondents are provided in Appendix 5 and summarised below.

Participants by Local Authority for each of the 4 survey waves

Local Authority	Number and percentage of participant respondents			
	Wave 1 Feb 2014	Wave 2 June 2014	Wave 3 Nov 2014	Wave 4 June 2015
Angus	2 (4)	-	1 (2)	1 (3)
Argyll and Bute	1 (2)	2 (4)	-	1 (3)
East Lothian	-	7 (13)	8 (14)	1 (3)
East Renfrewshire	9 (20)	7 (13)	3 (14)	4 (3)
Edinburgh City	9 (20)	3 (6)	2 (3)	1 (3)
Falkirk	1 (2)	2 (4)	11 (19)	12 (33)
Fife	1 (2)	1 (4)	-	-
Glasgow City	3 (7)	4 (8)	2 (3)	-
Inverclyde	1 (2)	3 (6)	1 (2)	1 (3)
Midlothian	1 (2)	6 (11)	6 (10)	2 (6)
Renfrewshire	6 (13)	4 (8)	7 (12)	2 (6)
South Ayrshire	1 (2)	1 (2)	1 (2)	-
South Lanarkshire	1 (2)	3 (6)	5 (9)	5 14)
West Dunbartonshire	9 (20)	10 (19)	11 (19)	6 (17)
Total	**45 (100)**	**53 (100)**	**58 (100)**	**36 (100)**

The surveys reached key local authority personnel, school management personnel, teaching staff and, where applicable, partner agencies in each of the partnerships. These were the personnel best placed to comment on developments in their respective partnerships. The questionnaire included closed and open-ended questions to elicit information on progress to date in the respondent's SIPP project, impact and comments on any challenges that had emerged. Where possible, findings from the surveys have been compared to give an indication of distance travelled over the duration of the Programme.

II. Secondary analysis of partnerships' own data and materials on progress and impact, including summaries of their own evaluation and scoping analyses;

III. Information from interviews and focus groups across the partnerships:

Initial scoping interviews/paired interviews

- Eight paired interviews/ small group discussions with the partnership local authority representatives
- Eight focus groups and needs analysis discussions with Head Teachers and key partnership teachers

These were conducted as each partnership got underway with its planning and meetings (mainly from December 2013 - end of February 2014).

Follow up interviews and focus groups:

A series of follow up interviews and/ or focus groups was conducted with those instrumental to the development and operation of the partnerships with an emphasis on getting insights from teachers, Head Teachers and local authority contacts. This entailed:

- Eight paired interviews/ small group discussions with the partnership local authority representatives
- Eight focus groups with Head Teachers
- Eight focus groups with key partnership teachers involved in the design, delivery and evaluation of their project/interventions.

These interviews and focus groups were conducted in May/June 2014 and repeated in May/June 2015 to gather insights on developments, progress, challenges and further needs. The interviews and focus groups were usually conducted in partnership schools but occasionally telephone interviews were used to gather follow-up information when a key stakeholder could not attend the face-to-face meeting

IV. During the project ongoing evaluation feedback was also obtained from participants during the monthly drop-in events/ surgeries hosted by the research team at the University of Glasgow

V. Insights on progress and issues gathered as part of the ongoing research support liaison process with the partnership projects

VI. Researcher observation during support visits to schools and events from December 2013 to July 2015.

Social Network Analysis (SNA)

The external research methods also included the use of Social Network Analysis to:

- Enhance the research team's understanding of how school partnerships were operating in different contexts;
- Explore how different types of knowledge were shared between teachers and
- Identify what professional roles appeared to be key to this process.

Three partnerships were initially selected that represented different models of collaborative working in the SIPP (i.e. covering wide geographical distances,

cross-school partnerships across two local authorities and cross-school partnerships within a single local authority). In each of these partnerships all members involved in any SIPP activity were sent an additional SNA online questionnaire via email. The surveys gathered data on:

- Respondent's name and professional details;

- The nature of educational inequity in the school;

- Participants' networking in their partnership, including mapping whom they liaised with and the focus of their collaboration.

The SNA method requires a very high response rate to produce meaningful data. Across the three partnerships sufficient data was gathered to allow analysis of one of the three partnerships' networking at the time of writing (with a 95% response rate). Given the demands of securing sufficient responses to conduct the analysis, this phase is on-going in order to finalise the data collection from the remaining two partnerships and also explore conducting SNA with a further partnership that typifies a further model.

The network boundaries were determined by consulting teachers in the partnerships and asking them to provide any additional names of participants who had been active in the partnership. In the partnership included in this report this process generated an additional five names of local authority staff. These names were added to the staff lists of teachers from the two schools. The names of teachers no longer teaching at the schools due to sick leave, or employment changes were removed. This applied to six of the teachers who had been previously included in staff lists. In total, the network boundary included 36 teachers and 5 local authority staff.

Before the questionnaire was issued it was shared with a number of individuals who provided critical comments: a quality improvement officer (former primary school Head Teacher), secondary school Head Teacher, and others with experience of using SNA (from the University of Glasgow and Southampton University). Based on the advice provided by these critical friends the questionnaire was modified.

The questionnaire was distributed in May 2015 and 36 teachers (out of a total of 36) and 3 local authority staff (out of a total of 5) completed the questionnaire, providing a response rate of 95%.

This report provides a synthesis of the key findings arising from the external evaluation strands and the teacher-generated data that has been presented in feedback from the national events and their individual project reports to gain valuable insights on the development of the Programme, factors influencing progress and indications of impact against the stated aims of the Programme.

Approach to the analysis

The overall framework for the analysis was the research objectives and research questions documented in Section 1 of this report. Completed baseline and follow-up questionnaires were described and analysed using SPSS (Statistics Package for the Social Sciences). Frequencies, cross-tabulations,

and relevant statistical tests were performed. The analysis also addressed, as far as was possible, the key factors which promote/hinder the impact of the SIPP approach and identified relevant associations between variables. The initial analysis was directed towards an exploration of the reported impact or otherwise of the projects drawing on stakeholders' reported responses to their survey questions and any secondary data from the schools on meaningful outcome criteria.

Qualitative evidence gathered during the individual and group interviews was recorded in both note-form and digital audio recording. A rigorous thematic analysis was conducted to illuminate participants' experiences of the initiative and detail their perceptions, aspirations and shifts in these as the Programme developed. The analysis also highlighted those processes that have influenced the implementation and impact of the SIPP. This analysis drew on transcription accounts for clarification and illustration.

The responses to the SNA surveys were analysed using the social network analysis software package called UCINET (University of California Irvine Net). This software package was used to produce sociograms to reveal the nature of the networks in the partnerships and the extent to which particular ideas were being shared across individuals involved.

In responding, to the SNA questionnaire, questions included respondents providing between 0 and 22 names. The names were coded. The code was securely stored by the researcher to protect the identity of participants, schools, and local authorities. Using the coded data a UCINET data language file (DL file) was written in Microsoft Word in the form of a nodelist. Using the SNA software UCINET, the nodelist was saved as a UCINET dataset. The sociogram was then created using Netdraw (accessed using UCINET). This sociogram was analysed visually to determine the positioning of the teachers and local authority staff within the partnership.

The draft findings emerging from the various strands of the evaluation were tested for face validity by the research team's external expert panel and the advisory committee and feedback to partnership stakeholders at the national events.

2. Findings

This section of the report is structured around the main evaluation findings. It presents a synthesis of findings from the questionnaire survey conducted at four SIPP national events, two in 2014 and two in 2015. Much of the discussion in this section focuses on comparisons between the findings from the first survey (wave one) and the most recent survey (wave four). In addition it draws on qualitative material from focus groups and interviews conducted as part of the external evaluation.

The questionnaire surveys used repeated measures questions whenever possible to track changes in responses over the duration of the project. The section also draws on the substantial amount of practitioner enquiry evidence provided by participants at the national events and in their project reports. The aggregation of this evidence gave the evaluation substantial insights into the development and impact of the SIPP initiative across the eight partnerships. Throughout this section of the report we have provided illustrative examples and insights into key processes and factors that facilitated impact. This includes drawing on the substantial amount of practitioner enquiry evidence provided by participants at the national events and in their project reports.

This cumulative evidence indicates that, overall, the partnership initiative has had a positive impact regarding its stated objectives including:

- Fostering collaborative working to tackle educational inequity;
- Developing capacity at school and local authority level to effect positive change, including improving enhanced leadership opportunities at all levels;
- Building teachers' knowledge, confidence and skills to challenge inequity;
- Improving teachers' understanding of evaluation and practitioner enquiry and importantly;
- Increasing learners' aspirations and achievement in the individual partner target groups.

We first look in detail at the process/ formative set of objectives and questions that the evaluation was tasked with addressing. This is followed by reporting on the intermediate outcome objectives.

Assessing how well the overall SIPP, and each individual partnership project within it, have been initiated (process/ formative questions)

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

The previous SIPP report detailed participants' accounts of how their partnerships had been initiated[3] (pp. 21-23). Partnerships had involved a range of people in different capacities during the setting up of their projects. Questions on initiating the project were only included in the first two surveys (waves 1 and 2) and not included in the two later surveys, by which time all of the partnerships

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[3] http://www.educationscotland.gov.uk/Images/141106%20SIPPfinalreport_tcm4-844483.pdf

were up and running. The initial stages of the partnerships were typified by professional dialogue and professional involvement. School staff and other partner professionals were substantially more likely than parents and pupils to have been engaged in consultation, decision making and taking on tasks associated with the setting up of the SIPP. School staff and partner professionals were again most likely to have been involved in decision making around the setting up of the partnership.

Partnership organisation and process

Insights regarding the actual design process and initial stages at partnership level are provided by the qualitative evidence. The projects were initially conceptualised at the local authority level with proposals submitted to, and negotiated with, Education Scotland. Despite the fact that the partnerships had similar beginnings they varied in the extent to which leadership and planning was then devolved from local authority managers to other partnership stakeholders. The most successful partnerships were those that established and supported a group of leaders at different professional levels to take forward their projects. There were differences in how long this process took and this was often influenced by the complexity of the project, the existing distribution of key actors and the networks already in place that facilitated collaboration.

Evidence from interviews with partnership members and insights gained from research team meetings across the Programme revealed that most partnerships took time to develop and agree their proposals with Education Scotland and then needed to invest further time to establish lines of communication to facilitate the partnership organisation and operationalisation. This activity was particularly important where there were many schools and organisations involved in a partnership and where more than one local authority was engaged. Most partnerships needed time to prepare a suitable project plan, underpinned by the Programme principles, with a clear action research focus on tackling inequality. Negotiations between the parties involved producing several iterations of their project plans. Partnership stakeholders involved in this process sometimes reported that there could have been more clarification and timely advice and feedback during this time. Partnership members involved in the initiation of the projects did, however, recognise, the challenges and time involved in getting the, often numerous, stakeholders to agree on project plan content before signing off. The role and commitment of the local authority, school management and those with responsibilities for developing and ensuring initial momentum of the partner initiatives was crucial to the success of the partnerships.

Qualitative feedback from local authority representatives across four of the partnerships, when discussing the initiation and inception phase, indicated that the process could have been improved and suggested the need for more direct support and guidance, ideally from an advisor, so that the plans could be completed more effectively.

Looking at the example partnerships detailed below illustrates the variation in initial partnership organisation and indicates that the earlier that practitioners were involved in the process, the sooner the project initiatives were developed and impact on pupils became apparent.

In the *Midlothian and East Lothian Partnership* *planning was underway at* the council level prior to April 2014. Gradually it was devolved to Head Teachers and then distributed in terms of leadership to deputy heads and principal teachers. By the spring of 2015, teachers were taking on leadership roles, for example in planning and delivering a SIPP conference for their partnership. By this time there was also evidence from practitioners' research that their projects were having a positive impact on learners.

In the *Falkirk Partnership* a team of council employees initiated the project (and began work in 2014). The team was comprised of a quality improvement manager, a support for learning adviser, and a community learning and development principal officer. This initial stage took several months, and included discussions about core values and vision. After a focus had been determined at local authority level, the practitioners were quickly involved. By September/October 2014 teachers and support for learning assistants (SfLAs) were involved and collecting assessment data. The positive impact of this partnership was evident in pupil reading levels within months.

In the *East Renfrewshire Partnership* local authority managers met with Head Teachers and teachers very early in the process and built on emergent practitioner research regarding promoting learning outcomes. There was evidence of teachers taking on leadership in this partnership at meetings as early as April 2014. The positive impact on pupils' problem solving abilities in mathematics was evident within less than a year. (Please see research question 2.6 for more details and evidence regarding differences in partnership leadership.)

2.2 How well was the overall Programme implemented and could it have been improved?

Feedback from partnership stakeholders, primarily from local authority representatives and teachers during the national events and research support visits, indicated that the implementation of the overall Programme was satisfactory. As the various partnership projects matured, partnership members found that organisational issues improved as roles and lines of communication became better established and apparent. The development of partnership plans and action occurred faster where partnerships established small teams of key personnel who had an organisational and coordinating role.

Drawing on the guidance regarding types of effective organisation and collaboration that was provided at the outset by the University team and Education Scotland, the partnerships adapted this to their context. Local authority and school managers helped by contributing knowledge and sanctioned time and resources to facilitate planning and development. Within this framework the partnership teams also found new ways to work and enquire collaboratively, demonstrating creativity and leadership across professional levels. The motivation for this often came from personnel being given responsibility and freedom to pursue action they were interested in so that they could make a difference to learner outcomes.

