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Evaluation of the Pupil Deprivation Grant - Year 1 Report

Evaluation of the Pupil Deprivation Grant: first year evaluation report

Julia Pye, Claire Hardy (Ipsos MORI)

Professor Chris Taylor (WISERD, Cardiff University)

Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government.

For further information please contact

David Roberts

Senior Research Officer

Knowledge and Analytical Services

Social Research and Information Division

Welsh Government

Sarn Mynach,

Llandudno Junction

LL31 9RZ

Tel: 0300 062 5485

Email: david.roberts@Wales.gsi.gov.uk

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Glossary of acronyms

CATS/ CATS data	Cognitive Ability Tests
CSI	Core subject indicator
e-FSM	Pupils eligible for Free School Meals
KS1	Key Stage 1 (Reception-Year 2 of primary school)
KS2	Key Stage 2 (Years 3-6 of primary school)
KS4	Key Stage 4 (Years 10-11 of secondary education)
LA	Local authority
LAC	Looked After Children
NPD	National Pupil Database
PASS	Pupil Attitudes to School and Self
PDG	The Pupil Deprivation Grant
SEAL	Social and Emotional Aspects of Learning
SEG	Schools Effectiveness Grant
TAs	Teaching Assistants
WG	Welsh Government

Executive summary

1. Ipsos MORI and WISERD were commissioned by the Welsh Government in April 2013 to conduct a process and impact evaluation of the Pupil Deprivation Grant (PDG). The PDG was launched in 2012 and provides additional funding to schools based on the number of pupils on their roll eligible for Free School Meals (e-FSM) or who are Looked After Children (LAC). Schools are provided with £450 per e-FSM or LAC pupil, and are directed to spend the additional funds on evidence-based interventions to help close the attainment gap[1].
2. This report is based on the first year of evaluation activity. The evaluation incorporates three main elements: a survey of 201 schools completed in spring 2014; in-depth case studies among 22 schools, of which 12 are complete at the time of reporting; and in-depth analysis of pupil attainment and absence data from the National Pupil Database. To date, the evaluation has focussed on capturing information about the process of implementing the Pupil Deprivation Grant rather than its impact; later stages of the evaluation will aim to draw conclusions about the impact of the Grant, and the effects of the one-off funding increase in 2014/15.

Key findings

3. The introduction of the PDG has led to schools funding a significant amount of new activity aimed at supporting pupils they identify as disadvantaged. Over half the interventions currently funded using the PDG (58% in primary, 71% in secondary schools) were not run in schools prior to the PDG's introduction. Even where activity pre-dated the PDG, it has usually been scaled up as a result of the additional funding available to schools. Primary schools run an average 3.4 interventions, which on average target 35 pupils each; and secondary schools run an average 5.0 interventions, each targeting an average of 174 pupils. However, there is

1 The amount of PDG funding per eligible pupil is £918 in the 2014/15 academic year (a one-off increase): the evaluation does not at this stage capture the impact of this increase.

a considerable variation in the scale and reach of programmes funded using the PDG, particularly at the secondary level.

4. Although the PDG represents a relatively small proportion of the total school budget (less than 4% on average), it amounts to significant sums of money that schools spend on activities to tackle disadvantage: primary schools received an average of £12,676, and secondary schools an average £61,311 in PDG funding in 2012-13. Case study schools noted that the grant was significant and a valuable source of funding that enabled them to increase the support they offered for vulnerable and disadvantaged pupils.
5. The PDG should be viewed in the broader context of work carried out by schools to support pupils they identify as disadvantaged: similar and complementary activities are funded through the Schools Effectiveness Grant (SEG), Band 4/5 funding, and the general school budget. Around nine in ten schools (86% primary, 91% secondary) report supplementing the funding of PDG-funded activities, usually from the general school budget and/or the Schools Effectiveness Grant. Typically, schools' financial contributions to PDG activities from other revenue streams are significant, with primary schools on average adding £10,240 from other funds, and secondary schools adding an average £44,356. Case study evidence suggests that schools sometimes regard activities they would like to fund through the PDG as beneficial to pupils more generally. Several case study schools noted that PDG funding on its own could not enable them to fund the interventions they run to support disadvantaged pupils, and it is clear that the impact of the PDG is reliant on the existence of other grants and funds with complementary aims.
6. The Welsh Government guidance encourages schools to use evidence-based approaches when spending the PDG, and to monitor the impact of activities using their own data tracking systems. Schools primarily use their own monitoring data systems and experience to plan and monitor the activities they fund through PDG: 79% of primary schools and 74% of secondary schools report using their own data. Most case study schools collected and monitored a wide range of pupil data, including attainment, attendance, and well-being measures (through measures such as the

Pupil Attitudes to Self and School). Schools also stressed that their personal knowledge of pupils' circumstances and support needs were important in identifying those requiring further support.

7. The majority of schools have made use of external evidence sources when planning their PDG spending, principally the Welsh Government guidance. Most of those using the guidance, especially in the secondary phase, reported finding the Welsh Government guidance useful (78% primary and 91% secondary).
8. Less than half of schools (36% primary, 49% secondary) report using the Sutton Trust Toolkit, despite the endorsement of the Toolkit within the guidance. The case studies suggest this is because schools either feel that the Toolkit reflects the approaches they are already using, or that they do not see some of the recommendations in the Toolkit as relevant to their particular setting. Even where schools have used the Sutton Trust Toolkit, we found limited evidence in the case studies that it had significantly changed the activities that schools carried out.
9. At the primary level, PDG funding is often used to fund literacy (37% of all primary interventions) and numeracy (25% of primary interventions) programmes, although a range of other interventions are also run. Primary interventions are often run by teaching assistants (65% of primary interventions), who typically deliver them in a mix of one-to-one and small group settings. There is a less clear-cut pattern at the secondary level: while literacy and numeracy interventions account for 17% and 16% of secondary interventions respectively, there is greater use of interventions aimed at pastoral issues at this level. At the secondary level, class teachers are as likely to be delivering interventions as teaching assistants, and there is a fairly widespread use of specialist roles such as Behaviour Coordinators, Attendance Officers, and Family Liaison staff.
10. Schools are aware that e-FSM pupils are the intended beneficiaries of the Grant (93% primary, 98% secondary), and around one in five mentioned the LAC criterion (15% primary, 23% secondary). Awareness of the LAC criterion is more widespread among schools with LAC pupils in their population. Alongside this, schools also identified a range of other pupils they felt should be targeted by the Grant, including around a fifth who

identified children with low attainment as being eligible (21% primary, 18% secondary). It is clear that schools use broader criteria than e-FSM/LAC status alone when targeting interventions in their own schools: according to data collected by the evaluation, only 60% of primary pupils and 72% of secondary pupils benefitting from PDG-funded interventions are e-FSM or LAC; however, the evaluation also identified that schools contribute a significant amount of additional funding from their own budgets or other revenue streams to fund PDG activities. There are two key reasons for the broad targeting of activities:

a. Schools understand that the Grant aims to tackle disadvantage rather than financial deprivation, and use a wider range of indicators and personal knowledge of pupils and families to identify those who are disadvantaged than FSM/LAC status on its own. Schools typically talk about 'disadvantage' in broad terms: a typical view is that it can include 'anything that means a child does not have a level playing field with other children'. This might include children from relatively affluent families whose circumstances – for example, family breakdown, parental neglect – make it difficult for them to fulfil their potential.
b. Schools understand the Grant aims to improve attainment and therefore target pupils with low attainment: 38% of primary and 32% of secondary interventions were targeted at pupils with low attainment.

11. While schools rarely run PDG-funded interventions that directly target parents and carers – 2% of primary and 4% of secondary-run interventions target parents – schools generally perceive that interventions they are running have had a positive impact on parental engagement. Sixty two percent of primary and 72% of secondary schools report that the PDG interventions they have run have had a medium-large impact on the involvement of parents/carers of pupils in the school. In the case study research, the evaluation found several examples of schools working to engage parents, suggesting that schools may be working with parents as part of delivering interventions, but they do not necessarily regard engaging parents as a primary outcome or focus of their activity.

12. Schools are proactively working with local school clusters in delivering just over a third of PDG interventions (39% primary interventions, 33% secondary interventions). Schools are also using evidence from other schools to plan their own interventions. There is limited evidence from the evaluation that most schools are actively using PDG funding to build links with the local community. Very few schools – including those in Communities First areas – cited community links when describing the nature, target beneficiaries or intended outcomes of the interventions they ran. However, just under a third of the interventions run in Communities First areas had involved the local Communities First partnership, suggesting that community links may exist in some of these areas. Few schools surveyed were receiving Communities First funding (only nine of 68 schools based in Communities First areas had received any Communities First funding, and only six of these received Matched Funds).
13. Evidence on the sustainability of PDG activity is mixed, although it is evident from the case studies that it has engendered a culture change in many schools by raising the profile and awareness of how schools can tackle disadvantage and monitor the impact of interventions targeted at disadvantaged pupils. Schools surveyed report that a significant amount of activity could be maintained even if the PDG was discontinued (albeit on a smaller scale), but this is likely to reflect the significant amount of supplementary funding schools invest in PDG initiatives rather than the self-sustaining nature of interventions. For example, schools report that around half of their most important PDG interventions are delivered by staff specifically recruited to deliver them (49% of primary interventions, 59% secondary interventions). Likewise, case study schools noted that most of their PDG activity was only possible because they were able to fund staff time to run new interventions.
14. At the same time, the PDG is invested in staff training and resources that are sustainable. Across the schools surveyed the majority of interventions (70% primary, 58% secondary) involved some sort of staff training, with a substantial minority (26% primary, 13% secondary) involving external training. Case study schools pointed out that staff had developed skills

and expertise in working with disadvantaged pupils that could be applied more generally.