There were illustrative examples across the partnerships that demonstrated how such key personnel and teams developed plans into action through

collaborative working. In the _Falkirk Partnership_ the successful implementation of the _High 5 Reading Programme_ was dependent upon a high level of parental engagement. This included consent letters being received and signed by parents/carers. Here, CLD workers played an important role in the initial stage of implementation:

> _…some parents highlighted that schools made assumptions about parent/carer literacy levels and therefore understanding letters and filling in forms were major barriers for parents/carers who struggled with reading.…Findings suggested that schools who had some level of CLD involvement, where parents were approached face to face and an outline of their role given, had higher levels of parent "buy in" to the project._ (Falkirk final report 2015)

It became apparent throughout the Falkirk project that some of the parents/carers had very limited literacy themselves and without the home delivery of the parent/carers letters by the CLD workers parents/carers may not have been able to provide the consent that was required for their children to participate in the _High 5 Reading Programme_. The importance of the involvement of the CLD workers was apparent in the initial stages and throughout the implementation of the programme. For example, CLD workers assisted a number of different groups of people in a variety of ways: supporting pupils with homework; facilitating teacher and parent communication; and helping parents to understand terminology such as dyslexia.

This example also reveals the importance of having personnel involved in collaborative partnerships who are well placed in the network and system to effect change and have particular expertise. It also highlights the challenges facing programmes that involve a range of professional partners. In this project there were pressures in trying to sustain the level of CLD staff, as those who moved on were not replaced.

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

The findings strongly indicate that the Programme has facilitated greater professional dialogue, collegiality and networking across those professionals involved in the partnerships. This has helped drive the work of the partnerships and led to sharing of ideas and practice pertinent to the specific project aims as well as broader teaching and learning.

The survey evidence, in particular, indicated that the SIPP activities were contributing to growing partnership and networking among school staff involved in the initiative. Focusing on the survey results between the first (Feb 2014) and fourth (June 2015) waves we can see that the following activities were increasingly likely to have happened _to some or to a large extent_:

- _Collaborative working across the partnership,_ up from 64% in the first survey to 100% in the fourth_;

- _Increased collegiality between colleagues across the partnership,_ up from 73% to 94%;

- *More opportunities for teachers to share their ideas and plans with colleagues across the partnership,* up from 73% to 92%;

- *Partnership working across schools and local authorities with a focus on exploring specific issues relating to educational inequity*, up from 70% to 88%;

- *The development of arrangements to support long-term collaboration and new approaches to capacity building,* up from 65% to 91%;

- *The involvement of an appropriate range of partners to support the partnership's activities*, up from 51% to 80%.

These findings are very encouraging given that there were already strong indications of developments in all of these areas by the first wave survey. See Appendix 1 Table 1 for results from all four waves.

Qualitative insights found very few inhibitors to working relationships apart from time constraints from other commitments to meet and plan. However, participants reported such barriers were usually overcome through the support of managers and commitment of staff

Specific experiences of working together within the SIPP initiative[4]

Respondents to survey waves two, three and four were asked to reflect on their individual experiences of working collaboratively within their partnership[5] through indicating their agreement, or otherwise, with a series of statements,

Full results of this exercise across the three survey waves are contained in Appendix 1 Table 2. Again focusing on comparing initial responses (from the second wave survey) with those in the fourth wave we see a very encouraging picture developing early in the initiative and being substantially maintained more than a year later. All respondents to both surveys *mostly or completely agreed* that working together:

- Left them with a desire to work collaboratively with colleagues
  and,
- Encouraged networking with other colleagues

High percentages of respondents in both surveys *completely or mostly agreed* that working together:

- Increased their leadership opportunities (92% wave 2, 91% wave 4);

- Encouraged them to try new ideas (94% wave 2, 88% wave 4);

- Promoted their skills in practitioner enquiry (90% wave 2, 91% wave 4);

- Increased their awareness of sources of support to address our SIPP aims (90% wave 2, 91% wave 4).

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[4] This section was not included in the initial survey.

[5] Respondents noted the extent to which they agreed with a series of statements concerning their specific experiences of collaboration within the SIPP on a five point scale comprising: completely agree; mostly agree; not sure either way; mostly disagree or completely disagree.

In respect of the following three statements we saw an increase in the number of respondents between the two surveys *completely or mostly agreeing* that working together:

- Gave them access to quality resources (72% wave 2, 98% wave 4);

- Increased their knowledge of approaches to tackle educational inequity (78% wave 2, 98% wave 4);

- Improved their teaching skills (46% wave 2, 83% wave 4).

It is noteworthy that working together through the SIPP initiative has promoted a range of positive developments among most, if not all, respondents.

The interview and focus group evidence also revealed the importance of building effective working relationships between teachers from different schools and/or authorities as well as across professions. There was consensus at all levels across the partnerships that involvement in the SIPP had promoted professional dialogue and that this had helped to share ideas and develop pedagogy and ways of working to tackle inequity but also address the needs of all students. Partnership teams stated that this collaborative working was now beginning to demonstrate a positive impact on students' outcomes and aspirations. Most believed that these networks and their impact would be sustainable and reflected in their planning.

The benefits of collaborative working were particularly evident where other services and agencies worked with teachers to address the complex factors influencing students' attainment. For example, in the *Falkirk Partnership* the Community Learning and Development (CLD) workers were an integral part of the partnership and were able to develop their work with families to address the work of the partnership. This promoted closer home-school links and engagement of parents in their child's learning with evidence that this was making a positive difference to students' literacy as described in the following stakeholder accounts.

> *The idea that parents and carers are rediscovering their role as educators and the value of dialogue, is further supported by the parents and carers who also recognised that they have knowledge of their children which would be of great benefit to schools in understanding the child in the broader context of their life e.g. within the family and wider community. This knowledge places the parent in the role of the 'expert' and as a result of working with CLD, some parents and carers now feel confident enough to place themselves in this role to support schools.*
> (Falkirk SIPP report 2015)

However, even where such holistic collaborative approaches were adopted the teams were aware of the substantial challenges that still faced efforts to tackle educational inequity.

> *[While there was] evidence that early engagement of CLD was having an impact on literacy, in that parents were more likely to opt into the programme, there were some limitations. CLD found that often parents in the area had other issues for example money, housing, welfare and health and wellbeing that often CLD workers had to deal with first. CLD*

workers have an ethos of working from where the person is currently, and for some of these parents other issues needed to be further explored before literacy could become a real focus. (Falkirk final report p.22)

After the intervention, staff felt that relationships between schools and parents were either mended or strengthened due to CLD involvement which will benefit other work in the future. Secondly, school staff felt that their knowledge of CLD work increased and their involvement also allowed staff to become more knowledgeable of family situations that could impact a child's learning. (Falkirk final report p.30).

Challenges to collaborative working

While working collaboratively has enabled the partnerships to tackle educational inequity and implement broader changes to improve their education systems, such approaches faced particular challenges.

For example, such challenges included: agreeing a shared focus, arranging appropriate communication and places to meet where partnership team members were separated geographically; finding time and cover to facilitate planning, enquiry and development activity; coping with changes of leadership in schools and agreeing on shared language and protocols where different services were involved.

In some cases, the pressure of finding time was alleviated by providing teachers with release time from their classrooms and schools to promote planning and professional dialogue. A persistent theme was that for some schools this presented a number of challenges due to the cost of getting cover, the shortage of supply teachers, and the extra time required to prepare lessons for cover teachers.

The *East Renfrewshire Partnership* anticipated and addressed the issue of cover in their planning with support from the local authority. In August 2013 there was an increase in the teacher-pupil ratio in mathematics and language classes. One of the teachers from this partnership explained how this alleviated the issue of finding supply cover and enabled teacher participation in collaborative activities outwith the classroom:

I was fortunate enough this year that there was an NQT in my class, a newly qualified teacher, so I had time out anyway to do different things. And so then when the project came in in January it was much easier for us when there was issues with supply, which there was…. (Interview with East Renfrewshire teacher)

In the *Falkirk Partnership*, one of the potential challenges regarding developing cross-professional relationships was the difference in cultures between schools, teachers, and CLD workers. However, this was recognised and addressed by teams:

Breaking down professional boundaries is really key… We absolutely have different cultures; different ways of doing business, but that kind of collaboration can only bring good results. (Falkirk steering group focus group).

The *Angus, Edinburgh, South Ayrshire Partnership* faced a number of challenges in developing cross-partnership working such as: considerable geographic distances, implementation of new secondary school national qualifications, and the secondment of one of the Head Teachers. However, this partnership managed to build effective and resilient working relationships. To achieve this, teachers had given up spare time and holiday time (including part of Easter break). Similar strategies were adopted by the *West Dunbartonshire & Renfrewshire Partnership* . For example:

Challenges	Strategies
Time to meet	Secure commitment from partners to keep to dates planned and attend
Staff cover	Funding provided but cover still not always available
Time to establish working relationships	Meeting when possible, regular dialogue, investing own time
Time to plan for cover	Teacher investing time to plan for supply teachers
Not teaching stage where the intervention is targeted	Teacher swaps within school
Keeping up with school programme of maths, teaching and assessments	Commitment from class teachers in own time to get work done
ICT and email correspondence	More streamlined communication, dates and emails to all

(West Dunbartonshire & Renfrewshire report – Project 2, p.6)

While such measures helped to drive the level of collaboration, it was recognised that to ensure sustainable collaborative action the schools would have to incorporate the SIPP action plans into their improvement plans. In this partnership's final report they stated that this type of strategic planning had been beneficial:

> *Action plans were incorporated into each school's improvement plan to allow workload and timescales to be manageable.* (Angus, Edinburgh, South Ayrshire Partnership final report p.6).

It is evident that the development of effective working relationships is a time consuming process. However, the *Midlothian and East Lothian Partnership* reported that, as a result of these effective working relationships, there were timesaving benefits in the long term:

> *The SIPP programme has helped us to focus our time and share the burden of work.* (Midlothian & East Lothian final report – Project 2).

Major sources of support for the development of SIPP activity in schools

Respondents to each of the four survey waves were asked about the extent to which colleagues and other organisations and factors helped or hindered the development of their SIPP. Focusing on the *major supports* and looking at the

results from the first and fourth surveys a number of interesting findings emerge.

- Sixty nine percent of respondents to the first survey indicated *colleagues in their own school as major supports*; however*,* by the fourth survey this figure had fallen to 39%;

- On the other hand, while 55% of survey one respondents indicated *other colleagues in their partnership* as major supports, this figure had grown to 74% by survey four.

Taken together these two findings may indicate that colleagues outwith the schools have become increasingly important as the initiative has developed. This suggestion is further supported when we look at the figures for the University and Education Scotland teams. As the initiative progressed there has been a rise in the percentage of respondents indicating that the team from the Robert Owen Centre has become a major source of support.

- In wave one 22% of respondents regarded the University team as a major source of support; by the fourth survey this figure had risen to almost half (46%).

- Over the same period the figures for Education Scotland as a *major support* rose from 11% in wave one to 25% in wave four.

- The equivalent figures for local authorities remained relatively stable over the same period, 43% in wave one and 39% in wave four.

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

There are indications from the external evaluation evidence and partnerships' own research that there are types of collaboration that reflect what is known from the literature about effectively developing a focus and system for activity. For example, there have been numerous instances where either the local authority (e.g. *Falkirk, West Dunbartonshire and Renfrewshire*) or partnership school senior management (*Angus, Edinburgh and South Ayrshire partnership*) have been instrumental in fostering networks that are in line with those identified by Wohlstetter et al (2003). Wohlstetter in her study of Los Angeles networks that drew schools together to facilitate 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 et al., 2003, p.399)

As Section 2.3 has detailed, partnership members believed that their involvement in the SIPP had promoted collaboration and professional dialogue that improved their practice and capacity for enquiry.

Some partnership teams were particularly well organised in developing a project focus and enquiry and ensuring this informed practice. For example, in the _East Renfrewshire Partnership_ , the team engaged with a collaborative action research methodology early on. This team of teachers and local authority staff took time to interrogate attainment data, identify a gap, and then establish a research focus. During their first meeting they began to define research questions. The research questions guided the enquiry process and remained unchanged throughout the project. Time was also spent consulting existing literature and a number of educational professionals. Books mentioned by the teachers included Mindset (Dweck 2006), Children's Mathematics: Cognitively Guided Instruction (Carpenter et al. 2000) and Lesson Study (Stepanek et al. 2007). One of the teachers commented:

> _We very quickly bought the books that had been recommended… So we did a lot of reading ourselves._ (Interview with teacher)

The people recommending the literature were school psychologists, quality improvement officers, and university staff. These were educational professionals outwith the boundaries of the school, but people who had developed relationships with the teachers and had the needs of the teachers in mind. These relationships were built across organisational boundaries, but practitioner-focused and were instrumental in the development of a clear focus that utilised Cognitively Guided Instruction (CGI) and Lesson Study to tackle inequity in primary school mathematics.

In the _Midlothian and East Lothian Partnership_ the team saw the challenge as identifying a focus that would fit with individual schools' development priorities or improvement plans. Collaboration that occurred at a time when schools' development priorities or improvement plans were flexible to suit both the strategic objectives and also local context appeared to be most advantageous to the process of identifying a project focus. When the circumstances were such that a school's development priorities or improvement plans did not have the flexibility to incorporate the SIPP focus, collaboration appeared to be less effective.

Teachers' feedback provides evidence that collaboration and partnership with other schools were the one of the main successful developments of the SIPP initiative. Comments from partnership teams reveal that the teaching staff involved had developed closer working relationships and developed more effective networking. As practitioners from the _Argyll and Bute and Inverclyde Partnership_ commented: "_It is great to be able to share experiences and work together._" Teachers also commonly noted that being able to observe others' teaching was extremely useful for improving their practice. Teachers saw the increased opportunity for networking as a key benefit of the SIPP:

> _Networking with colleagues from other schools and authorities…has broken down barriers and encouraged excellent opportunities for professional dialogue._

> _The most successful development in my school is the positive attitude developed towards collaborating with colleagues in other schools within and outwith the authority. This is a terrific foundation for a sustainable_

partnership and attitude. (Teachers from West Dunbartonshire and Renfrewshire Partnership project)

Partnership working has been extremely beneficial as a CLD worker in maximising resources when working with young people. (CLD worker in the Angus, Edinburgh City and South Ayrshire Partnership project)

The collaborative partnerships meant that teachers were able to engage in professional dialogue, build confidence and develop leadership capacity.

Comments and evidence from teachers and local authority colleagues regarding positive outcomes as a result of the SIPP indicated that there were benefits from partnership working that were unforeseen at the proposal stage. For example, the opportunities provided by increased collegiate working and collaborative networking often led to synergies and new ideas such as new learning and teaching approaches, more critical reflection and new evaluation strategies. For some, this had had a motivating effect.

This has inspired me to stay in teaching (Supply Teacher, Angus, Edinburgh and South Ayrshire Partnership project)

There is evidence of local authority representatives 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. However, parents and pupils have generally not been consulted during the planning phase across the partnerships.

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

Over the life of the SIPP initiative the Robert Owen Centre team has observed growing teacher engagement with the collaborative enquiry process. Comparing results for wave one and wave four surveys we can see substantial positive changes in this area.

- We noted a rise from 50% of respondents in wave one to 81% in wave four who were *using systematic enquiry and evidence gathering to inform practice and monitor developments*;

- Over the same period we also witnessed an increase in respondents (from 61% to 89%) reporting *increased teachers' reflective practice and self-evaluation*.

Appendix 1 Table 3 details results from the four survey waves.

Teacher and local authority comments provided during national and local events, focus groups and interviews highlighted the role of the University team in helping to develop capacity and skills regarding collaborative enquiry. Teachers also learned from one another, with some in each group having research expertise gained during masters or other courses.

In their reports, the partnerships made reference to their improved capacity and expertise regarding the use of data and evaluation approaches. For example the *Falkirk Partnership* team reported that the CLD staff:

> *…have increased knowledge in gathering and analysing quantitative and qualitative data to evidence impact, identify themes and address community needs* (Falkirk final report p.11).

The *West Dunbartonshire & Renfrewshire Partnership* team reported that "Teachers and head teachers have had the opportunity to lead discussions and evaluations, and learn skills in data collection and analysis" and stated in their report that

> *Participation in several professional learning opportunities with the Robert Owen Centre for Educational Change at the University of Glasgow throughout the project. This resulted in continuous development of data collection and analysis.* (West Dunbartonshire final report p.3).

Practitioners' increased knowledge and experience regarding context-specific methods of assessment and data collection were evident in the number of data collection tools accessed, modified and designed by practitioners. To name just a few examples: teachers designed bespoke assessments to determine pupils' ability to solve mathematical problems using a CGI approach; designed pupil surveys for secondary pupils to determine key issues regarding attendance; designed surveys for education professionals regarding staff knowledge and attitudes and modified pupil attitudinal surveys to use, as well as accessing and using a number of pre-existing data collection tools. (For more details see Appendix 4.)

While the SIPP initiative has improved practitioners' reflective practice and evaluation skills and contributed to Local Authorities' data gathering and analysis systems, the University research team noted some implications of this improved capacity. Perhaps the most important was that as evaluative approaches became more sophisticated and higher quality data was gathered, there was an increased need across partnerships for support regarding more complex analysis to make best use of a range of detailed data and to better synthesise this evidence.

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

Again, there was evidence that the SIPP had promoted leadership opportunities and allowed teachers to develop greater responsibility as part of their partnership team. This included responsibility for developing interventions/ projects and enhanced enquiry roles. Results from the wave one survey indicated that the SIPP initiative had begun to support leadership opportunities. However, by wave four these figures had risen again to the point where the overwhelming majority of respondents indicated a positive response.

- Eighty five percent of wave four responses, compared to 76% of wave one responses, indicated that involvement with SIPP activity had seen *a commitment to developing leadership opportunities*.

- Eighty eight percent of respondents in wave four also indicated that involvement with the SIPP had resulted in the creation of leadership opportunities and professional learning of staff at all levels. Two thirds of respondents (66%) reported this at the wave one stage.

See Appendix 1 Table 4 for additional detail.

Staff across the partnerships took on a number of diverse and varied leadership roles including: developing project plans, organising collaborative enquiry, organising and delivering parent engagement activity, participating in lesson study cycles, writing reports, facilitating and video-recording pupil focus groups, creating pupil assessments, collecting data, analysing data, involving various experts; researching, introducing and instructing staff in new pedagogies such as CGI and presenting at SIPP national events etc.

In the _Falkirk Partnership_ teachers commented that they had gained knowledge and leadership opportunities through their involvement. It was not only teachers who benefited from opportunities to take on new roles and responsibilities, but also SfLAs and CLD workers. For example, SfLAs took on teaching roles in this programme by planning lessons, delivering lessons, and participating in shadow observations. SfLAs benefited professionally from these opportunities, but also invested their own time after hours to voluntarily contribute to the lesson planning.

> School D stated that the SfLA was always 'super organised' which saved a lot of time as she ensured that time was used wisely and resources were also prepared for both staff and pupils. (Falkirk final report p.33).

In this partnership, CLD workers also stated that they benefited from the opportunity to take on new roles and responsibilities. By learning new reading strategies they were able to share these strategies with parents and with pupils through the homework club. The CLD workers also stated that they gained a better understanding of the issues teachers face in their work. The Falkirk final report stated that CLD workers: "are more confident in working collaboratively across disciplines and localities" and "have shared skills and specialisms to enhance family learning and literacy provision" (p. 11).

In the _West Dunbartonshire & Renfrewshire Partnership_ Head Teachers reported that, through their involvement in the SIPP, their schools were now in a position to share innovative approaches and develop leadership in other schools. One Head Teacher said, "We felt we had something to give". Teachers in this partnership also benefited from learning and leadership opportunities such as:

> …leading our own professional development in order to develop an enhanced understanding of the core curricular area of numeracy, opportunities to lead our core group within the partnership at different times – taking charge of distributing responsibilities, leading CPD activities within home school, leading development at an authority level, opportunities for developing confidence, opportunities to observe in our own and other authorities with a view to sharing our observations with our own partnership group, building a larger network of colleagues
> (Final report Project 2)

Staff in this partnership took on a number of diverse and varied leadership roles including organising and delivering parent workshops, writing reports, presenting at SIPP national events, facilitating or video-taping pupil focus groups, creating pupil assessments, collecting data, analysing data, involving various experts, introducing and instructing staff in new approaches.

In the _Angus, Edinburgh and South Ayrshire Partnership_ many teachers were afforded the opportunity to take on leadership roles by leading or participating in the nine development groups and/or the joint group. In addition, a number of staff presented their work and disseminated good practice at a residential conference.

With the _Midlothian and East Lothian Partnership_ Head Teachers and teachers from St. David's High School, Newbattle High School, and Knox Academy organised a conference to share good practice. Two hundred and thirty staff participated in the conference's 24 workshops. The leadership of this partnership was shared among a group of Head Teachers, deputy head teachers, and teachers who took on the roles of workshop presenters, conference organisers, working group leaders, and personal support programme leaders.

Assessing the extent to which the SIPP has contributed to its intended intermediate outcomes.

In the next part of this findings chapter, we look at the longer-term outcome objectives of the SIPP. These outcomes are those where we would expect developing progress regarding impact on teachers' capacity to better understand and tackle educational inequity and, importantly, the impact made by their SIPP work in terms of a positive impact on students.

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

There was a clear indication from the surveys that the partnerships had begun to have a positive impact on teachers' understanding of disadvantage, and aspects of the inequality agenda. There was increased understanding across staff of the nature of disadvantage and its relationship with other factors such as health, wellbeing and pupil outcomes. Focusing on the wave one and wave four results we can see involvement in SIPP activity associated with substantial gains in the following:

- Almost all wave four responses (97%), compared to 56% of those in wave two, suggested that SIPP activity had sharpened _focus on closing the achievement gap_;

- Eighty eight percent in wave four, compared to 52% in wave one, indicated that SIPP involvement had supported _a commitment to reciprocity and mutual benefit to all involved_;

- Eighty percent of wave four and 54% of wave one respondents agreed that SIPP developments had *increased the capability of teacher networks to address inequality in education*.

See Appendix 1 Table 5 for additional detail.

In the _Falkirk Partnership_, the cross service partnership including CLD meant that teachers became more aware of the range of challenges that some parents in the community faced. For example, CLD workers were supporting parents in tackling financial difficulties, housing issues, welfare and health and wellbeing issues. The CLD workers helped teachers recognise the complex and wider issues that can influence students' attainment and that have to be addressed before parents would prioritise the literacy level of their children. (Falkirk final report, p. 22*)*

Also in the _Angus, Edinburgh and South Ayrshire Partnership_ as a result of their involvement in the SIPP, teachers became much more aware of equity issues, the attainment gap and the significance of SIMD levels.

> *The profile of the whole [educational inequity] issue has been raised, so that teachers are very clear about their role in tackling the issue at classroom and whole school level in order to improve outcomes for young people. Involvement in the SIPP programme has put the attainment information available on Insight into context, for the three schools, perhaps sooner than would otherwise have been the case.* (Angus, Edinburgh, and South Ayrshire Partnership report p.6)

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

Analysis of survey data between the first and fourth survey rounds indicated that partnerships had begun implementing approaches to address inequality in education across schools and seen the introduction of particular teaching and learning approaches for learners from disadvantaged backgrounds.

- Almost four out of five respondents (79%) compared to just under half (49%) participating in the in the wave four and wave one surveys respectively reported SIPP involvement leading to the *implementation of approaches to address inequality in education across schools.* Examples of teaching and learning approaches included: Cognitively Guided Instruction (East Renfrewshire), Hattie's Visible Learning (East/ Midlothian), CLD support workers supporting schools to promote parent's engagement with children's learning and implementing a family literacy programme (Falkirk).

- Just under three quarters of wave four responses, compared to fewer than half of wave one responses (43%), suggested that involvement in SIPP developments had seen *increased understanding across staff of disadvantage and its relationship with other factors such as health, wellbeing and pupil outcomes*.

- Finally, more than nine out of ten (91%) wave four responses compared with 45% wave one responses, indicated SIPP activity, seeing *the introduction of particular teaching and learning approaches for learners from disadvantaged backgrounds.*

See Appendix 1 Table 5 for additional detail.

Impact on individual staff
Between wave one and wave four surveys the research team noted increasing impact of the SIPP initiative on individual staff. Ninety one percent of respondents in the wave four survey, compared to 55% in wave one, reported that *a commitment to the professional learning of staff* as a result of staff involvement with SIPP activity happened to at least some extent. Moreover, there was also an indication of substantially increased impact on teachers' knowledge, confidence, and skills in approaches to address educational inequity.

- Ninety five percent of wave four respondents, compared to 61% of wave one respondents, indicated an *increase in teachers' knowledge of approaches to address educational inequality.*

- Ninety one percent of wave four respondents, compared to 56% of those in wave one indicated an *increase in teachers' confidence in approaches to address educational inequality.*

- Ninety four percent of wave four respondents, compared to 56% of those in wave one also indicated an *increase in teachers' skills in approaches to address educational inequality.*

See Appendix 1 Table 6 for full details of impact on staff by survey wave.

Strategic planning and capacity

There was good evidence to suggest that staff involvement with SIPP activity had impacted on strategic planning and capacity within schools.
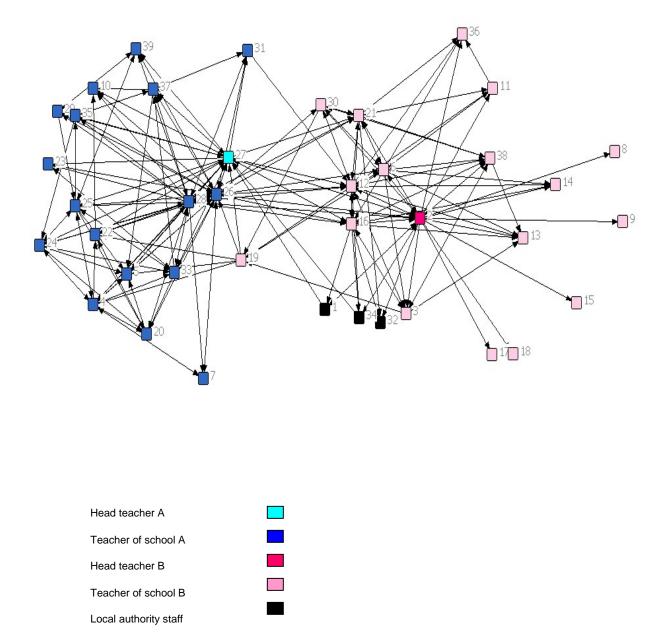
- Eighty five percent of respondents in the fourth survey, compared with 54% in the initial one, indicated that *explicit links to school improvement planning across the SIPP schools and local authorities had developed* as a result of SIPP activity.