15. Most teachers perceived that their PDG interventions were having a positive impact on pupils. They were more positive about the impact of PDG-funded initiatives on outcomes such as pupil engagement and well-being, than on outcomes such as attainment and attendance. Over six in ten (63% primary, 71% secondary) report that their PDG activities have had a large positive impact on pupil engagement. By contrast, schools are less likely to perceive the PDG has had a large positive impact on pupil attendance (29% primary, 48% secondary) or on pupil attainment (59% primary, 54% secondary). The case study evidence highlights that interventions designed to have a positive outcome on attainment and attendance often had ancillary benefits for pupil engagement and well-being: for example, intensive literacy interventions improved attainment but also helped to settle pupils and reduce disruptive behaviour in class.
16. The evaluation team carried out impact analysis using attainment and absence data from the National Pupil Database. The aim of this analysis is to monitor the size of the educational attainment gap between e-FSM and non-FSM pupils at the national level prior to, and during the life of, the PDG in order to evaluate whether the PDG appears to be contributing to a narrowing of the gap. The analysis can only demonstrate trends over time rather than attribute changes to the introduction of the PDG: no comparison group of pupils or schools not receiving the PDG is available, and many other concurrent initiatives in Welsh education may also contribute to any improvements we observe. Key findings from this analysis are summarised in Figure 0.1.
17. At the national level there has been a narrowing of the attainment gap in some measures of achievement at Key Stage 2 and Key Stage 4. However, this improvement pre-dates the introduction of the PDG and at Key Stage 2 the rate of improvement among e-FSM pupils is unchanged since its introduction. Improvements cannot therefore be attributed to the introduction of the PDG with any confidence.
18. Despite a narrowing gap in attainment nationally at Key Stage 4 there are some caveats: first, improvements in GCSE attainment among e-FSM

pupils are balanced against proportionately fewer e-FSM pupils being entered for GCSEs in core subjects; second, improved progress among e-FSM pupils at Key Stage 4 in 2012 and 2013 is likely due to improvements at Key Stage 2.

Area	Summary of findings
Absence	Rates of absenteeism have declined overall, but the % differential between e-FSM and non-FSM pupils has not changed much from 2011-2013. Although the 'gap' in unauthorised absence was smaller after the introduction of the PDG in 2013 this seems to be the result of more unauthorised absence among non-FSM pupils.
Key Stage 1/ Foundation Phase outcomes	Comparisons of data for the period 2011-13 have limited reliability due to differences in the assessments used each year. However, in language and literacy and in mathematics the % differential between e-FSM and non-FSM pupils was larger in 2012 than in 2011. In 2013, the % differential improved/ narrowed, particularly in the area of language and literacy.
Key Stage 2 achievement	The % differential between e-FSM and non-FSM pupils has improved/ narrowed with respect to those achieving expected levels in KS2 mathematics, English/Welsh, and Science. The % differential for those who achieved expected levels in all three subjects has also narrowed. However, the 'gap' was closing before the introduction of the PDG, and the rate of improvement is, generally, unaffected by its introduction.
Key Stage 4 achievement	Among those entered for GCSEs in all three subjects, the 'gap' in those achieving the Core Subject Indicator has narrowed each year after 2011[2]. The rate of progress for e-FSM pupils in 2012-13 was more than twice the rate of improvement in 2011-12. However, there is evidence this progress can be explained by proportionately fewer e-FSM pupils being entered for all three GCSE subjects over this time period. Nevertheless, when considering attainment in GCSE or equivalent qualifications, the 'gap' is narrowing, and the rate of improvement of e-FSM pupils was greater in 2012-13 than in 2011-12.
Value-added	Analysis suggests that much of the improvement observed in achievement at KS4 in 2011-12 and 2012-13 is likely due to earlier improvements in pupils' attainment (i.e. at KS2), since the 'value add' from KS2 to KS4 has reduced over 2011-13 for e-FSM pupils at the same time that KS4 outcomes have improved slightly.

2 I.e. those achieving C or above in GCSE Mathematics, English/Welsh and Science.

Key conclusions and areas for further investigation

19. The evaluation survey and case studies highlight that the PDG plays an important role within a suite of initiatives and funding streams that enable schools to support disadvantaged pupils. The introduction of the PDG is associated with a substantial amount of new activity in schools that aims to provide for the needs of pupils identified by schools as disadvantaged. It has also helped to engender a greater focus on disadvantaged pupils and how best to provide for them. Schools have a good understanding of the aims and directives of the PDG. The PDG activity broadly conforms to the principles set out by the Welsh Government: there is a focus on improving literacy and numeracy (particularly at the primary level) as well as investing in initiatives to increase engagement and improve behaviour and attendance (especially at the secondary level). Schools are making significant investments in staff training in their delivery of PDG interventions. Schools are also using and investing in data monitoring systems, which the case studies highlighted were used to reflect on the effectiveness of the interventions run, and to adjust and review the way PDG funds were spent. There is mixed evidence on the extent to which parents are targeted and engaged as part of the PDG interventions, but the case studies highlight a number of examples that schools perceive are working effectively.
20. There appears to be scope for schools to make greater use of external sources of evidence, such as the Sutton Trust Toolkit, particularly at the primary school level. Just under half the schools surveyed used the Toolkit. The use of external and academic sources of evidence is less widespread at the primary than the secondary level. Primary schools were also less likely than secondary schools to report finding the PDG guidance helpful. It will be important to explore this further in the second year of the evaluation case studies, to understand any gaps in the evidence sought by primary teachers, and to investigate any particular concerns about the evidence and recommendations within the Toolkit.

21. There remains some ambiguity about how the PDG should be targeted. Schools typically target pupils they identify as disadvantaged based on a range of indicators, rather than e-FSM alone, and use a broader definition of disadvantage than financial deprivation. While this includes e-FSM/LAC pupils, it also extends to a large number of non-FSM/non-LAC pupils. It is worth bearing in mind that schools commit significant additional funds to the PDG in the way they fund interventions, so that schools are not necessarily spending Grant money on non-FSM/non-LAC pupils, although this would be complex to disentangle.
22. Schools generally perceive that PDG-funded initiatives have had a large positive impact on outcomes such as pupil well-being and engagement. A smaller proportion perceives large positive impacts on pupil attainment and attendance. The impact analysis to date is inconclusive: while the attainment gap has narrowed at the national level, improvements appear to pre-date the PDG.

1 Introduction

1.1 Ipsos MORI and WISERD were commissioned by the Welsh Government in April 2013 to conduct an evaluation of the Pupil Deprivation Grant. The Pupil Deprivation Grant (PDG) is a central element of the Welsh Government's policy efforts to close the educational attainment gap between children from more and less affluent families. The PDG was launched in 2012 and provides additional funding to schools based on the number of pupils on their roll eligible for Free School Meals (e-FSM) or who are Looked After Children (LAC). Schools are provided with £450 per e-FSM or LAC pupil, and are directed to spend the additional funds on evidence-based interventions to help close the attainment gap.

1.2 This chapter outlines the aims and methodology of the evaluation, and provides an overview of the contents and scope of this report.

The pupil deprivation grant

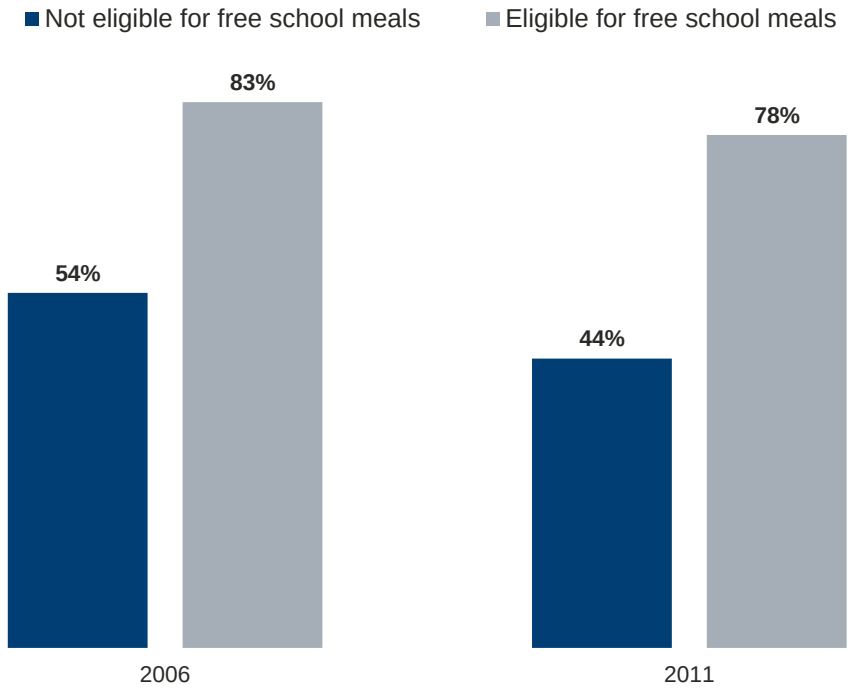
1.3 The Pupil Deprivation Grant reflects priorities within the Tackling Poverty Action Plan to address the causes and lived effects of poverty. It also addresses one of the three key priorities for education in Wales: closing the achievement gap between socioeconomic groups.[3] As such, it forms a key part of the Improving Schools plan, which outlines a range of initiatives to improve standards in response to concerns about both Wales' overall educational performance,[4] and the widening/persisting gap in the attainment of e-FSM and other pupils (non-FSM). In 2011, for example, 78% of e-FSM pupils failed to achieve 5 A*-C GCSEs including English/Welsh and Maths, compared with 44% of other

[3] *The other priorities are improving standards of literacy and numeracy. As expressed by the Minister for Education and Skills in his speeches Teaching Makes a Difference (February 2011) and Raising School Standards (June 2011), and in the Programme for Government.*

[4] *For example, Wales' performance relative to other nations in the 2009 PISA assessments: Wales performed relatively poorly compared with other UK nations, and its overall ranking – and in particular rankings for mathematics scores – fell. http://www.educationcounts.govt.nz/topics/research/pisa_research/pisa_2009*

children: this gap of 34 percentage points grew from 29 points in 2006[5].

Figure 1.1 – Proportion of 15 year olds not achieving Level 2 threshold (e-FSM vs non-FSM)



Source: Welsh Government data

1.4 The Improving Schools plan highlights the significance of schools' role in reducing the effects of poverty on children's educational outcomes: the gap in attainment widens as children progress through the education system, but effective school practice has been shown to narrow the attainment gap between disadvantaged learners and their more affluent peers.[6] A recent Estyn review concluded that while schools are often effective at identifying and supporting low performing learners, many are ineffective at targeting support specifically at disadvantaged learners.[7] The Pupil Deprivation Grant, and the associated guidance for spending the grant, aims to help ensure that improving the outcomes of

[5] *Figures and chart from Evaluation of the Welsh Child Poverty Strategy: Baseline Indicator Report (Ipsos MORI and NPI), July 2012, Internal WG.*
[6] *Route Map for Breaking the Link between Poverty and Educational Attainment (Internal WG)*
[7] *Effective practice in tackling poverty and disadvantage in schools (Estyn, 2012). http://www.estyn.gov.uk/english/docViewer/259977.9/effective-practice-in-tackling-poverty-and-disadvantage-in-schools-november-2012/*

disadvantaged learners becomes a higher priority for LAs and schools, and that schools are encouraged to work more effectively by diverting funds into activities that are proven to work.