- Nine out of ten responses (91%) in the final survey, compared to 57% in the first, suggested that involvement in SIPP activity had resulted in *a commitment to long-term sustainability and capacity building regarding the partnership's aims.*

See Appendix 1 Table 7 results for the four surveys.

The external research used SNA to provide a further perspective on how partnership members shared tried and tested ideas relating to effective teaching and learning approaches for the tackling of educational inequity. This produced a sociograms. At least three other partnerships will be included in future SNA analysis but at the time of writing, one of the partnerships had provided sufficient data to conduct the analysis. Within the partnership various

people took on the role of sharing teaching and learning approaches. The following sociogram was constructed by asking teachers, headteachers and local authority officers involved in the SIPP the following question:

With whom have you shared tried and tested ideas [relating to effective teaching and learning approaches for the tackling of educational inequity]?

Head teacher A	
Teacher of school A	
Head teacher B	
Teacher of school B	
Local authority staff	

Participants listed the names of people with whom they had shared tried and tested teaching and learning ideas or approaches. Some of the teachers (represented by coloured boxes on the sociogram) have multiple lines connecting them to other people. Other teachers have only a single line suggesting their conversations were limited to a single person. Rather than a single individual occupying a central role in the sharing of ideas, a number of

individuals are positioned centrally where they appear to be in leadership roles. Headteacher A and headteacher B have prominent positions, but it is evident that the sharing of ideas is also distributed among other teachers. This interpretation was confirmed throughout the focus groups and interviews in which a teacher stated that the sharing of ideas and associated roles were not occupied by headteachers or quality improvement officers:

> *It was kind of just like a big team in terms of who we were, but we were the leaders.*

The sociogram also reveals the involvement of the local authority officers (represented in the sociogram in black) as sources of support to this partnership and not necessarily taking on leadership roles. This was also mentioned in one of the interviews in which a teacher explained the type of support that had been beneficial:

> *So we knew by the end of the first day that we had a focus, but after that the* headteachers *us to kind of see where we were going with the next steps…* (Teacher interview)

> *…people have come in at the right time… At certain times we chose, or through discussion with the* headteachers *or just in our team we highlighted the people that we would need or we had a question that we needed support with and that was when we kind of involved more partners.* (Teacher interview)

2.9. Impact on students

There is growing evidence from survey responses that the SIPP initiative has begun to impact on students. At the wave one stage just under a third of respondents (31%) indicated that SIPP involvement had had a positive impact on *student aspirations*. However, by the fourth wave survey this figure had risen to 100%. Similarly while 34% of responses to the initial survey indicated that the initiative had *increased Student achievement* by the fourth round of survey all respondents (94%) reported this. See Appendix 1 Table 8 for further details.

It is important to note that these teacher reports of impact on pupils were based on their own research, monitoring and assessment. Indeed, a key feature of all of partnerships' planning and work was the presence of an integral research component that focused on target groups' needs, baseline indicators and follow-up measures. Appendix 2 provides a summary of each partnership and key examples of impact provided in their respective reports.

Some partnership teams in their development of appropriate evaluation, test and assessment instruments and approaches highlighted that relying only on standardised tests, such as Centre of Evaluation and Monitoring (CEM) data and the Scottish Index of Multiple Deprivation (SIMD), was insufficient. Teachers believed that a range of measure were necessary to gain a holistic assessment of needs, distance travelled and actual outcomes. Some noted that there should be more discussion and opportunities for a wider range of educational professionals to be consulted earlier in the programme regarding assessment and measurement as well as selection of target students. This would, they believed, have allowed more pupils to be identified for inclusion who would have benefited.

In addition to the challenge of acquiring parental/carer consent for students' involvement in the projects, there were a number of other challenges. For example, where projects required removing learners from their usual classroom this presented difficulties because of lack of accommodation in some schools, competing events going on for that year group and primary students feeling self-conscious about being removed from their regular class.

Looking in detail at particular partnerships we can obtain further insights regarding the impact of the SIPP activity on student outcomes.

The _East Renfrewshire Partnership_ involved Crookfur Primary School and Thornliebank Primary School collaborating with a focus on raising attainment in mathematics with boys and learners from minority ethnic backgrounds through the use of Cognitively Guided Instruction (CGI) and Lesson Study. This project was fully implemented in January 2014 with two classes of primary 5 pupils involved and their teachers leading the project. Through their involvement in the project colleagues introduced Cognitively Guided Instruction (CGI) into their approach to teaching mathematics. Cognitively Guided Instruction (CGI) is characterised by a teacher's focus on understanding the mathematical thinking that a child brings to arithmetical problem solving contexts.[6] Building on the informal mathematical knowledge and intuition of each student a constructivist approach is applied to teaching rather than a more traditional approach using prescribed algorithms. A teacher's learning about their students' solution strategies informs their teaching and the classroom becomes an interactive and dynamic learning environment in which teacher and student learning takes place concurrently.

Evaluation included impact on learners, parents and staff. Impact was monitored throughout the implementation of the project through a range of methods including:

- Standardised test results;
- Pre and post attitude surveys, Myself as a Learner;
- Pupil observations;
- Pupil work samples;
- Lesson study observations, de-briefing logs, reports;
- Pre and post questionnaires to pupils, parents and staff;
- Focus groups of pupils and staff;
- Parent evaluations of workshops;
- Staff evaluations of the Lesson Study approach;
- GL Education Group (external agency) pupil assessment test;
- Teacher devised assessment on fractions;

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[6] Moscardini, L. (2014) Developing equitable elementary mathematics classrooms through teachers learning about children's mathematical thinking: Cognitively Guided Instruction as an inclusive pedagogy. _Teaching and teacher education_. 43, p.69-79.)

- Use of authority tracking database to gather and analyse data around gender, ethnicity, free school meal entitlement, English language acquisition, lowest 20%, teacher judgement and SIMD.

Within 18 months of the introduction of the CGI approach, their research demonstrated the impact on students and the skills of almost 40 primary teachers, two Head Teachers, a secondary teacher, and five education officers within East Renfrewshire, as well as educational professionals in at least three other local authorities (West Dunbartonshire, Renfrewshire, Falkirk). Their evidence is detailed in the partnership's own report and indicated the following impact:

Impact in the East Renfrewshire SIPP has included:

- A statistically significant impact regarding attainment in mathematics for almost all learners as evidenced in bespoke baseline and follow-up tests
- Boys and minority ethnic pupils have made progress in both attitude and attainment as evidenced in Myself as a Learner (MAL) questionnaires and standardised test results
- Pupils no longer restricted to using a set procedure or algorithm, but instead developing their own strategies for problem solving; observations of pupils recognising that a maths question has more than one solution
- Increase in pupil enthusiasm regarding maths problem solving, stating that they want to do more
- Pupils demonstrating more confidence by choosing more challenging questions; have a more *'can do'* attitude to problem solving; pupils seeing themselves as problem solvers; fully engaged in the sessions
- Children are explaining their findings both orally and in writing in pairs, mixed ability groups and class situations; exploring their learning through discussion and questioning
- Pupils highly motivated; teachers identified that this is not always the case in other areas of the curriculum
- Data revealing which strategies each child was using and providing more accurate information regarding where the children were
- Younger pupils in the school are now tackling problems involving multiplication and division
- Lesson study has improved teachers' knowledge and understanding about teaching mathematics
- Lesson study has promoted a culture of collaboration and professional dialogue around mathematics
- Teachers have become more skilled in their approaches to observing, evaluating and assessing pupils' learning and understanding in mathematics.
- Parental responses through questionnaires and discussions have been overwhelmingly positive citing their children having an improved attitude towards mathematics and problem solving, commenting about how the approach is the way forward.

One of the head teachers and a teacher in the *East Renfrewshire Partnership* explained how the new approach was more effective than previous approaches that had been used with learners from disadvantaged backgrounds.

> *…previous strategies for closing the gap would have been to put in more and more additional support and more and more of the same approaches rather than trying a different approach. Instead we are now*

using the teacher who knows the pupils and adding to their [the teacher's] knowledge. (Headteacher in East Renfrewshire focus group)

We didn't have a good idea of where the children were [before using Lesson Study]. Even if the children were getting the right answers we weren't able to identify which strategies each child was using. Now we're able to … The impact CGI is having on the children is huge. (East Renfrewshire Partnership teacher)

Across the *West Dunbartonshire & Renfrewshire Partnership* , after introducing CGI into mathematics classrooms the teachers in this partnership were impressed with their students' enthusiasm for problem solving and related confidence to learn. In the *West Dunbartonshire & Renfrewshire Partnership* , students improved their ability to interpret mathematics questions, choose the correct operation and calculate correct answers. From the pre-assessment to the post-assessment there was an increase in correct answers from 52% to 67%. Feedback from pupils, teacher observations, child case study, *Myself as a Learner* (MAL) questionnaire results, and pupil presentations demonstrated an increase in the number of questions attempted, enhanced student engagement, perseverance and confidence to learn. Evidence of students linking mathematical concepts, justifying their choices and explaining calculations was also evident from teacher observations and feedback from students. (West Dunbartonshire & Renfrewshire final report, Project 2). An overview of some of the key impacts from this partnership is provided below.

> **Impact in the West Dunbartonshire and Renfrewshire SIPP has included**:
> *Numeracy:*
> - Pupil attainment in problem solving has increased. Pre and post assessment results – increase in correct answers from 52% to 67%
> - Pupils improved their ability to: interpret questions, choose the correct operation and calculate correct answers. Scale to gauge distance travelled- increase from 40% to 68%
> - Minor calculation errors decreased
> - Major calculation errors decreased
> - Greater speed in interpreting and solving problems. 70% of children improved their ability to interpret questions and there was an increase in the number of questions attempted
> - Enhanced pupil engagement. Perseverance and confidence to learn as demonstrated by: feedback from pupils; teacher observations; child case study; pupils presenting at West Dunbartonshire 'Amazing Things' showcase; MAL questionnaires
> - Pupils employing higher order thinking skills: linking mathematical concepts, justifying their choices and explaining calculations.
>
> Impact on literacy in primary schools:
> - Mean percentage of literacy assessments increased from 46% on the pre-test to 69% on the post test
> - Increases in scores for reading understanding, reading analysis, and reading evaluation were all evident with the largest increase evident for reading evaluation
> - Improvement in pupils' confidence, perseverance and enjoyment.

Students who were interviewed in this partnership shared the following insights:

I picture the problem. It's like having a camera inside your head.
I think I've been taught by my friends and I've taught them. Did you know that you remember 90% of what you teach? We can bounce ideas off each other.
I used to be shy but now I'm more confident to share with the class.
I don't worry about getting things wrong.
I asked for more homework.
We have lots of tools. My favourite is where I have to draw a picture to solve the problem.
Word problems...YES!!!
(Pupils from West Dunbartonshire & Renfrewshire Partnership final report)

The West Dunbartonshire and Renfrewshire Partnership also included schools that focused on Reciprocal Reading. With the support of the University research team, the partnership found that there has been a statistically significant increase in pupil attainment in all aspects of reading from pre and post intervention. Results from reciprocal reading assessments identified improvements *for all schools in the three areas measured*; Understanding, Analysis and Evaluation.

- Understanding: 18% increase

- Analysis: 20% increase

- Evaluation: 36% increase

- Overall: 23% increase

Results from one of the partnership schools using the YARC Assessment of Reading Comprehension showed that improvements were beyond what would be typically expected and aside from improved reading comprehension, pupils were more able to answer inference and vocabulary dependent questions showing a greater analysis of text. This assessment considered changes linked to typical development and maturation. Results indicated a reading comprehension gain of 10 months and the ratio gain to be 1:6 months over a 6-month intervention period.

In the _West Dunbartonshire & Renfrewshire Partnership_ , the CGI approach was seen as contributing to improved student attainment because it fostered their ability to:

> _…attempt problems with more confidence, a 'can do' attitude, recognise the range of tools and strategies available, explain benefits of using them, selecting the appropriate one for them for that task, use algebraic reasoning to interpret written problems and identify what information is known and what has to be calculated (from range of questions in CGI), justify choice of strategy used, link mathematical concepts and determine the reasonableness of a solution (Significant Aspects Of Learning), work collaboratively and learn from each other, identify and apply the correct processes when attempting problems involving number values beyond their current experience, explain that there can be a number of different approaches to solving the same problem._ (West Dunbartonshire & Renfrewshire final report, Project 2, p.5)

Similarly, in the _Midlothian and East Lothian Partnership_ there was evidence that involvement in the SIPP had impacted on teachers' awareness and capacity to tackle the attainment gap and address the needs of disadvantaged students.

> _Teacher conversations have also shown a significant culture shift, particularly in the context of being more aspirational for the weakest students, who are often the ones in the lowest SIMD. This shift will take some time to spread throughout our schools and that is going to be one of our major foci next year._ (Project 2 final report, p.7)

In this partnership, their practitioner enquiry revealed the challenge of impacting on attainment for those secondary school students from more deprived areas. Assessment evidence of improvement as a result of student feedback varied but attainment was found to improve significantly if older students were targeted by the SIPP work and the number of project lessons per week was increased (i.e. two or more lessons a week). The partnership's student surveys also revealed strong approval of specific feedback, as did the parental surveys. The SIPP experience had promoted 'a shift in culture towards one of collaboration and a growth mindset' across staff. It had also led to the creation of a new network of over 40 staff with a desire to network across a wider group of schools and there was evidence of successful techniques being shared across the partnership schools (for example RAG rating or videoed feedback)'.

In the _Falkirk Partnership_ evidence collected revealed a positive impact on both students and their parents as learners. A member of the _Falkirk partnership_ stated that the _High 5 Reading Programme_ had demonstrated the effectiveness

of targeted support for upper primary pupils from disadvantaged backgrounds. Interventions in the past had often focused on younger children from disadvantaged backgrounds, but this project revealed that targeting upper primary pupils from disadvantaged backgrounds could also be effective. Using CEM assessment data and Neale Analysis of Reading Ability (NARA) assessment data, the reading ages of pupils were determined before and after the targeted intervention. The analysis of this data led to the following conclusion:

> *Pupils who took part in the project have, on average, made significant progress with reading this session and also have gained an increased reading age of 5.9 months greater gain than their peers in the control group.* (Falkirk final report p. 15).

Qualitative data collected from pupils was also positive, indicating that pupil 'confidence, engagement, motivation and interest in literacy has increased by taking part in this project' (Falkirk final report p. 19).

The impact of this project also extended to adults as learners. Adults were found to have benefited through the adult literacy aspect of the partnership work. This was explained by a member of the Falkirk steering group:

> *I mean I've been doing my job for 40 years. Feels as if I've been going on about adult literacy for that length of time and this is the first time it's felt to me as if there has been a real positive shift… So, for me this has been amazing. I just hope it doesn't get lost.* (Steering group focus group)

Parents of the target group of students involved in this project explained how they began to see themselves as educators:

> *It [the club] has helped me think about the ways I can help my child with learning at home.* (Parent comment from Falkirk final report p. 25)

In the *Angus, Edinburgh and South Ayrshire Partnership* there was evidence of impact on target students' outcomes in line with the objectives of this partnership:

> *The attendance of the identified groups in all 3 schools improved. 21 of the 26 targeted pupils in Holy Rood improved their attendance, with the average of a 7% improvement. In Ayr the targeted group's attendance improved by 5% and the whole school by 1%. Indications show that there may be a further improvement this session of another 1%. In Arbroath Academy our overall school attendance has increased by 1%.* (Angus, Edinburgh and South Ayrshire Partnership report p.4)

> *We [Arbroath Academy] have seen an increase in the number of parents attending parents' evening, for example S3 has increased from 29% to 44% and S4 from 21% to 43%.* (Angus, Edinburgh and South Ayrshire – from final report)

The *South Lanarkshire Partnership* monitored the target students involved in the Nurture Programme and found improved engagement, attendance and achievement. Feedback from students highlights the positive impact for them:

The nurture group helped me in a number of ways in school. It helped with my behaviour. It also helped me control my feelings and helped me get over my dad's death. Finally, it helped build my confidence because I met new people and made new friends. (Student interview)

3. Summary of key findings arranged by the research questions

A) Objective*: **To assess how well the overall SIPP, and each individual partnership project within it, have been initiated. (Process/ formative question)***

Research questions and key findings

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

A number of partnerships reported that the development of their proposal and inception was time-consuming due to the need to negotiate an appropriate design and then communicate the plans to colleagues. However, all those who were successful with their proposals were able to see progress thereafter. Improvements could include greater support for partnership development teams when developing their focus of their collaborative enquiry.

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

The overall SIPP has been successfully implemented in that participating partnerships have been able to develop appropriate plans, infrastructures and collaborative networking in line with that recognised by the literature on collaborative enquiry and improvement. This has produced positive impact depending on the 'maturity' of the partnership and the extent to which the partnerships reflects the core principles for effective collaborative action and enquiry.

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

Overall, teachers quickly developed collaborative networks, supported by their partnership colleagues, school and local authority managers and the external Robert Owen Centre and Education Scotland team. This has facilitated positive developments in joint projects and enquiry, with impact on students being reported in those partnerships that most closely fit the profile of effective collaborative systems and underpinning core principles. A key factor in the successful establishment of these working relationships has been the motivation and commitment of core team members. Their engagement has often been promoted by opportunities to become engaged in innovative projects, having a role in decision-making and the resulting leadership opportunities.

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

Effective collaboration was most evident in working teams constituted to develop the various SIPP projects within each partnership. These promoted sharing of valuable ideas for learning and teaching and developing new skills, including research and enquiry capacities and leadership opportunities. The most effective teams and partnerships reflected the core principles underpinning the SIPP that were set out at the beginning of the initiative and were informed by the research literature.

Opportunities to get together during the research support events, facilitated by the local authorities and involving the University and Education Scotland members were also effective.

The National SIPP events provided opportunities for cross partnership sharing of ideas and demonstration of progress.

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

Overall, there has been notable progress regarding this objective as the Programme has progressed. Key factors that have facilitated teachers' evaluation capacity appear to be the support from the University team and collaborative networking within and across partnerships.

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

Teachers report that the SIPP experience has promoted their leadership opportunities through their activity in developing innovative learning and teaching approaches and enquiry.

B) *External evaluation Objective*: To assess the extent to which the SIPP has contributed to its intended intermediate outcomes. (Outcome objective)

Evaluation Questions and key findings

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

The majority of teachers report enhanced awareness and understanding of disadvantage. This has substantially increased as the Programme has developed. The practitioner enquiry process, inputs during the national SIPP events and an increasing national priority on educational inequity have contributed to practitioners' understanding of disadvantage.

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

The majority of partnership members report adopting teaching and learning approaches that aim to tackle disadvantage. This has increased in pace over the past year as the partnerships have matured.

9. Impact on students

Since the last SIPP report there has been a notable increase regarding partnerships' demonstrating an impact on the target students' achievement and other learning outcomes, such as confidence to learn. However, some partnerships were better able to demonstrate such impact. In some cases, partnerships were still implementing their projects and collecting evidence to assess impact.

4. Conclusion

After two years of development and implementation, the available evidence from the external evaluation and the partnerships' own evaluative findings strongly indicate that the SIPP is now having an impact regarding its stated objectives, including on attainment and other broader student outcomes. Overall, the SIPP initiative has continued to promote collaborative approaches that have also positively impacted on personnel in the participating schools, local authorities and partner agencies/ services. The processes involved in establishing and sustaining the partnerships has facilitated improvements in learning and teaching, assessment, joint working to tackle student needs, engagement with families, leadership and professionals' motivation.

The range of positive developments and impact demonstrate that the underlying principles for collaborative partnership working and enquiry to tackle educational inequity are sound. Indeed, progress and impact has been most evident in those partnerships that have been able to adapt and apply the principles and core concepts underpinning the SIPP to their own context. The majority of the partnerships report that lessons learned will be reflected in school and local authority planning to sustain approaches that have proven effective. The support from the Robert Owen Centre and Education Scotland has been valued across the partnerships. There has been an increase in sharing of ideas and lessons learned across the whole programme. There is evidence that this is now influencing developments more widely across the participating local authorities and more generally across the wider education system.

The SIPP has introduced new ideas and processes into the system that have resonated with those involved. It has provided a model with a flexible but rigorous framework that has supported localised capacity building and ownership of the initiative that has supported those involved in experimenting, taking risks, reflecting on, and monitoring developments and outcomes.

Where there have been challenges of limited time, funds and resources, most partnership teams have worked creatively to overcome impediments and implement their plans and sustain action. However, across the individual partnerships the pace of progress has been uneven. A minority of partnerships have taken longer to put their ideas and plans in place. This reflects variation in capacity within organisations, internal and external factors in the partnerships and their particular projects. Nevertheless, even where progress has been

slower, important lessons have been learned not least because of the collaborative enquiry integral to the partnerships. Such insights appear to be informing strategies to improve approaches in these partnerships.

The SIPP has tended to have most traction where there a group of committed practitioners, supported by school and local authority leaders, are quickly established to drive the project who have then been able to engage other staff and expand the influence of the Programme to affect behaviours more widely across schools and partnerships. This is challenging and complex territory but this type of work is crucial in developing a robust Scottish approach to move the education system forward.

The policy and social landscape in which SIPP is operating is changing. During the lifetime of the initiative there has been an increasing focus from Government on tackling the attainment gap with further resources being deployed. The SIPP is well placed to continue to inform these national developments, providing examples of 'what works' and supporting this with detailed insights on why certain approaches work in particular contexts. The emerging evidence from within the SIPP, combined with the literature that underpins this approach, suggests that, with further support combined with longer-term strategic planning, the SIPP has an increasingly important role to play in supporting national efforts to combat educational inequity.

Characteristics of effective partnerships

Over the first two years of the programme we have identified a number of common features or key characteristics associated with more successful partnerships. These appear to be the core ingredients that support flourishing partnerships. They can be distilled into ten key characteristics:

1. **Focus on closing the attainment gap between learners from more and less advantaged backgrounds.** This focus ranges from investing resources to gain commitment from staff and the wider community to challenging current ways of working and expectations. Senior leaders within schools and the local authority provide advocacy and articulate a compelling narrative as to why focusing on the attainment gap is so important.

2. **Purposeful leadership.** Leadership is key to the success of SIPP partnerships. The most successful partnerships have encouraged and created space for the emergence of leaders at all levels. In some cases this has been through the formal identification of individuals; in others leaders have emerged as the programme has evolved. In both situations, senior leaders have deliberately created leadership opportunities in order to build capacity across the partnerships. Diverse examples include:

   - Classroom teachers who have developed their knowledge and expertise in specific enquiry techniques or pedagogical approaches and shared this by leading school and partnership-wide professional development

   - Headteachers who motivate and mobilise their staff to engage with residential professional development activities

- Local authority officers who broker and facilitate professional learning within and across partnerships.

3. **Understanding the change process.** This has involved a clear articulation of a phased approach to the programme that moves from 'creating the conditions' on to 'embedding ways of working' and 'planning for long-term sustainability' beyond the time-frame of the funding stream. Successful SIPP partnerships have undertaken a contextual analysis which has enabled them to tailor focus, activity and pace to their specific contexts, building on their previous successes and ultimately developing a strategy for sustaining new ways of working for the longer term.

4. **Structured opportunities for collaboration.** Partnerships have invested in structured opportunities for staff from different institutions to work collaboratively. These have included:

   - Attending regular learning events led by Education Scotland

   - Organising partnership-led residentials and away days

   - Running partnership learning days where teachers bring their data and share their findings to move knowledge and practice around the system.

5. **Commitment to collaborative action research.** Focused systematic practitioner enquiry is used to critically examine current arrangements, make changes based on evidence, monitor the impact of these changes and refine and adapt arrangements as appropriate. This has involved drawing on a range of approaches including lesson study, learning rounds, improvement science and more generic collaborative action research to explore focused questions pertaining to closing the attainment gap.

6. **Use of data and understanding of impact.** Data richness has long been associated with effective school improvement. Successful partnerships are not only data rich, they are also data literate. They have the capacity to understand and interpret a range of data to create a holistic picture of their context that guides decision-making. The diversity of the data that is collected and analysed allows for multiple understandings of impact and ranges from statistics on attainment in terms of academic outcomes to accounts of the experiences, perceptions and attitudes of a range of stakeholders.

7. **A focus on literacy, numeracy and parental engagement.** Successful partnerships have used enquiry processes to improve arrangements for literacy, numeracy and, to a lesser degree, parental engagement. This has been most potent where collaborative enquiry has been used to refine and adapt the implementation of evidence-based interventions for specific groups of learners. This creates a robust process that is vital in supporting the implementation of an evidence-based intervention.

8. **Investing in building positive relationships.** The most successful partnerships have invested significant energy in initiating and sustaining positive relationships across professional, institutional and geographical boundaries. Activities have included:

- Teachers taking time to understand their different school contexts

- CLD teams and teachers learning from each other and exploring mechanisms for maximising their potential for closing the attainment gap

- Local authority officers building cross-local authority relationships to tackle the attainment gap.

9. **Promoting a risk-taking culture.** Partnerships that have developed the confidence to experiment and innovate have been most successful. They can challenge established norms of practice and staff and student expectations. Changes have involved rethinking roles and relationships in some settings, for example finding new approaches for multi-agency working, devising new methods for developing approaches to collaborative teaching and learning and even totally rethinking how whole school CPD is undertaken.

10. **Drawing on external expertise.** The most successful partnerships recognise the value of drawing on external support and have worked with other schools, Local Authorities Education Scotland and The Robert Owen Centre for Educational Change. Individual schools and partnerships have used these external partners to broker, support and facilitate collaboration and knowledge exchange and draw down different types of knowledge and evidence. They have used external support to make connections between individuals and partnerships with similar interests and concerns, built capacity and gained expertise in research methods and drawn upon academic knowledge of 'what works' in terms of prevention and intervention.