1.5 In addition to increasing the potential for schools to support e-FSM pupils, the PDG guidance also makes clear the importance of the role of parents and the wider community in raising the attainment of e-FSM pupils, and the need to address non-educational factors such as engagement and well-being as well as educational attainment. The guidance echoes a range of evidence sources in underlining the importance of these factors.[8]

1.6 Together with the School Effectiveness Grant, the Pupil Deprivation Grant represents the Welsh Government's principal means of providing financial support for improving educational outcomes in schools. The School Effectiveness Grant is aimed at supporting measures to improve the quality of teaching and learning and to raise literacy and numeracy levels while the Pupil Deprivation Grant's key priority is to reduce the impact of poverty on educational achievement.

1.7 Similar initiatives are associated with success: for example, an Ofsted report on the Pupil Premium in England showed that the introduction of the Pupil Premium coincided with significant improvements in the attainment of the pupils targeted: the proportion of e-FSM pupils gaining five A*-C grades at GCSE rose from 57% in 2011 to 80% in 2012, which reduced the gap between e-FSM and other pupils from 27 to 8 percentage points.[9] The PDG was preceded in Wales by RAISE, which funded schools in Wales' most

[8] *For example, recent Joseph Rowntree reports have propounded the use of 'AAB' strategies to address children's aspirations, attitudes and behaviours, as well as strategies that directly work to influence teaching/learning http://www.jrf.org.uk/sites/files/jrf/wales-education-poverty-summary.pdf. Estyn's report on 'Effective practice in tackling poverty and disadvantage in schools' (November 2012) also highlights the role of the family, as does the Route Map for Breaking the Link between Poverty and Educational Attainment.*

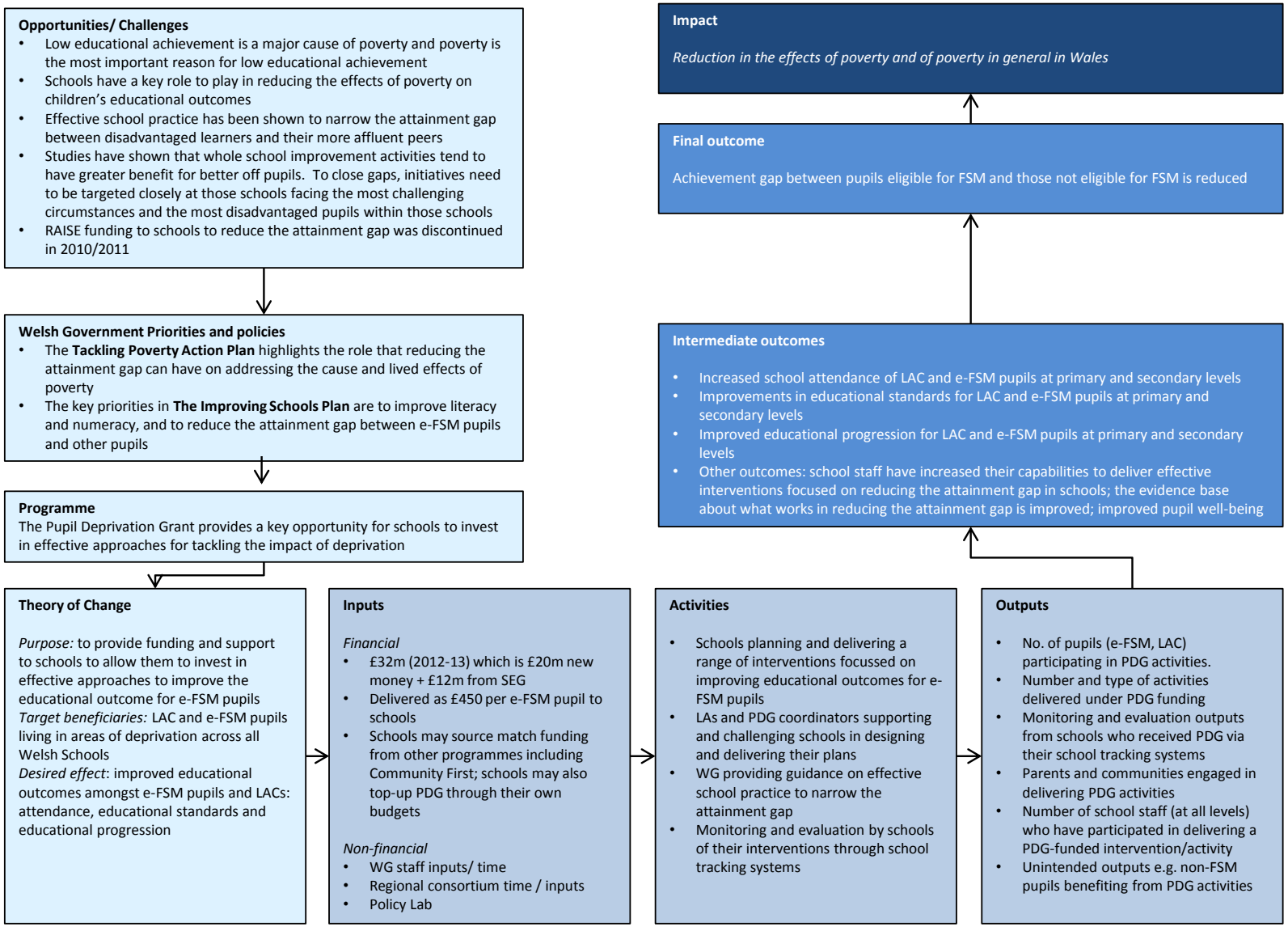
[9] *The Pupil Premium: How schools are spending the funding successfully to maximise achievement. Note that the Pupil Premium has a number of different features to the PDG: the funds are greater per pupil (£900 rather than £450 per eligible pupil), and eligibility is defined slightly differently (the Pupil Premium uses the 'Ever6' rule whereby any pupil eligible for FSM in the past 6 years attracts the funding, while the PDG operates on the previous year's FSM eligibility only).*

deprived areas to fund initiatives to support socioeconomically disadvantaged pupils:[10] however, an evaluation of RAISE found that the money was not always spent effectively, or on the target group of pupils, and lessons from RAISE have directly contributed to the guidance and governance arrangements for the PDG.[11]

1.8 Based on an initial scoping stage and interviews with stakeholders, LAs and schools, the evaluation team developed a logic model for the PDG. This model depicts what the grant is anticipated to deliver and how this is expected to happen. Each link in the logic model between the activities delivered and the outcomes achieved is underpinned by a series of assumptions. The logic model has informed the approach for both process and impact evaluations and will be used as the analytical framework against which the grant will be reviewed. Figure 1.2, overleaf outlines the model.

[10] *http://www.raise-wales.org.uk/raise/raise-about.htm*
[11] *Route Map for Breaking the Link between Poverty and Educational Attainment (Internal WG)*

Figure 1.2: PDG intervention logic framework



1.9 The evaluation will investigate issues around the process of implementing the PDG, as well as the grant's impact. This interim report is based on the first two years of the implementation of PDG and as such focusses on the way the PDG is being interpreted and implemented, rather than the impact of the Grant on pupil performance and school practice. The next stage of the evaluation will have a greater focus on impact. The specific aims of the evaluation are to:

- Assess the extent to which the overall aims and objectives of the PDG have been met;
- Determine the impact of the PDG on improving the educational outcomes of pupils receiving support through PDG-funded provision;
- Determine the impact of PDG on improving standards of education;
- Determine the impact of PDG on long-term capacity-building to help improve the attainment of socio-economically disadvantaged pupils;
- Identify how effective LAs, regional consortia and clusters have been in ensuring the grant is used effectively;
- Identify the key strengths of PDG and any constraints/ issues that may have impeded its effectiveness;
- Assess the value for money of the grant; and
- Provide recommendations as to how the Welsh Government, LAs and schools can best build upon the PDG in meeting the priority to reduce the impact of deprivation on academic attainment.
- Methodology

1.10 The evaluation comprises three main elements:

- School survey: a survey of 200 schools provides in-depth evidence about the initiatives funded via PDG.
- Impact analysis: analysis of the National Pupil Database looks for evidence of the impact of the PDG in terms of narrowing the attainment gap.
- School case studies in 22 schools: case studies investigate how the PDG is being used in practice. Case studies in the next year of the evaluation will aim also to capture teachers' perceptions of the impact of PDG-funded initiatives, as well as gather schools' own measures of impact.

Survey of schools

1.11 The survey findings represent primary and secondary schools with 1 or more e-FSM pupils.[12] This ensured that participating schools were in receipt of at least £450 in PDG funds, and would be able to provide evidence about the interventions funded via PDG, the evidence on which funding decisions are based, and the perceived impact of the funded interventions.

1.12 The questionnaire was developed by Ipsos MORI, working with WISERD and the Welsh Government to refine the questions. The draft questionnaire was tested in the early case study visits to ensure the questionnaire covered relevant issues, and that questions were easy to understand and respond to. In particular, the case studies confirmed that schools were able to provide the level of information about PDG-funded interventions that the evaluation team sought, and clarified that it would usually members of the senior leadership team who had the necessary information to respond.

1.13 The sample frame was the Welsh Government's list of all maintained schools in Wales. Additional information derived from the NPD was

12 Data about the number of LAC pupils in each school was not available on the sampling frame, and could not be matched. As such, eligibility was determined on the basis of the number of e-FSM pupils only.

matched to the frame, including data on the size of the educational attainment gap in each school, so that the sample could be stratified on these variables

1.14 After removing schools not in receipt of PDG funding and where key data was missing from the sampling frame, the eligible population for the research comprised 1,321 primary schools and 216 secondary schools. All secondary schools were invited to take part in the survey. A sample of 400 primary schools was selected. The sample was proportionately stratified by region, school size (in tertiles), the proportion of e-FSM pupils (quintiles), and the size of the educational attainment gap (quintiles).

1.15 In total, responses were gained for 201 schools, including 136 primary schools and 65 secondary schools. Teachers were interviewed by telephone in the period 21 February to 4 April 2014. Interviews lasted 38 minutes on average. All interviewing was carried out by trained Ipsos MORI interviewers.

1.16 Within participating schools, interviewers asked to speak to the head teacher initially and then to the member of staff who was best placed to discuss the detail of the school's PDG planning and spending (if this was another member of staff) for interview. A detailed sample profile can be found below (a breakdown of primary and secondary phases can be found in the appendix).