The characteristics of the partnerships also align with the nine core attributes of effective networks identified by Kerr et al. (2003):

- *Forms of participation* involve teachers in ways to further the aims of their partnerships and are being sustained;

- There is evidence of *productive relationships and trust* being sustained and developed further;

- There have been continued developments *in coordination, facilitation and leadership* with partnerships demonstrating vertical and horizontal coordination, facilitation and leadership to keep participants engaged;

- This has promoted *communication within and across* the partnerships;

- In terms of *'structural balance'* there appears to be a balance between network processes and structures with the right amount of structure to promote dynamism of the networks, yet sufficient direction and structure to avoid confusion and lack of focus;

- There is also *diversity and dynamism* in the network, bringing together appropriate people and ideas. Staff have volunteered to take on roles in their partnerships, including responsibility for coordination and evaluation. However, key participants in the

partnerships continues to mainly comprise of teachers and educational professionals with greater involvement of pupils and parents still limited;

- There are continued signs of *growing decentralisation and democracy*, that allow participants to address local issues while still facilitating a collaborative environment that encourages inclusive and transparent decision making;

- *Time and resources* have continued to be highlighted as challenges. However, partnership teams have often found ways to creatively address such issues to ensure momentum is sustained and approaches embedded in planning;

- Finally, there is evidence of partnerships increasingly developing and integrating *monitoring and evaluation* as part of their SIPP activity in order to identify what works and to understand why.

All of the above features are seen to a greater or lesser degree in all of the partnerships. However, the extent to which each feature permeates the network is dependent on a number of conditions, including partnership maturity, leadership capacity and the capacity to engage with new ways of working. Perhaps, most importantly, it seems that the extent to which each of the partnerships have engaged with the questions associated with each of the factors offers an important proxy for the level of progress made.

In conclusion, the research findings, strongly suggest that, overall, the SIPP is continuing to develop and mature and is producing robust evidence, including via partnership reports, of impact against its stated aims. This includes facilitating effective collaborative networking that is promoting teachers' confidence and expertise to innovate regarding learning and teaching, assessment and collaborative enquiry in order to promote educational equality. Importantly, there is now clear evidence that the Programme has fostered approaches that are positively impacting on the attainment and wider opportunities of the targeted students.

This is not to say that there is room for complacency. Not all partnerships have yet demonstrated impact against their stated aims and are still exploring how best to configure their approaches and systems. Also, a key challenge will be ensuring that those positive developments to date are sustained and embedded in practice and continue to impact on students' outcomes. Feedback from the partnerships reveals that shifting local and national policy priorities and changes in resources and staffing locally can slow or even threaten progress and sustainability.

5. Commentary

Our work over the first two years with the SIPP has provided evidence of the Programme's efficacy and identified areas for development, and approaches that have potential to inform change efforts across the Scottish education system. Our analysis has identified a number of issues and opportunities that have implications for policy and practice, these include:

- The previous evaluation report (Nov 2014) argued for the case for Innovation Hubs. Since then Education Scotland has established an Improvement Hub, We suggest this Hub has three key dimensions:

  1. **A curriculum dimension** focusing on what does, and does not work in closing the attainment gap in different contexts around the system. These efforts should focus on the key areas of Literacy, Numeracy, Health and Wellbeing and STEM. *A key function of this dimension would be to organise and move existing knowledge and instructive practice across the system.*

  2. **A Research and Development dimension** to develop practitioners' capability enquiry approaches that are informing and developing practice the SIPP, i.e.: Collaborative Action Research (CAR), Lesson Study, Improvement Science, and Instructional Rounds. *A key function of this dimension would be develop expertise, innovate and test new knowledge and approaches.*

  3. **An evidence for Improvement dimension** that builds a robust evidence base underpinned by a myriad of data sources including those within the recently announced National Improvement Framework and increases expertise in the use and interpretation of improvement and contextual data. *A key function of this dimension would be to build capability for self-improvement across the system.*

All three dimensions will demonstrate a strong commitment to professional learning and leadership development that articulates directly with policy developments within key agencies and policies (e.g. SCEL, RAFA and the Attainment Challenge Fund). This will support building coherence across the system. Fullan and Santiago (in press) argue three key areas are required to develop a high quality coherent education system, these factors are:

> *- An uplifting agenda that is based on the moral imperative of raising the bar and closing the gap for all children while focusing in a small number of ambitious goals.*
>
> *- Purposeful vertical and lateral interaction that develops capacity, disseminates good ideas, and builds a shared sense of purpose and know how.*
>
> *- Different policies and units at the state level deliberately serving the same integrated purpose.*
>
> Fullan and Santiago (in press)

SIPP, RAFA and Attainment Challenge have focused attention on creating a more equitable education system and created an uplifting agenda around closing the gap. An Improvement Hub underpinned by the three key

dimensions of: curriculum, research and development and evidence for improvement which can support purposeful vertical and horizontal interaction and linking different polices to serve the same integrated purpose. Therefore, the Improvement Hub has the potential to play a significant role in creating a more coherent system.

- Linked to the ideas outlined above, there is scope for the SIPP to inform the development of Initial Teacher Education (ITE) by aligning the three key dimensions (curriculum, research and development and evidence for improvement) to the ITE curriculum. The power of SIPP then moves from within service professional learning to impact on pre-service learning. This is an important aspect of embedding the principles that underpin SIPP into the education system and within teachers at the outset of their careers. We would see Government, existing higher education providers of ITE and relevant associations being involved at the core of this ITE hub.

- The range of enquiry methods used by partnerships includes collaborative action research, improvement science, instructional rounds and lesson study. While there is variation in the intensity and breadth to which these methods have been utilised, the Programme now has a significant opportunity to embed and spread this newly developed capacity within the system as the Programme moves forward. One implication of the improved sophistication and capacity regarding practitioner enquiry across the partnerships has been the need for correspondingly sophisticated analysis to do justice to the data gathered and provide meaningful answers to their research. questions. Currently, there is a need for focused support from the university team to support the partnerships in further building their evaluation capacity and conducting aspects of analysis that they are not yet equipped to do.

In summary, there is much to be encouraged by in what the SIPP has achieved over that past two years. How this is embedded and enriched within the emerging educational landscape will be the challenge over forthcoming period. If SIPP's principles and achievements can be woven into the broader educational policy narrative, promote coherence and provide a lasting legacy there is cause for optimism that educational outcomes can be enhanced for all our children irrespective of their background.

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Appendix 1: Survey tables for Waves one to four

Table 1 – Development and impact – partnership and networking

% Development and impact – partnership and networking	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
Collaborative working across the partnership	51	63	71	35	49	32	24	29	-	6	6	21	-	-	-	15
Increased collegiality between colleagues across the partnership	54	69	70	41	40	28	20	32	6	4	8	9	-	-	2	18
More opportunities for teachers to share their ideas and plans with colleagues across the partnership	65	63	58	38	27	35	32	35	6	2	8	12	3	-	2	15
Partnership working across schools and local authorities with a focus on exploring specific issues relating to educational inequity	50	58	50	38	38	40	33	32	12	2	10	15	-	-	8	15
The development of arrangements to support long-term collaboration and new approaches to capacity building	34	41	37	24	57	52	48	41	9	7	12	15	-	-	4	21
The involvement of an appropriate range of partners to support the partnership's activities	27	20	35	15	53	67	22	36	18	11	30	18	3	2	14	30

Table 2 – Individuals' experiences of working together

% Working together has…..	Completely agree			Mostly agree			Not sure either way			Disagree			Completely disagree		
	W4	W3	W2	W4	W3	W2	W4	W3	W2	W4	W3	W2	W4	W3	W2
left me with a desire to work collaboratively with colleagues	71	80	75	29	20	25	-	-	-	-	-	-	-	-	-
encouraged networking with other colleagues	74	73	73	26	27	27	-	-	-	-	-	-	-	-	-
increased my leadership opportunities	41	69	72	50	29	20	6	2	6	3	-	2	-	-	-
encouraged me to try new ideas	64	66	57	24	28	37	9	6	6	3	-	-	-	-	-
promoted my skills in practitioner enquiry	58	52	51	33	43	39	9	6	10	-	-	-	-	-	-
increased my awareness of sources of support to address our SIPP aims	41	52	41	50	40	49	9	8	8	-	-	-	-	-	2
given me access to quality resources	46	40	33	52	49	39	3	11	22	-	-	2	-	-	4
increased my knowledge of approaches to tackle educational inequity	37	54	31	61	33	47	-	14	20	3	-	2	-	-	-
improved my teaching skills	38	42	22	45	42	24	17	12	47	-	5	4	-	-	2

Table 3 – Reported impact on teachers' understanding of evaluation

% Development and impact – Impact on evaluation	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
Increased teachers' reflective practice and self evaluation	40	37	41	29	49	50	30	32	9	10	20	15	3	4	9	24
The use of systematic enquiry and evidence gathering to inform practice and monitor developments	42	40	24	24	39	49	46	26	15	11	20	24	3	-	11	26

Table 4 – Development and impact − leadership

% Development and impact – leadership	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
A commitment to developing leadership opportunities	38	37	58	38	47	53	35	38	15	2	2	9	-	8	4	16
The creation of leadership opportunities and professional learning of staff at all levels	44	45	55	30	44	45	33	36	12	2	8	12	-	8	4	21

Table 5 – Development and impact – Inequality agenda

% Development and impact – Inequality agenda	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
Focusing on closing the achievement gap	47	52	58	38	50	44	24	18	3	4	12	18	-	-	6	27
A commitment to reciprocity and mutual benefit to all involved	47	44	48	40	41	44	28	12	12	6	14	18	-	4	10	30
Implementing approaches to addressing inequality in education across your school	33	35	35	16	46	46	31	31	19	14	23	25	3	6	12	28
Increased teacher networks addressing inequality in education	40	42	25	15	40	44	41	39	19	8	22	21	3	6	12	24
Increased understanding across staff of disadvantage and its relationship with other factors such as health, wellbeing and pupil outcomes	24	27	20	10	49	44	35	33	21	23	24	30	6	6	20	27
Introduction of particular teaching and learning approaches for learners from disadvantaged backgrounds	36	29	20	12	55	46	29	33	6	19	29	27	3	6	21	27

Table 6 – Impact on staff

% Development and impact – Impact on staff	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
A commitment to professional learning of staff	49	51	54	29	42	45	26	26	6	2	13	21	3	2	7	24
Increase in teachers' knowledge of approaches to address educational inequity	40	40	39	26	55	47	26	35	3	11	17	15	3	2	17	24
Increase in teachers' confidence in approaches to address educational inequity	39	30	28	12	52	53	39	44	6	15	20	18	3	2	13	26
Increase in teachers' skills in approaches to address educational inequity	44	33	24	21	50	53	40	35	3	11	20	21	3	2	16	24

Table 7 – Impact on strategic planning and capacity

% Development and impact – Strategic planning and capacity	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
Explicit links to school improvement planning across the partnership and local authorities	47	51	53	24	38	35	35	30	12	6	10	18	3	8	2	27
A commitment to long-term sustainability and capacity building regarding the partnership's aims	56	48	49	27	35	39	41	30	6	6	6	15	3	8	4	27

Table 8 – Impact on pupils

% Development and impact – Impact on pupils	To a large extent				To some extent				Little or no change				Don't know			
	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1	W4	W3	W2	W1
Increased pupil achievement	50	24	17	17	44	47	17	17	6	8	24	20	-	22	41	47
Increased pupil aspirations	50	41	27	21	50	37	22	10	-	8	20	18	-	14	31	52

Appendix 2: Overview of the SIPP partnerships and examples of impact

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
1. West Dunbartonshire and Renfrewshire Partnership project	This partnership project currently includes 13 primary schools from across the two education authorities and will involve building partnerships across sectors (including pre-5 partners). The 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.	Impact on mathematics in primary pupils: • Increased ability to correctly solve mathematics problems: pre- to post- assessments revealed an increase in correct answers from 52% to 67% • Evidence of increased ability to justify chosen strategy and communicate answer: teacher observations and feedback from pupils • Scale to gauge distance travelled by each pupil – increase from 40% to 68% • Evidence of increased ability to interpret questions: pre- and post- assessments • Increase in pupils' mathematics confidence, independence, engagement, perseverance and creativity: evidence from Myself As a Learner questionnaire results, pupil presentations at showcase, teacher observations, pupil feedback, child case study. Impact on literacy in primary schools: • Mean percentage of literacy assessments increased from 46% on the pre-test to 69% on the post test • Increases in scores for reading understanding, reading analysis, and reading evaluation were all evident with the largest increase evident for reading evaluation • Improvement in pupils' confidence, perseverance and enjoyment

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
2. Angus, Edinburgh City and South Ayrshire Partnership project	Arbroath Academy, Holy Rood RC High School and Ayr Academy are collaborating to improve attainment of young people in S4-S6 through improving the quality of feedback, attendance and parental engagement. Their 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?	Impact on secondary school attendance: All schools in the Partnership had increased attendance • Holy Rood High School: average attendance improvement 7% • Ayr Academy: targeted group attendance improvement 5% • Arbroath Academy: overall school attendance improvement 1% Impact on parental engagement: • Parent attendance at S4 evening increased from 21% to 43% for Arbroath Academy and attendance at S3 evening increased from 29% to 44%
3. South Lanarkshire Partnership project	This project 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 the 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.	The impact of this partnership is still being assessed. The Boxall profile has demonstrated improvements in pupil mental wellbeing. There are also indications of improvements in targeted pupils' attendance and motivation to learn. Other reported developments include: • 30 staff across four schools and other establishments supporting targeted students have received Basic Training • 15 staff have completed Accredited Training from the Nurture Group Network from establishments across SLC • Evidence based review now means the authority has validation, further evidenced by an HMIe visit • 3 schools with a common approach are now acting as a 'partnership hub' sharing expertise and ideas • There is mentoring of other staff in the approaches • Building capacity within, beyond and across schools • 'Pairing' recently trained staff with a vulnerable young person • 'Pairing' recently trained staff with Behaviour Support Specialist • Offering advice to other groups • Aiming to develop a nurture trained member of staff across schools • Now embedding best practice approach influenced by data

		• Growth and sustainability have been addressed.

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
4. Glasgow City and Fife Partnership project	This collaboration between Glasgow City and Fife involves Local Improvement Groups set up as a key driver of improvement. There will be increasingly bespoke solutions to local priorities for improvement. It includes 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 a greater focus on wider intra, and inter authority, partnerships (e.g. Fife) to support school improvement.	This project is still being developed but initial reported impacts include: • Schools have been inspired to re-focus on their core purpose of planning, delivering, evaluating and improving high quality learning experiences – engaging with the influences on learning • Creativity is emerging from exploration • A change in schools' reflection and dialogue focus on L&T, from shared observations • LIG schools beginning to be involved in professional enquiry with initial developments regarding improvements in leadership • Raising the bar with partnership schools
5. Falkirk Partnership project	This project involves Falkirk High School and the Grangemouth High School community learning clusters. The action research is targeted at the current P6 stage for those children from disadvantaged backgrounds with low attainment in literacy, and is to form part of an extended transition across P6-S1. It considers multi-agency and cross-service aspects, such that the interventions are as holistic and effective as possible. This includes targeted and sensitive interventions to support family literacy, involving schools, parents, CLD and family support workers.	Impact on pupil literacy: • Increased reading age of participants was 5.9 months greater than peers in control group using CEM data • Qualitative data revealed increased pupil confidence, engagement, motivation and interest in reading Impact on family literacy: • Evidence of increased involvement of parents with their child's literacy at home and at after school club Impact on educational professionals: • Teachers, Support for Learning Assistants, and Community Learning Development workers all reported increased knowledge and skills related to teaching reading to pupils and families in disadvantaged areas.

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
6. Midlothian and East Lothian Partnership project	This project involves 6 secondary schools from each local authority working as sets of trios. Each set has agreed areas of focused improvement which include: • Tackling inequality by improving leaners' experiences • Improving monitoring and tracking • Improving the delivery of the CfE entitlement to 'personal support' • Improving use of data, intervention and assertive mentoring and improved feedback.	Impact on education professionals: • 230 staff shared in good practice at a conference organised by partnership schools • 24 staff led workshops at the conference • 37 staff currently leading and/or participating in working groups and/or school visits • Evidence of increased ability of staff to identify levels of attainment and appropriate interventions • Innovative Personal Support Programmes currently being implemented • Newly developed school tracking, monitoring and reporting data base

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
7. East Renfrewshire Council Partnership project	This partnership involves Crookfur Primary School and Thornliebank Primary School collaborating with a focus on raising attainment in maths for boys and learners from minority ethnic backgrounds through improved learning experiences. Evaluation will include impact on learners, parents and staff, involving Psychological Services. The action research questions are: • 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?	***Impact on primary pupils' mathematics:*** • Impact regarding attainment in mathematics for almost all learners • Boys and minority ethnic pupils have made progress in both attainment and attitude as evidenced in standardised test results and MAL questionnaire • Parental responses in questionnaires and discussions have been overwhelmingly positive, citing their children having an improved attitude towards mathematics and problem solving, commenting about how the approach is the way forward • Pupils no longer restricted to using a set procedure or algorithm, but instead developing their own strategies for problem solving; observations of pupils recognising that a maths question has more than one solution • Increase in pupil enthusiasm regarding maths problem solving, stating that they want to do more • Pupils demonstrating more confidence by choosing more challenging questions; having a more 'can do' attitude to problem solving; pupils seeing themselves as problem solvers; fully engaged in the sessions • Children are explaining their findings both orally and in writing in pairs, mixed ability groups and class situations; exploring their learning through discussion and questioning • Pupils highly motivated; teachers identified that this is not always the case in other areas of the curriculum • Younger pupils in the school are now tackling problems involving multiplication and division ***Impact on education professionals:*** • Lesson study has improved teachers' knowledge and understanding about teaching mathematics • Lesson study has promoted a culture of collaboration and professional dialogue around mathematics • Teachers have become more skilled in their approaches to observing, evaluating and assessing pupils' learning and understanding in mathematics

Partnership	Description	Examples of impact based on University team data gathering and schools' own research
8. Inverclyde and Argyll and Bute Partnership project	This project involves Clydeview Academy and Dunoon Grammar School collaborating to close the gap between their high attaining students and those of lower ability. The focus of the action research will be: • Does the identified profiling champion with responsibility for a group of young people generate 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?	The impact of this partnership is still being assessed. There are some indications of a positive impact on parental engagement. It is also expected that there will be evidence of a positive impact on effective profiling methods and the use of mathematics teaching and learning techniques for low-attaining maths pupils.

Appendix 3: Project methodology

Introduction

It is important that measuring the success of the SIPP partnerships goes beyond using only traditional attainment data, particularly in the short-term. Therefore, each partnership has been asked to indicate what success will look like and, from this, appropriate measures have been developed. This has included a mixture of quantitative data, such as attendance or exclusion figures, and a qualitative assessment of engagement levels in relation to 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 specific success measures, therefore, have been different for each partnership, reflecting their particular circumstances and objectives. However, we have worked on the assumption that, while schools will have specific criteria for success grounded in their plans, we can also look for more general progress criteria regarding school improvement. These include:

- Evidence of distributed leadership where more staff take up leadership activities to operationalise and manage their school plan;

- Positive developments in staff attitudes regarding leadership commitments and their roles within the SIPP partnership;

- 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;

- Increased staff confidence in and use of research and enquiry approaches;

- A shift in children's 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 are seen as likely to include:

- Improved attainment and achievement for the target groups, evidenced in 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 was also important that each partnership constructed 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 thought had worked or was beginning to work, what had been less successful and the

reasons for success or otherwise. This qualitative evidence provided 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 contexts across the partnerships, the evaluation adopted a two-strand approach. Strand 1 supported partnership teams to develop and deploy their own action research enquiry/ evaluation. Strand 2 entailed an external, yet collaborative, evaluation that assessed progress across all of the partnerships to understand the effectiveness to date of the overall project.

These two complementary and related strands have:

- Supported action research and enquiry across the partnerships;

- Mapped and monitored the development of relationships, networks and practices within partnerships;

- Identified and examined 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);

- Identified and examined developments and intermediate outcomes in line with planned objectives emerging from the initiative;

- Identified and examined facilitating and inhibiting contextual conditions within partnerships;

- Provided 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;

- Provided 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 required an approach based on action research and the process of collaborative enquiry. Strand 1, therefore, developed 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 provided support to the partnerships as they used the processes of enquiry to move thinking and practice forward. The research team worked as an integral part of the support network provided by individuals from Education Scotland and Local Authorities to give critical friendship, assisting the partnerships to build capacity for educational improvement and to develop sustainable ways of working beyond the duration of the Programme. The nature of the support activity provided by the research team evolved over time as the needs of the partnerships developed but it generally involved:

- Supporting workshops for each partnership team in order to strengthen their skills in gathering and using evidence and in sharing each other's 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 research and evaluation 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, staff and local authority personnel in order to explore strategic implications of the findings of the research activities;

- Supporting the partnership teams in writing their evaluative accounts.

The researchers also analysed and documented processes and outcomes of activity and impact in each of the partnerships they supported. This led to the production of detailed evaluative evidence that was used to inform developments of future activity within the Programme and contribute to wider understanding in other contexts in Scotland and internationally. This data and evidence also informed Strand 2, the external evaluation.

Each member of the research team was assigned to two or three partnerships and worked collaboratively with the local authority officers and Education Scotland teams allocated to support each partnership. This approach and process helped to build the evaluation skills of the authority officers and Education Scotland personnel and promoted professional dialogue. It also promoted the University team's awareness of local and national policy and practice developments.

The partnerships worked 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 made up a cycle of reflective collaborative research. The insights and findings from Strand 1 allowed partnerships to understand the extent of their progress and the factors involved. The findings across the partnerships also fed into the external evaluation's overall assessment of impact and progress (Strand 2).

Strand 2: External evaluation approach

This strand primarily addressed the second and third project aims, i.e.:

> *To determine how well the overall SIPP 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 involved directly working with the individual partnerships to support them in devising, refining and conducting their own evaluations, Strand 2 of the evaluation involved the aggregation of the individual partnership evaluation findings, along with the University teams' 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 ensured that the evaluation plans and projects devised and operationalised by the different partnerships were sufficiently robust and valid to support the additional analysis carried out by the research team in Strand 2. Moreover, direct involvement with partnerships helped them maximise the formative element of the action research.

Strand 2 had four main components (detailed below).

(i) Identifying the range of partnerships

The research team worked in collaboration with Education Scotland and other key stakeholders to develop a framework that characterised the range and nature of the partnerships, including their particular aims, preliminary plans and networks of partners.

(ii) Mapping and monitoring the partnerships

The research team applied a range of approaches for this activity including gathering descriptive data and documentation and information on partnerships' plans and objectives. Social Network Analysis (SNA) has also been used with a small number of partnerships to explore in detail how influential networks developed and shaped the work of the respective partnerships.

(iii) Developing accounts of practice

This strand of activity involved developing in-depth qualitative accounts and case studies of activity across the partnerships. The case studies identified key developments and systems put in place and processes within the partnerships and examined their outcomes against their intended objectives. This analysis helped to interpret the quantitative findings. As part of the analysis of this material, the research team used an appropriate logic model to understand the relationships between the preconditions and resources invested and the inter-connected activities, outputs and outcomes of the Programme. This analysis informed the final section and reflections in this report. While causal relationships would have been difficult and inappropriate to identify, this *Theory Of Change* approach looked at outcomes and applied critical thinking to the design, implementation and evaluation of the SIPP and supported change in the various contexts (Vogel 2012). This allowed the research team to track developments and practice in the field and identify

critical incidents that facilitated or impeded the development of partnerships and their expected outcomes.

The design of the case studies was informed by the initial and baseline analysis and involved site visits to each school in the partnership, documentary analysis, and interviews with key stakeholders and observations of partnership meetings and activities.

(iv) Overview of all projects and synthesis

This part of Strand 2 involved a number of activities designed to collect additional data where necessary and produce a synthesis of findings from the other evaluation strands and a distillation of the major lessons from all of the partnerships. The evaluation gathered together evidence from individual partnership evaluations to produce an overview of findings. Although each partnership had specific and different aims and/or emphases in their work e.g. ethnic and gender equality, improving transitions, etc., the individual evaluations reflected the overall research questions detailed in Section 1. This 'framework' supported the aggregation of findings where appropriate and the discussion of experiences to allow:

- Collation and analysis of relevant documentation, evaluation findings, and summary reports generated across all 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 were also conducted, with the main methods being:

- Questionnaire surveys of relevant staff involved across the partnerships. These surveys provided baseline and follow-up data on partnership activity and progress. The second data collection point towards the end of the Programme enabled the team to identify any shift in progress criteria within and across the partnerships;

- Targeted interviews and focus groups conducted with staff and those at strategic level to discuss and reflect on emerging themes from the evaluation;

- A brief literature review of research on school improvement initiatives, which informed the analysis and provided a wider perspective on collaborative networking and enquiry in the context of school change and improvement.

For the evaluation of the SIPP, the views of pupils, where appropriate, were collected via partnerships' own data collection approaches, which had been informed by the University team. As partnership representatives have highlighted throughout the study, the impact on pupils will be more evident in the coming months and years.

Table 9 provides a summary of the methods, rationale and expected outputs for this component.

Table 9 Summary of the Strand 2 research methods, rationale and outputs.

Activity	Rationale	Output
Analysis of partnership documentation, evaluation findings, and reports. **On going and completed by June 2015.**	Identification of partnership aims, methods of working, key issues, successes. Provide 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. **On going and completed by June 2015.**	Further analysis (where possible) of existing partnership data. Aggregation of individual partnership data to improve its robustness. Provide complementary external component to internal partnership evaluations.	Provide generalised and more comprehensive findings. Contribute to the indication of overall success. Identification of key drivers of success and an indication of overall sustainability.
Questionnaire survey of SIPP partner representatives including Head Teachers, local authority staff, key teachers and other staff involved across the partnerships. **Conducted in February 2015 and repeated in June 2015.**	Supports the identification of initial initiative impact. Provide 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.
Qualitative research strand including: Interviews Focus group interviews with partner representatives including Head Teachers, local authority staff, key teachers and other staff involved **March-June 2015.**	In-depth material to help identify the impact of the partnership towards the end of the evaluation. Reflection and validation of emerging external findings. Provide complementary external component to internal partnership evaluation.	Qualitative dimension to the impact of the initiative. Material supported the generation of illustrative examples and accounts of practice.
Qualitative research strand including: Social Network Analysis (SNA) conducted with 3 partnerships **March-June 2015.**	To analyse inter-relationships and provide more detailed understanding of partnership work and key actors.	Detailed sociograms of each partnership including qualitative information.

Approach to the analysis

The research used ex post facto evidence, expert and key informant judgments and focused primary data gathered at two key intervals to explore the extent to which changes in the observed outcomes were due to the SIPP activities. The analysis systematically identified the main factors involved in the observed outcomes. The overall framework for the analysis was the research objectives and research questions documented as set out in Section 1 of this report.

Completed baseline and follow-up questionnaires were described and analysed using SPSS (Statistics Package for the Social Sciences). Frequencies, cross-tabulations, and relevant statistical tests were performed. The analysis also addressed, as far as was possible, the key factors which promote/hinder the impact of the SIPP approach and identified relevant associations between variables.