Table 1.3: Profile of Surveyed schools

	All primary and secondary			
	Population N	Population %	Achieved N	Achieved %
Phase				
Primary	1,321	86%	136	68%
Secondary	216	14%	65	32%
Region				
Central South Wales	384	25%	29	14%
South East Wales	243	16%	39	19%
North Wales	414	27%	56	28%
South West and Mid Wales	497	32%	77	38%
School size[13]				
Small	601	39%	86	43%
Medium	509	33%	65	32%
Large	428	28%	50	25%
Proportion of e-FSM pupils in school				
Very high/high	523	34%	63	32%
Average	486	32%	66	33%
Low/Very low	518	34%	71	36%
Attainment gap				
Very small/small	516	37%	68	38%
Average	295	21%	48	27%
High/ very large	575	41%	65	36%
English/Welsh medium				
English medium	1072	70%	131	71%
Welsh medium	457	30%	54	29%
Communities First area				
Yes	n/a	n/a	68	34%

1.17 Most participants were head teachers (176 respondents), with a smaller number being deputy or assistant head teachers (14 respondents), finance officers or bursars (7), members of the senior leadership team (2), or other roles (3).

13 For primary, defined as small (1- 149 pupils), medium (150-249 pupils), large (250 or more pupils). For secondary defined as small (up to 699 pupils), medium (700-999), large (1000 or more).

1.18 Data are unweighted. Throughout the report we comment on primary and secondary responses separately given the very different contexts of primary and secondary schools.

Case studies

1.19 The specific aim of the case study visits is to gain an in-depth insight into how school budgeting allocation and decisions are made. These face-to-face visits further explore who is involved in the PDG decision process, what information spending decisions are based on, how spending is monitored and evaluated for impact, and the perceived impacts of PDG-funded initiatives. Schools are funding a wide range of initiatives with PDG and, while school spending is often recorded in detail, schools often blend PDG funds with other monies to fund interventions and, furthermore, e-FSM pupils are not solely targeted. These case study visits are designed to isolate what activities schools are funding with PDG funds, which pupils these activities are targeted at, as well as their perceived impact and sustainability.

1.20 In addition, the case studies identify a range of softer outcomes, such as pupil well-being and confidence, which are not only key aims in themselves but are strongly associated with the attainment and attendance outcomes of primary importance to the Welsh Government. The case study visits capture in detail the impact of the PDG on these softer outcomes by capturing teachers', pupils' and parents' perceptions of the impact of PDG-funded activities.

1.21 The sample was selected by the evaluation team, who reviewed Estyn inspection reports and school profiling data in order to select schools carrying the desired attributes.

Figure 1.4 – Profile of Case Studies

Sample profile for case studies completed in the first year of the evaluation		
Proportion of pupils eligible for Free School Meals	Above average	5
	Average/below average	7
Phase	Primary schools	8
	Secondary schools	4
Mid/North/South Wales	Mid	2
	North	5
	South	5
Community First area	Yes	5
	No	7

1.22 Case study visits were carried out by members of the PDG evaluation team from Ipsos MORI and WISERD at Cardiff University. Visits were carried out face-to-face. Within each visit we aimed to speak to a range of staff, pupils and parents, as appropriate (and depending on the types of interventions run by the school: for example, parents will only be covered if schools are running parenting interventions). The members of staff interviewed in each school is agreed with each school, based on their approach to managing PDG and who is involved in delivering, planning and receiving interventions in their school. In each school, researchers consulted with five to eight members of staff, and some schools researchers were able to consult with small groups of pupils about their experiences.

Figure 1.5 –Case Study Format

Role	Rationale
Head teacher	To gain an overview of the planning and spending of PDG across the school, how funding decisions are made, and the school's overarching approach to tackling disadvantage
Member(s) of the Senior Leadership Team	To understand the schools PDG spending patterns, evaluation and monitoring activities.
Data /finance officer (if relevant)	To gain insight into how PDG spending is recorded and monitored, as well as its perceived impacts.
Parents (if relevant)	To ask parents about the perceived impacts on their and their child's well-being and confidence.
Pupils (if relevant)	To understand the perceived impacts of the interventions on the target group.
Teachers/TAs	To understand the implementation and perceived impact of the initiatives 'on the ground' by those who are (typically) most closely involved in the delivery of interventions.

The impact analysis

1.23 Analysis has been carried out using National Pupil Database (NPD) information. The aim of this analysis is to track the educational outcomes of e-FSM and non-FSM pupils before and after the introduction of the PDG, in order to understand trends in the size of the educational attainment gap at the national level. Specifically, the analysis considers the academic years 2010-11, 2011-12, and 2012-13. A range of outcomes are considered, including absenteeism and attainment at Key Stages 2 and 4. While any narrowing/improvement in the gap between e-FSM and non-FSM pupils cannot necessarily be attributed to the PDG, the intention is that the long-term analysis will help to identify any changes in trends for e-FSM pupils after the introduction of the PDG.

1.24 The analysis will be repeated in the second year of the evaluation.

Scope and limitations of this report

1.25 The survey data is based on a survey of 201 schools (136 primary and 65 secondary schools). The commentary in this report is primarily based on findings at the aggregate level for primary and secondary schools. Where possible, we highlight differences between different types of school, such as those with relatively high or low proportion of e-FSM pupils. Any differences we highlight are statistically significant.

1.26 The case studies do not aim to provide evidence about a representative sample of schools. Qualitative research is designed to be exploratory and provides insight into people's perceptions, feelings and behaviours. The case study research is not designed to provide statistically reliable data, but to provide in-depth understanding of a particular topic. It is possible that schools agreeing to participate in the case studies have a particular interest in the PDG or its aims, or feel they are using the PDG in particularly innovative ways.

1.27 To date, the evaluation has focussed on capturing information about the process of implementing the Pupil Deprivation Grant rather than its impact; later stages of the evaluation will aim to draw conclusions about the impact of the Grant, and the effects of the one-off funding increase in 2014/15.

1.28 This report comprises five chapters:

- *Chapter 1* summarises the policy context for the PDG, and describes the aims and methodology used by this evaluation
- *Chapter 2* summarises the key inputs to the PDG, including the financial input provided by the Welsh Government and schools, as well as non-financial inputs in the form of staff time, and the recruitment of members of staff to deliver PDG interventions.

- *Chapter 3* describes the activities occurring as a result of PDG funding, including details about the nature of the interventions run by schools using PDG funding, and the types of pupils targeted.

- *Chapter 4* describes the outputs of PDG funding, including the number of activities run, the number of pupil beneficiaries, and outputs such as staff training and other resources.

- *Chapter 5* outlines the outcomes associated with PDG funding to date, including the perceived impacts according to teachers' views, and trends in the attainment of e-FSM and non-FSM pupils before and after the introduction of the PDG, to help estimate its potential impact.

2 Inputs

2.1 This chapter sets out the financial and non-financial inputs required to deliver the PDG, including the financial grants made by the Welsh Government to schools, schools' own supplementary funding of PDG activities, and the staff inputs within schools. The evidence in this chapter is primarily based on Welsh Government data, and financial and resourcing data collected as part of the school survey.

Primary schools received an average of £12,676, and secondary schools an average £61,311 in PDG funding in 2012-13. This represents a relatively small proportion of the total school budget (less than 4%).

Around nine in ten school report that they supplement the funding of PDG-funded activities. On the whole, schools' financial contributions to PDG activities – which are usually drawn from their school budget and/or the Schools Effectiveness Grant – are significant, representing 50-100% of the value of the Government PDG allocation.

Schools report that about half of their most important PDG interventions are delivered by staff specifically recruited to deliver them.

Financial inputs do not vary depending on the % differential between e-FSM and non-FSM pupils' attainment. This is to be expected given the way the grant is allocated, but may limit its potential impact.

Funding allocated

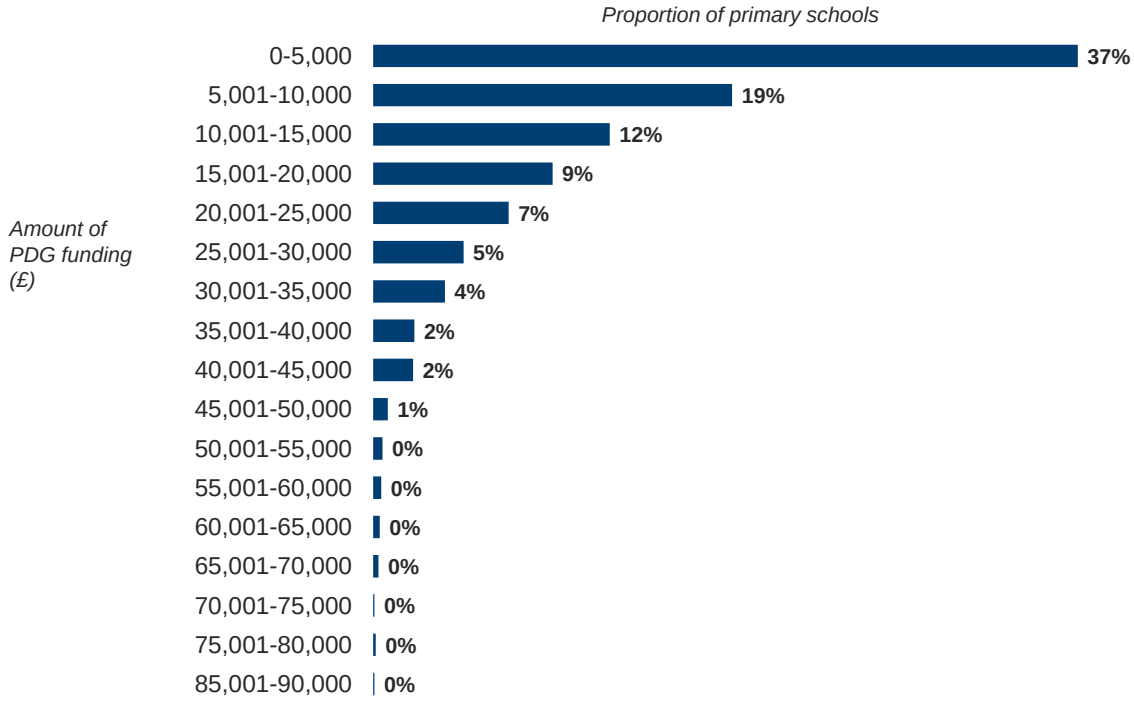
2.2 In 2012-13 the Welsh Government distributed £32,432,850 in Pupil Deprivation Grants to schools in Wales (excluding the Looked After Children component). This was based on £450 per e-FSM pupil[14]. More than half of this (56%) went to primary schools[15] (£18,189,900), 42% to secondary schools[16] ((£13,611,150) and 2% to special schools[17] (£631,800). In addition, a total of £1m funding was available to schools in Communities First areas. Schools in

14 As officially recorded for schools in the January 2012 Pupil Level Annual Schools Census (PLASC).
15 Based on 1,435 Primary schools we have information for.
16 Based on 222 Secondary schools we have information for.
17 Based on 43 Special schools we have information for.