The initial analysis was directed towards an exploration of the reported impact or otherwise of the projects drawing on stakeholders' reported responses to their survey questions and any secondary data from the schools on meaningful outcome criteria. Depending on the nature of the data, and where there were robust numbers, the team applied cross-tabulation and Analysis of Variance (ANOVA) to explore both association and difference of variables within and across the different projects. However, this was limited by the numbers of respondents available for statistical calculation once the data was attributed to respective partnerships. Likewise, comparison on the basis of stakeholder group was a focus for the analysis but again, numbers of responses limited the level of analysis to the whole 'population;' so that analysis was not feasible at the local authority and project level.

Qualitative evidence gathered during the individual and group interviews was recorded both in note-form and through digital audio recording. A rigorous thematic analysis was conducted to illuminate participants' experiences of the initiative and detail their perceptions, aspirations and shifts in these as the Programme developed. The analysis also highlighted those processes that have influenced the implementation and impact of the SIPP. This analysis drew on transcription accounts for clarification and illustration.

Analysis involved coding to distil and sort the data to enable comparisons to be made and analytical insights developed. During this process memos were used to define emerging ideas and interpretations and to develop analytic categories. In addition to identifying key themes, patterns and trends these categories assisted in identifying any gaps in our data that were then addressed through further data collection. As categories developed they were built through successive levels of analysis. As the analysis developed, additional data collected served to check and refine the categories, culminating in a deep theoretical understanding of the studied experience and generation of findings that highlighted the reported impact of the projects. The draft findings were tested for face validity by the research team's expert panel and advisory committee. In addition to the expertise within the core group the research team included external key experts who acted as critical friends for the evaluation process. These experts were Professor Graham Donaldson (University of

Glasgow and Professor Mel Ainscow (University of Manchester), both of whom have unparalleled vantage points and expertise regarding the direction of Scottish education and school improvement. These individuals provided expert insights and assessment regarding the emerging findings and themes at key stages of the research.

Social Network Analysis (SNA)

The external research methods also included the use of Social Network Analysis to:

- Enhance the research team's understanding of how school partnerships were operating in different contexts;

- Explore how different types of knowledge were shared between teachers and

- Identify what professional roles appeared to be key to this process.

Three partnerships were initially selected that represented different models of collaborative working in the SIPP (i.e. covering wide geographical distances, cross-school partnerships across two local authorities and cross-school partnerships within a single local authority). In each of these partnerships all members involved in any SIPP activity were sent an online questionnaire via email. The surveys gathered data on:

- Respondents' name and professional details;

- The nature of educational inequity in the school;

- Participants' networking in their partnership, including mapping who they liaised with and the focus of their collaboration.

The SNA method requires a very high response rate to produce meaningful data. Across the three partnerships sufficient data was gathered to allow analysis of one of the three partnerships' networking at the time of writing (with a 95% response rate). Given the demands of securing sufficient responses to conduct the analysis, this phase is on-going in order to finalise the data collection from the remaining two partnerships and also explore conducting SNA with a further partnership that typifies a further model.

The network boundaries were determined by consulting teachers in the partnerships and asking them to provide any additional names of participants who had been active in the partnership. In the partnership whose SNA is included in this report this process generated an additional five names of local authority staff. These names were added to the staff lists of teachers from the two schools. The names of teachers no longer teaching at the schools due to sick leave or employment changes were removed. This applied to six of the teachers who had been previously included in staff lists. In total, the network boundary included 36 teachers and 5 local authority staff.

Before the questionnaire was issued it was shared with a number of individuals who provided critical comments: a quality improvement officer (former primary school Head Teacher), secondary school Head Teacher, and others with experience of using SNA (from the University of Glasgow and Southampton

University). Based on the advice provided by these critical friends the questionnaire was modified.

The questionnaire was distributed in May 2015 and 36 teachers (out of a total of 36) and 3 local authority staff (out of a total of 5) completed the questionnaire, providing a response rate of 95%.

The responses to the SNA surveys were analysed using UCINET. This allowed sociograms to be produced that revealed the nature of the networks in the partnerships and the extent to which particular ideas were being shared across individuals involved.

The SNA question on the questionnaire that pertains to this report asked, 'With whom have you shared tried and tested ideas?' Respondents answered this question by providing between 0 and 22 names. The names were coded. The code was securely stored by the researcher to protect the identity of participants, schools, and local authorities. Using the coded data a DL file was written in Microsoft Word in the form of a nodelist. Using the SNA software UCINET, the nodelist was saved as a UCINET dataset. The sociogram was then created using Netdraw (accessed using UCINET). This sociogram was analysed visually to determine the positioning of the teachers and local authority staff within the partnership.

Appendix 4: *Partnership evaluation methods*

Target group	Target issue	Data collection tool	Issues investigated	Key points (what did they do?)
Primary pupils	**Attainment in reading**	CEM (Primary)	Reading comprehension, reading age, word decoding	CEM was used by primary school teachers for measures of reading ability both before and after introducing new teaching approaches. In some cases CEM was used prior to interventions to determine attainment gaps and to aid the selection of target groups. In other partnerships CEM was used to assess improvements after an intervention.
		N.A.R.A. (Neale Analysis of Reading Ability)	Reading comprehension, reading age, word decoding	This was used in place of CEM by a primary school to assess reading ability pre- and post- intervention.
		School-based literacy assessment	Phoneme/grapheme, phono awareness, high frequency words, big writing	Used with primary pupils to assess reading ability.
		Pupil work samples, presentations, and profiles	Evidence of improved confidence, reading enjoyment, reading ability, spelling, story-writing, improved self-perception, attitudes.	Pupil work samples were used by teachers to aid selection of target group. In addition to work samples, pupil presentations at school events and profiles were used to assess post-intervention improvements.
	Attainment in mathematics	Bespoke assessment for Cognitively Guided Instruction (CGI)	Pupil ability to do problem solving in a wide range of problem types in primary mathematics	This assessment tool was collaboratively designed by teachers who were using Cognitively Guided Instruction to teach mathematics. The assessment was used before and after the implementation of a Cognitively Guided Instruction approach to determine the improvement in pupils' ability to solve mathematics problems.
		CEM (Primary)	Maths	CEM was used by primary school teachers for measures of mathematics ability both before and after introducing new teaching approaches. In some cases CEM was used prior to interventions to determine attainment gaps and to aid the selection of target groups. In other partnerships CEM was used to assess improvements after an intervention.
		Bespoke scale created to measure distance travelled by each pupil	Improvement in mathematics problem solving	This scale was applied to the pre and post assessment results. It enabled a closer look at the results, not just in terms of correct answers, but in such a way that staff were able to judge how learners' approaches and thinking had developed following the intervention.

Target group	Target issue	Data collection tool	Issues investigated	Key points (what did they do?)
Primary pupils	**Attainment in mathematics**	MAL – Myself as a Learner scale	Primary pupil attitudinal survey to investigate self-perception attitude to learning	This existing survey was used in primary schools before and after interventions to assess changes in pupils' self-perceptions. The primary schools using this survey added the following question to the beginning of the questionnaire: How good are you at maths?
		Lesson study (observation grids and lesson study focus group videos)	Evidence of pupil learning and staff learning	Cycles of Lesson Study facilitated opportunities for multiple teachers to observe learning in a single class before sharing observations, re-designing lessons, and then observing additional classes.
		Pupil focus group		Used to discuss and evaluate subject-specific learning experiences.
		Parent events and surveys	Pupil improvements in mathematics	Parent events and surveys were used in the assessment of pupil attainment, confidence, and enjoyment
Secondary pupils	**Attendance and behaviour**	SEEMIS data	Attendance and behaviour	SEEMIS data was used to access data regarding attendance, truancy, exclusions, behaviour, merits, etc.
		Bespoke pupil surveys and pupil focus groups	Pupil attendance	Surveys were created to determine key issues regarding pupil attendance. Pupil focus groups were also used.
		Parent focus groups	Pupil attendance	Parent groups were used to facilitate discussions regarding issues around pupil attendance.
	Learner feedback	Pupil groups, surveys, and feedback diaries	Learner feedback	Used to collect data and discuss preferred learner feedback and learners' experiences.
		Motivation to learn questionnaire used for secondary pupils	Adapted for Pelletier's SMS scale on self-determination theory	Provides measures of motivation based on self-determination theory and intrinsic motivation related to particular outcomes.
		Hattie's Visible Learning Profile on Relational Trust		Assesses the level of trust between peers in educational contexts which, research has indicated can affect learning outcomes
	Attainment	SQA	Exam data	SQA data was used for attainment measures both before and after introducing new approaches. In some cases examination data was used prior to interventions to determine attainment gaps and to aid the selection of target groups. In other partnerships SQA data was used to assess improvements after an intervention.
		CEM (Secondary: SOSCA)	Subject specific assessment	Secondary On Screen Computer Assessment (SOSCA) was used to assess subject specific knowledge.

Target group	Target issue	Data collection tool	Issues investigated	Key points (what did they do?)
Secondary pupils	**Attainment**	CEM (Secondary: Midyis)	Non-subject specific assessment of learning potential	Midyis was used to assess non-subject specific learning potential of secondary pupils.
		Insight	Secondary school online benchmarking tool	Used to examine data on post-school destinations, attainment in literacy and numeracy, local measures related to curriculum, subjects, courses.
Both primary and secondary schools	**Parental engagement**	Parent focus groups, surveys and parent evening evaluations	Parental engagement	Focus groups, surveys and evaluations were used to collect data regarding issues around parental engagement.
		Parent events	Parental engagement	Parent events were held at both primary and secondary schools. Sometimes these events took place during the school day and sometimes during the evening. These events were used to gather feedback from parents regarding a number of issues depending on the partnerships' project focus.
	Knowledge and approaches to teaching in disadvantaged contexts	Bespoke educational professional survey	Staff knowledge, learning, and/or attitudes	These bespoke surveys were designed by educational professionals within partnerships to assess changes in staff knowledge and attitudes after the partnership had tried an intervention designed to improve pupil attainment, behaviours or attitudes.
		Staff learning evaluations, profiles, event evaluations, and reflective journals	Staff learning and attitudes	Staff profiles, reflective journals, bespoke staff evaluations and other staff evaluations (such as CLPL- Career long professional learning evaluations) were used to collect data regarding staff learning and attitudes.

Appendix 5: Details of survey respondents

Waves 1 and 2
Fifty-three participants completed the questionnaire at the partnership event on 19 June (Wave 2 survey). Twenty-six were male and 26 were female. Forty (77%) were school staff, 23 (43%) were secondary based and 16 (30%) were based in primaries. Sixteen (30%) were Head Teachers and there were 10 local authority education representatives. By comparison, the initial survey (Wave 1) was completed by 45 respondents, 28 males and 17 females. Seventy three percent were school staff, with 28% secondary based and 44% primary staff. Fourteen (32%) were Head Teachers and there were 10 local authority representatives.

While there are similarities in the profile of respondents to both surveys it is clear that more secondary than primary staff completed the Wave 1 questionnaire and more primary than secondary staff completed the Wave 2 questionnaire. Looking at responses by local authority staff we see some differences in the profile of respondents. Such differences are likely to reflect changes in participation and levels of involvement in the SIPP as the partnerships matured during the first year or so.

Four surveys of the key representatives from all SIPP partnerships. The first survey was administered near the start of the Programme in February 2014; the second was conducted when partnership representatives met again during a national SIPP event in June 2014, the third survey-taking place in November 2014 and the final survey administered at the national event in June 2015.

Wave 3
Fifty-eight participants completed the questionnaire at the partnership event in November 2014 Sixteen were male and 42 were female. Forty (69%) were school staff, 18 (31%) were secondary based and 22 (38%) were based in primaries. Nineteen (33%) were Head Teachers and there were 8 local authority education representatives.

Wave 4
Thirty-six participants completed the questionnaire at the partnership event in June 2015. Ten were male and 26 were female. Twenty-six (72%) were school staff, 13 (36%) were secondary based and 13 (36%) were based in primaries. Nine (25%) were Head Teachers and there were 2 local authority education representatives.

Table 10 – Participants by Local Authority for each of the 4 waves

Local Authority	Number and percentage of participants responds			
	Wave 1 Feb 2014	Wave 2 June 2014	Wave 3 Nov 2014	Wave 4 June 2015
Angus	2 (4)	-	1 (2)	1 (3)
Argyll and Bute	1 (2)	2 (4)	-	1 (3)
East Lothian	-	7 (13)	8 (14)	1 (3)
East Renfrewshire	9 (20)	7 (13)	3 (14)	4 (3)
Edinburgh City	9 (20)	3 (6)	2 (3)	1 (3)
Falkirk	1 (2)	2 (4)	11 (19)	12 (33)
Fife	1 (2)	1 (4)	-	-
Glasgow City	3 (7)	4 (8)	2 (3)	-
Inverclyde	1 (2)	3 (6)	1 (2)	1 (3)
Midlothian	1 (2)	6 (11)	6 (10)	2 (6)
Renfrewshire	6 (13)	4 (8)	7 (12)	2 (6)
South Ayrshire	1 (2)	1 (2)	1 (2)	-
South Lanarkshire	1 (2)	3 (6)	5 (9)	5 14)
West Dunbartonshire	9 (20)	10 (19)	11 (19)	6 (17)
Total	**45 (100)**	**53 (100)**	**58 (100)**	**36 (100)**

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