Communities First clusters can apply for grants of between £10,000 and £75,000 per cluster. In 2013, a total of 16 proposals for this matched funding were approved by the Welsh Government.

2.3 On average primary schools received £12,676 each, although around 5% of primary schools received in excess of £40,000 (Figure 2.1). Thirty nine primary schools did not receive the Pupil Deprivation Grant because they had no e-FSM pupils.

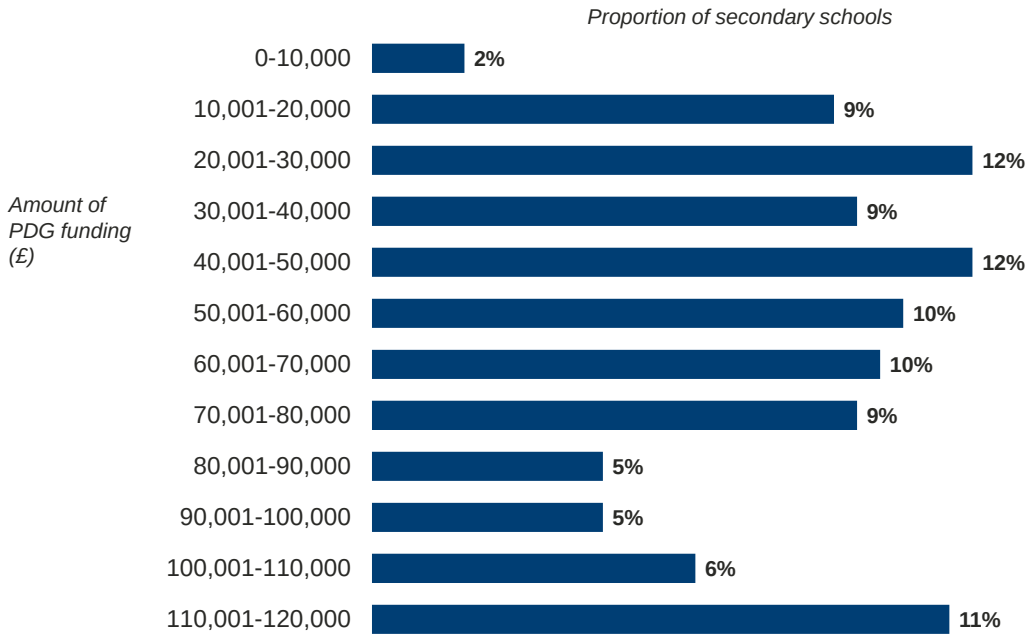
Figure 2.1: PDG funding per primary school, 2012-13 (Welsh Government data)



Primary funding for 2012-13 (£450 per FSM pupil)

Source: Welsh Government data

Figure 2.2: PDG funding per secondary school, 2012-13 (Welsh Government data)



Secondary funding for 2012-13 (£450 per FSM pupil)

Source: Welsh Government data

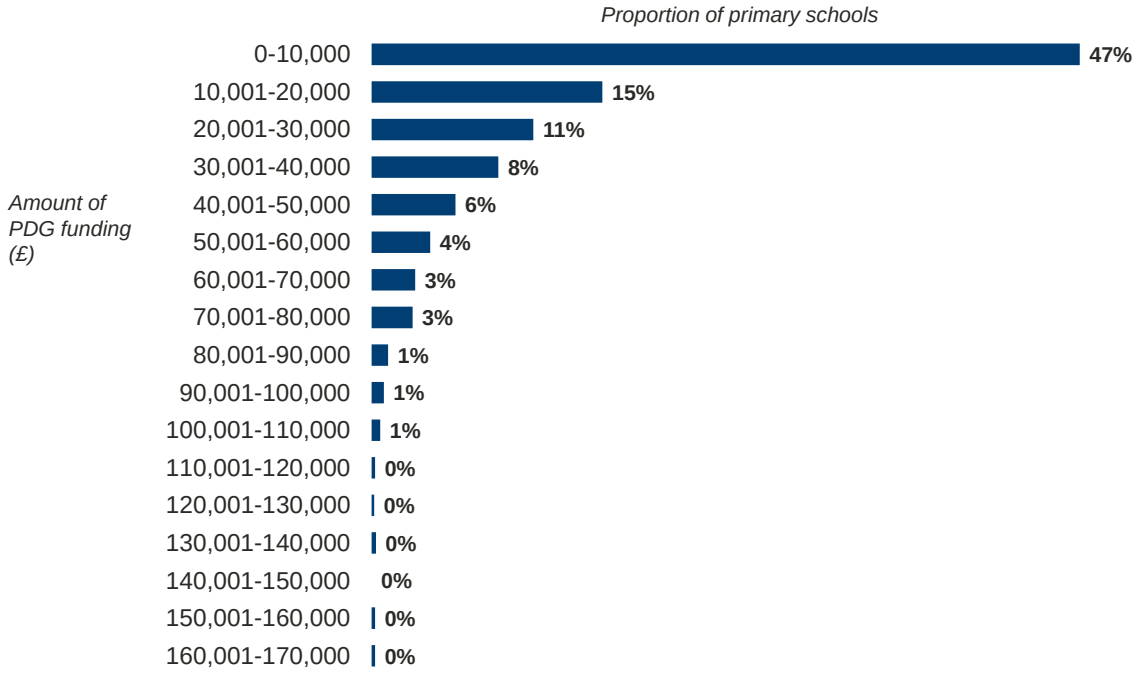
2.4 Secondary schools received considerably more funding, with £61,311 on average per school. though compared to primary schools the level of PDG per secondary school varied less. However, 17% of secondary schools received more than £100,000 in PDG in 2012-13.

2.5 In 2013-14 the overall amount of Pupil Deprivation Grant slightly increased to £33,289,200. For 2014-15 the Pupil Deprivation Grant substantially increased to £64,594,152[18] as a result of the Welsh Government decision to more than double the size of the Grant for each pupil from £450 to £918 per e-FSM pupil. This change is applicable to the 2014-15 academic year only: this report is based on the academic year 2013-14 and as such we do not yet have evidence about the way the increased Grant is being used. Again, 56% of the overall resource will go to primary schools and 41% to secondary schools. Although overall levels of funding will increase in

18 Excluding the Looked After Children component.

2014-15 the variation in the level of funding per school will remain very similar (Figure 2.3 and Figure 2.4).

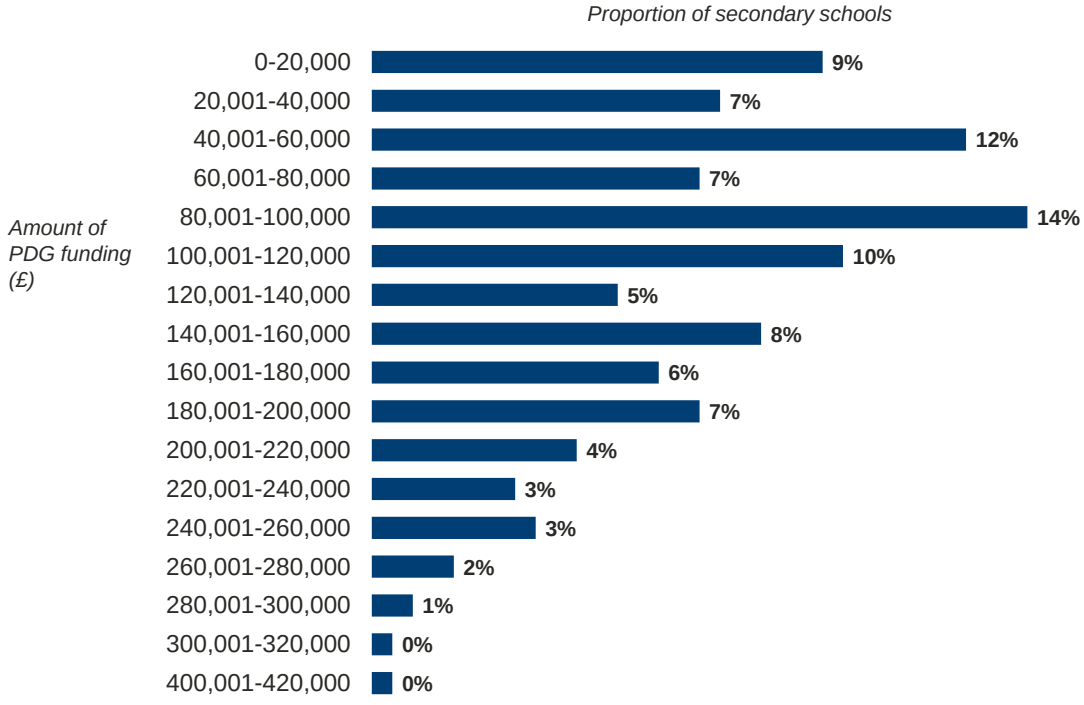
Figure 2.3: PDG funding per primary school, 2014-15 (Welsh Government data)



Primary funding for 2014 -15 (£918 per e-FSM pupil)

Source: Welsh Government data

Figure 2.4: PDG funding per secondary school, 2014-15 (Welsh Government data)



Secondary funding for 2014 – 15 (£918 per FSM pupil)

Source: Welsh Government data

2.6 The distribution of PDG budgets among the 201 schools participating in the survey closely matches the distribution of funds across the population (further details in Annex 2).

2.7 It is important to note that levels of PDG funding received by schools do not vary according to the size of the % differential in educational achievement between e-FSM pupils and non-FSM pupils. This is to be expected given the way the PDG is calculated based on the number of e-FSM pupils in a school. However, it demonstrates that schools with varying differences in the achievement of e-FSM versus non-FSM pupils may be receiving very similar levels of funding, which in turn has important consequences for the potential impact of that resource on reducing the % differential between e-FSM and non-FSM pupils.

2.8 An analysis of the survey data demonstrates that there is little difference in the total school budgets between schools with an average and large intake of e-FSM pupils, although schools with a relatively low proportion of e-FSM pupils have smaller budgets[19]. The financial data captured in the survey also demonstrates that primary and secondary schools in Communities First areas have relatively large budgets compared with those in other areas[20].

2.9 The proportion of schools' budgets that are accounted for by the PDG is, on average, less than 4% (2.3% primary, 3.6% secondary). The PDG allocation represents a relatively small amount of the school budget even in schools with a comparatively high proportion of e-FSM pupils (in primary schools with a high proportion of e-FSM students, 3.1% of the school budget).

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19 The mean total school budgets for schools surveyed were: £1.5m for schools with a small proportion of e-FSM pupils, £2.4m for schools with an average proportion of e-FSM pupils, and £2m for those with a high proportion of e-FSM pupils.

20 The mean total budget for schools in Communities First areas was £2.8m compared with £1.5m for schools outside Communities First areas. This difference is not explained by the relatively high proportion of secondary schools in Communities First areas: secondary schools in Communities First areas have larger budgets on average than those outside of Communities First areas, as do primary schools.

2.10 Among the schools surveyed four in ten or fewer said their total school budget was higher than the previous year (40% of primary schools and 32% of secondary schools). A quarter of primary (25%) and half of secondary (52%) schools said their budget was lower than the previous year. The falling budgets of half of secondary schools could limit the potential impact of PDG funding, and is important to bear in mind in analysing the Grant's Grant's impact.

2.2 Additional funding

2.11 Around nine in ten schools (86% primary, 91% secondary) surveyed report supplementing PDG funding through the general school budget or other school funds in order to finance PDG-funded activities. There is generally little variation in the propensity for schools to top up PDG funding according to school size or size of the % differential in the achievement of e-FSM and non-FSM pupils.

2.12 The amount of additional funding schools report using to supplement PDG-funded activity ranges from £200 to £15,000. On average primary schools report supplementing PDG-funded activities with an additional £10,240 – with the amount increasing in line with the proportion of e-FSM pupils in the school – while secondary schools contribute an additional £44,356 on average, with little variation regardless of the proportion of e-FSM pupils (Figure 2.5) [21]. The additional funding represents a significant supplement to the PDG, particularly in primary schools, as illustrated in figure 2.3. In fact, on average primary schools report almost matching the PDG allocation with their own funds, while secondary schools contribute between 50%-99% of the PDG allocation from other funding streams on average.

21 Note, however, that secondary findings are based on a relatively small sample within each e-FSM category.

Figure 2.5: Mean amount of PDG funding allocated by type of school, and mean additional (non-PDG) funding used by schools to part-fund PDG activities

	Primary			Secondary		
Proportion of e-FSM pupils:	High	Medium	Low	High	Medium	Low
PDG funding allocation (mean)	£21,185 (N=31)	£13,597 (N=43)	£5,257 (N=62)	£90,216 (N=19)	£64,702 (N=22)	£42,667 (N=24)
Additional funding (mean)	£19,026 (N=20)	£10,023 (N=30)	£4,783 (N=31)	£45,496 (N=11)	£45,769 (N=11)	£42,351 (N=14)

Source: Ipsos MORI survey
Notes: Proportion of e-FSM pupils groupings defined as low (up to 12% of pupils in school are e-FSM), medium (12% up to 24%), high (24% or more).
Base: Primary and secondary schools providing PDG financial data (see figure for base sizes), Feb – Apr 2014

2.13 Schools typically supplement PDG funding from the general school budget and the School Effectiveness Grant (SEG). The strong financial links with the SEG are unsurprising given that the Welsh Government guidance for the grants is integrated, and the grants' aims are closely interrelated (although separate, stand-alone guidance for the two grants was published in December 2013). A wide range of other funds are also used. It is notable that Communities First funds are used only in a minority of schools. In total, of 63 schools surveyed that are based in Communities First areas nine had received some financial support from Communities First, six from Matched Funding and three from the standard programme funds.

Figure 2.6: Source of additional funding for PDG-funded activities

	Primary %	Secondary %
General school budget	84	78
School Effectiveness Grant (SEG)	36	36
Welsh in Education Grant (WEG)	3	7

Communities First (standard)	-	5
Communities First Matched Funds	2	7
National Literacy and Numeracy Programmes	3	2
Foundation Phase	2	-
Band 4/5 Funding	-	7
Special Educational Needs	3	-
Other	16	15

Source: Ipsos MORI survey
Base: 117 primary and 59 secondary schools where PDG funding is supplemented from other sources of funding, Feb – Apr 2014

Staff involvement

2.14 Around half of the interventions funded by PDG, including 49% of primary interventions and 59% of secondary interventions, are delivered by staff specifically recruited to deliver the intervention. Case study evidence suggests this is likely to cover a mix of external recruitment, extending the hours of existing staff, and/or moving existing staff into roles funded by PDG.

2.15 The average number of staff reported to be involved in the planning, support and delivery of all PDG activities within a school is 7.6 in primary schools and 12.3 in secondary schools. Seven in ten secondary schools report that 10 or more members of staff are involved in delivering PDG interventions. Small schools, and schools with a relatively small proportion of e-FSM pupils report a smaller number of staff being involved in planning and delivering PDG interventions. As with the financial inputs noted above, the level of staff resource does not vary by the size of the % differential in achievement between e-FSM and non-FSM pupils in schools. As would be expected, more intensive interventions that are run over many sessions (151+ per year), and/or run every day typically command more staff time in planning and delivery (see Annex 2).

2.16 Teaching assistants are widely used by primary schools to deliver PDG-funded interventions (65% of all primary interventions). Secondary schools tend to use a wider range of staff to deliver

interventions, as illustrated in Figure 2.6 below. This composition reflects the different types of intervention run in primary and secondary schools. Schools with relatively small proportions of e-FSM pupils are slightly more likely to use class teachers to deliver their interventions, whereas schools with a large proportion of e-FSM pupils are more likely to use administrative or general school staff in their delivery.

Figure 2.7: Number of staff involved in the planning, support and delivery of PDG

	Primary %	Secondary %
1-5	47	12
6-10	26	17
10+	27	71
Mean	7.6	12.3

Source: Ipsos MORI survey
Base: 136 primary and 65 secondary schools, Feb – Apr 2014

2.17 Teaching assistants are widely used by primary schools to deliver PDG-funded interventions (65% of all primary interventions). Secondary schools tend to use a wider range of staff to deliver interventions, as illustrated in Figure 2.6 below. This composition reflects the different types of intervention run in primary and secondary schools. Schools with relatively small proportions of e-FSM pupils are slightly more likely to use class teachers to deliver their interventions, whereas schools with a large proportion of e-FSM pupils are more likely to use administrative or general school staff in their delivery.

Figure 2.8: Type of staff involved in delivering PDG interventions

Type of staff	Primary %	Secondary %
Teaching assistant/ learning support assistant/ higher level teaching assistant	65	23
Class teacher	25	26
Family / well-being behaviour / special needs teacher/ coordinator/ coach	5	12
Tutor/ learning coach/ catch-up coordinator	2	13
General staff/ admin staff	2	12
Senior staff (head teachers, assistant head teachers etc.)	4	11
Specialist staff (e.g. digital support staff/ reading specialist/ music therapist)	2	3
External staff/ outside support/ independent advisor	5	8
All staff/ all teachers	5	5
Specific department	1	4
Teacher recruited specifically/ teacher paid with PDG money	3	3

Source: Ipsos MORI survey
Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014.
Note that respondents were able to give multiple responses, and therefore answers sum to more than 100%.

3 Activities

This chapter sets out the key activities carried out by schools using PDG funding. It looks at the evidence used by schools to inform these activities, the types of pupils schools have decided should receive PDG-funded interventions, how and by whom the interventions are delivered, and the role and importance of Welsh Government guidance and support to schools.

Schools primarily use their own data monitoring systems and experience to plan and monitor the activities they fund using the PDG. The majority have also made use of external evidence sources, principally the Welsh Government guidance, in their planning. Less than half of schools report using the Sutton Trust Toolkit, despite the endorsement of the Toolkit within the guidance.

Schools are aware that the target beneficiaries of the PDG are e-FSM and LAC pupils. However, they use broader criteria when targeting interventions in their own schools: only 65% of interventions run in both primary and secondary schools were targeted specifically at e-FSM pupils, and there are a significant number of other pupils benefiting from Grant-funded activity. There are two key reasons for this:

- Schools consider the Grant aims to tackle disadvantage rather than financial deprivation, and use a wider range of indicators and personal knowledge of pupils and families to identify those in need of support, rather than FSM/LAC status alone.
- Schools consider the Grant aims to improve attainment and therefore target pupils with low attainment: 38% of primary and 32% of secondary interventions were targeted at pupils with low attainment.

While schools rarely run interventions using PDG funding that directly target parents and carers – 2% of primary and 4% of secondary-run interventions target parents – schools generally perceive that interventions they are running have had a positive impact on parental engagement. This might be explained by interventions working with parents in order to target outcomes for pupils, and/or interventions that work directly with pupils incorporating elements of parental engagement.

At the primary level, PDG funding is used primarily to fund literacy (37% primary interventions) and numeracy (25% primary interventions) programmes. These are often run by teaching assistants (65% of all primary interventions). There is a less clear-cut pattern at the secondary level: while literacy and numeracy interventions are fairly common, there is greater use of interventions aimed at improving self-esteem, behaviour, attendance and pastoral issues at this level. At the secondary level, class teachers are as likely to be delivering interventions as teaching assistants, and there is a fairly widespread use of specialist roles such as Behaviour Coordinators and Family Liaison staff.

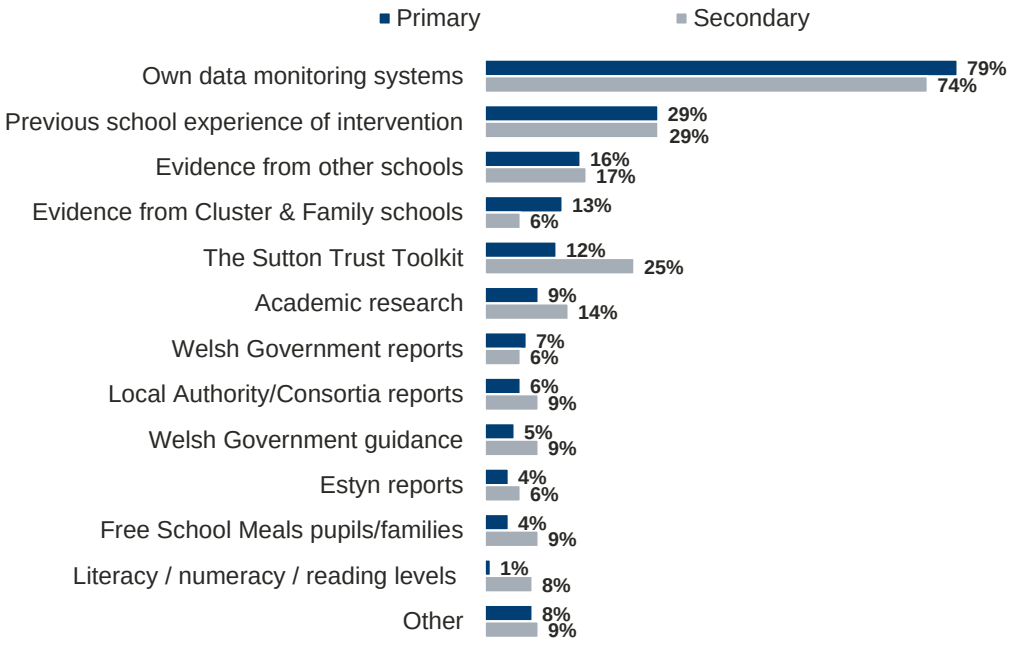
Evidence used to plan Pupil Deprivation Grant activity

3.1 The Pupil Deprivation Grant guidance encourages schools to make use of evidence-based approaches when planning how to spend the PDG. The guidance requires that schools make intelligent use of data tracking systems to identify learners' needs, target interventions and monitor impact, and it highlights a number of external sources of evidence that schools can use to plan their spending. Specifically, the guidance from the Welsh Government highlights the Sutton Trust Toolkit, Estyn reports and Save the Children Wales's Communities, Families and Schools Together report.

3.2 When asked unprompted what sources of evidence they use when deciding how to spend the grant, schools typically reported using their own data monitoring systems (79% primary and 74% secondary), and a significant proportion mentioned their past experience (29% primary, 29% secondary). A minority of schools spontaneously mentioned external sources of evidence: 12% of primary and 25% of secondary schools reported using the Sutton Trust Toolkit, for example; and 4% of primary and 6% of secondary cited Estyn reports. Schools with a higher proportion of e-FSM pupils were more likely to use both the Sutton Trust Toolkit and Estyn reports (27% with a large proportion of e-FSM used the Sutton Trust Toolkit, and 13% used Estyn reports). The guidance does

suggest that schools use their own data alongside external sources, but 66% of primary schools and 46% of secondary schools reported only using their own, or informal, sources of evidence, and did not spontaneously mention using external or formal evidence[22].

Figure 3.1: Evidence used by schools when planning how to spend the Pupil Deprivation Grant (unprompted responses)



Base: 201 schools surveyed, Feb – Apr 2014. Figure shows responses given by at least 5% of respondents.

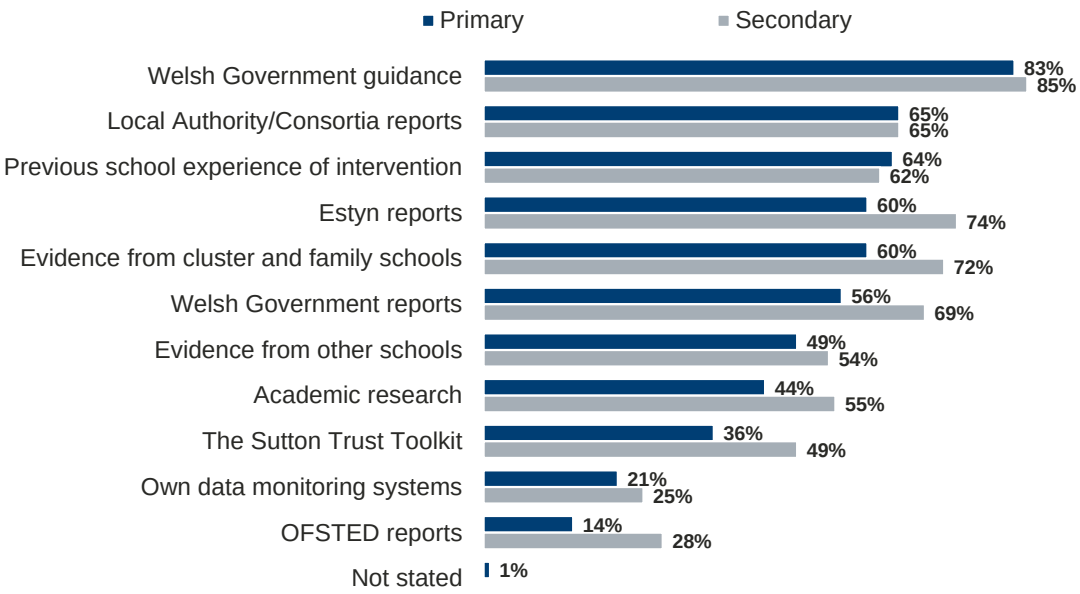
Question: *What evidence or information, if any, did you use when deciding how to spend the PDG? (Unprompted)*

Source: Ipsos MORI survey

3.3 However, on prompting, 83% of primary schools, and 85% of secondary schools reported using Welsh Government guidance; 36% of primary and 49% of secondary schools reported using the Sutton Trust Toolkit; and 60% of primary and 74% of secondary school respondents said that they used Estyn reports.

22 We have defined formal / external sources of evidence as that which the Welsh Government has advised schools use (e.g. the Sutton Trust Toolkit), and published academic evidence. Other sources of evidence, such as school data, past experience, or good practice shared with local schools is defined as internal or informal.

Figure 3.2: Evidence used by schools when planning how to spend the Pupil Deprivation Grant (prompted responses)



Base: 201 schools surveyed , Feb – Apr 2014. Figure shows all sources of information asked about.

Question: *And did you use of any of the following when deciding how to spend the PDG? Prompted*

Source: Ipsos MORI survey

3.4 This conforms with findings from both waves of case studies: schools primarily plan interventions based on their own data and experience, but supplement this through referring to other, external evidence. For example, schools typically use their own data monitoring systems, in conjunction with anecdotal feedback from pupils and staff, to identify pupils who could benefit from extra support and/or to identify the types of support required across the school population.

3.5 Some case study schools were allowing the priorities of the school, or the needs of the pupil cohort to drive the priorities for the PDG spending. At one secondary school the senior leadership team looked at what the whole school was planning to achieve, and then at how the PDG could help them achieve it. They used CATS data (Cognitive Ability Tests), PASS (Pupil Attitudes to School and Self) survey data and pastoral data to decide which groups of pupils to

target with the PDG. In another school, the head teacher perceived a need to improve teaching quality across the board and the PDG strategy was aimed at supporting and coaching staff. In another (primary) school, the head teacher acknowledged the link between a supportive home environment and pupil attainment and used the funding to allocate teacher time specifically to improving relations with parents. This involved working with parents from specific ethnic backgrounds who were finding it difficult to help their children with homework due to language and cultural barriers, and visiting the homes of pupils who were demonstrating low attendance.

3.6 Most case study schools took a critical approach to evaluating interventions they had run in previous years to determine whether or not to continue or rescale their activities – for example, many used pre- and post-intervention testing as well as a mix of gathering feedback from beneficiaries and/or observation of activities. One primary school told us that their planning was informed by the Estyn inspection reports and good practice guidance and that they also used local authority and Welsh Government guidance. They had heard of the Sutton Trust Toolkit, but did not use it. The head teacher also used experience of work in a previous school to inform forward planning.

Targeting the Pupil Deprivation Grant

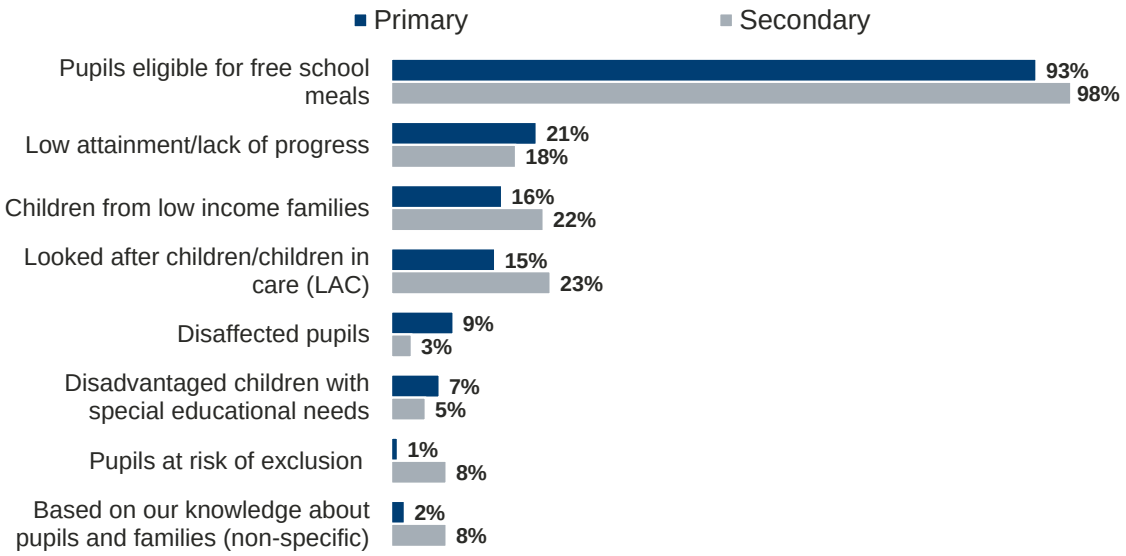
Targeting pupils

3.7 Welsh Government Guidance[23] states that the Pupil Deprivation Grant (PDG) must be used to fund measures to improve attainment by pupils eligible for school meals (e-FSM pupils) and looked after children (LAC), and is not intended to tackle under achievement across the whole school.

23 http://wales.gov.uk/docs/dcells/publications/130426-school-effectiveness-grant-2013-2015-en.pdf

3.8 Schools are aware that the Welsh Government intends the PDG should target e-FSM and, to a lesser extent, LAC pupils. When asked which group the PDG intended to benefit, 93% of primary and 98% of secondary school respondents cited e-FSM pupils, and 15% of primary and 23% of secondary school respondents said LAC. Just over half of schools (55% primary, 60% secondary) identified that both e-FSM and LAC pupils are eligible for the Grant. Schools that reported having LAC pupils in their population were more likely than those with no LAC pupils to report that the Grant targets this group[24].

Figure 3.3: Perceptions of the intended beneficiaries of the Pupil Deprivation Grant



Base: 201 schools surveyed, Feb – Apr 2014. Figure shows responses mentioned by at least 5% of respondents

Question: *First of all, based on your understanding of the Pupil Deprivation Grant guidelines, which groups of pupils is the PDG intended to benefit?*

Source: Ipsos MORI survey

3.9 In addition to e-FSM and LAC, significant proportions of schools noted other groups they understood as eligible for the PDG, including pupils with low attainment, children from low income families, and disadvantaged children with special educational needs.

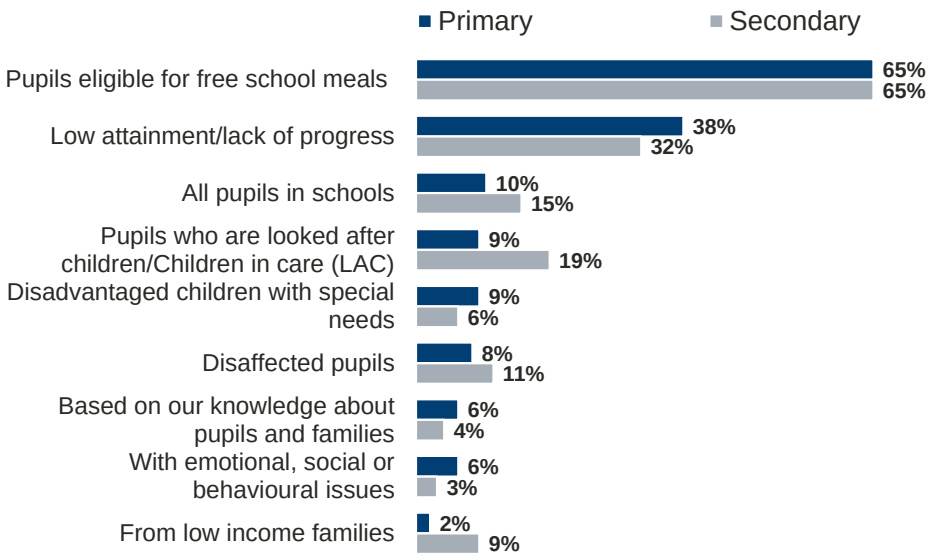
24 For example, 4% of primary schools with no LAC pupils were aware of the LAC criterion, compared with 27% of primary schools with LAC pupils on roll.

While there was a broad understanding that the PDG was intended to target e-FSM and LAC, the range of additional responses suggested that schools were not always clear in their understanding as to whether they should be targeting only e-FSM[25] and / or LAC, or whether a broader definition of disadvantage should be applied[26].

3.10 In line with this, only 65% of schools' PDG interventions in both primary and secondary were targeted at a group of pupils that included e-FSM pupils; 35% of interventions were targeted at other types of pupil[27]. As illustrated in Figure 3.4, a proportion of the interventions targeted at other types of pupils were whole-school initiatives (10% of primary, 15% of secondary) that would include e-FSM pupils as well as others. However, a significant minority of interventions are targeting groups of pupils that do not necessarily include e-FSM pupils, such as disaffected pupils or those with low attainment. Primary schools were more likely than secondary schools to target pupils with low attainment, and secondary schools were more likely than primary to target looked after children[28].

[25] *Data presented later in this report highlights that 60% of primary pupils and 72% of secondary pupils benefitting from PDG-funded interventions are e-FSM or LAC.*
[26] *This might be because secondary schools, on average, have a larger number of looked after children on roll.*
[27] *Data presented later in this report highlights that 60% of primary pupils and 72% of secondary pupils benefitting from PDG-funded interventions are e-FSM or LAC.*
[28] *This might be because secondary schools, on average, have a larger number of looked after children on roll.*

Figure 3.4 – Groups targeted by PDG-funded initiatives



Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014. All responses with 5% or more (total)

Question: *Which groups of pupils, parents, or other groups are targeted as part of this intervention?*

Source: Ipsos MORI survey

3.11 The case study visits echoed the survey findings, in that schools recognised the link between disadvantage and attainment, and understood the aim of the Pupil Deprivation Grant was to tackle the attainment gap by targeting disadvantaged pupils. Head teachers interviewed as part of the case studies were broadly supportive of the funding's core aim of specifically helping deprived pupils. Two key issues emerged in explaining why schools use a slightly different eligibility criteria than the criteria outlined in the programme guidance:

3.12 Schools see the Grant as aiming to tackle 'disadvantage' and use a broader definition of deprivation than e-FSM and LAC status alone;

3.13 Schools see the Grant as aiming to improve attainment and want to target underachieving pupils, and see the PDG and SEG as complementary funds.

3.14 In both cases, there was some ambiguity around whether the e-FSM and LAC eligibility criteria existed merely as a funding mechanism to

allocate the Grant rather than the basis on which the Grant must be spent.

Tackling disadvantage

3.15 Teachers felt that pupils could be classified as "disadvantaged" for a number of reasons, including short-term changes to circumstances and issues such as family breakdown. Case study schools relied heavily on their staff's knowledge of individual pupils and families to target the PDG, and felt that indicators such as e-FSM were 'crude' and 'blunt instruments'[29]. One head teacher explained the PDG interventions should be used for any vulnerable pupils, with vulnerable defined as any children who are not able to achieve their full potential, or for whom the playing field is not level with other children because of their circumstances outside school. This view was typical of most head teachers the evaluation team has consulted. Often, schools' conceptions of disadvantage were based on parents' attitudes: they feel that whilst some children are deprived socio-economically others are deprived because of parents' work commitments (e.g. having three jobs), parental lack of engagement with children or school, or because parents are absent in other ways.

3.16 A further nuance in the targeting lies in the relationship between disadvantage and attainment: while the guidance specifies that schools should target e-FSM and LAC, regardless of relative attainment, schools typically target disadvantaged pupils who are under-achieving compared with peers, rather than under-achieving against their own potential. [30]

29 Furthermore, the poor take-up of e-FSM among those entitled to it in some communities means that schools often regard FSM status as an inaccurate measure of financial deprivation.
30 The guidance notes that e-FSM pupils may still be underperforming against their own potential even if they are doing well in relation to other children. Supplementary Welsh Government guidance "The Pupil Deprivation Grant, short guidance for practitioners" states that "it is important to remember that the PDG is for targeted interventions to support learners from deprived backgrounds to reach their potential. This includes very able learners who, if they were supported to overcome their barriers resulting from living in poverty could be expected to achieve above average results."

Improving attainment

3.17 Some schools also indicated that, while they understood the link between deprivation and attainment, they also wanted to target pupils who were underachieving against their potential even if they were not disadvantaged. They felt that the Grant's intended outcome was to improve attainment and that the best way of achieving this was to target pupils who are under-achieving. A few of the case study schools talked about some of the PDG funding being used to benefit low achieving pupils. In these cases schools identified pupils who were not reaching targets as the children who needed support from the PDG interventions, rather than looking at e-FSM status. Following a similar principle, schools would argue that e-FSM pupils whose attainment was at the expected level did not need the additional benefits of the PDG.

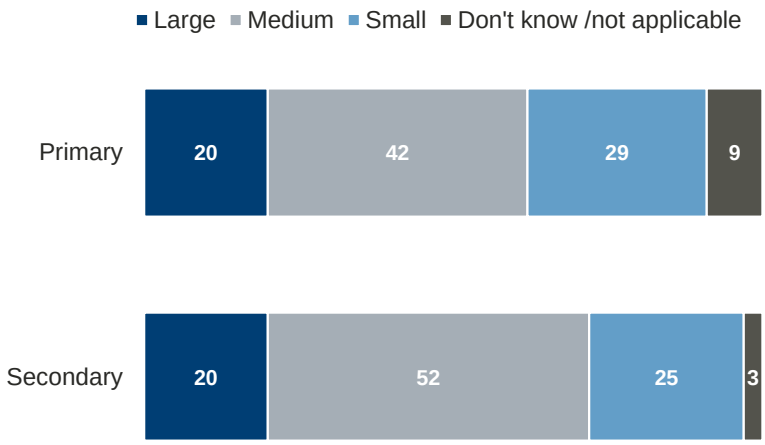
Targeting parents

3.18 Empowering and engaging parents and carers is cited as a key driver for improving school standards in the programme guidance. The guidance states that the Welsh Government expects that schools will "adopt strategies that involve parents and carers in the learner's education", on the premise that "the Welsh Government is of the view that parents and carers need to understand their responsibilities in supporting their child's education."

3.19 There is limited evidence that schools are using the PDG to engage parents and the community from the evaluation survey. In spite of this, schools perceive that the interventions they are running have had a positive impact on parental engagement. Only 2% of interventions in primary schools and 4% of interventions in secondary schools were reported as targeting parents and carers of pupils, and just 7% of interventions at both primary and secondary level have parental engagement as an intended outcome. At the

same time, schools reported achieving at least a modest positive impact on relationships with parents for 62% of primary interventions and 72% of secondary interventions. This apparent discrepancy can be explained by the way that interventions targeted at pupils often work through parents. For example, one case study school funded a teacher to spent time liaising with parents in order to improve attendance and well-being among pupils.

Figure 3.5: Impact of the PDG on parents and carers



Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014

Question: *How much of an impact, if any, has the PDG had on the involvement of parents/carers?*

Source: Ipsos MORI survey

3.20 However, there were examples of case study schools proactively engaging with parents. A number of case study schools spoke about the challenge of getting the parents of more disadvantaged pupils to engage with teachers and the school. The parents they most needed to engage with were traditionally the hardest to engage, and a number of case study schools had used PDG funding to work with parents.

Engaging parents: case study examples

Providing skills: two case study schools were inviting parents to IT classes. Both schools felt that the classes helped the parents "cross the threshold" of the school, as well as giving them additional skills which improved their confidence when helping their children with school work.

Broad targeting: one case study school invited all parents in to the school for after school groups with the children. They felt that the parents they most need to target would be the least likely to attend if they felt that they were being singled out. In a similar vein, another case study primary school invited all parents to workshop days to enable parents to engage with their children's learning.

Seeking parents' help: one primary school asked fathers to trial literacy packages for them as part of a 'dads and lads' initiative. The school chose to approach parents informally when they were dropping children at school, for example, rather than inviting parents to a formal meeting which they may find daunting. Participating fathers are given iPads to take home; each fortnight the iPads are loaded with a new literacy package which fathers trial with their sons. Fathers are asked to provide information about the package next time they are in school. It was evident from consulting with parents and children that the iPads had encouraged children who were formerly reluctant readers to read independently and with their parents, and that siblings were also enjoying reading on iPads.

Targeting the local community

3.21 The guidance states an expectation that schools will engage communities in the life of the school and schools in the life of the community. There was limited evidence from the survey or the case studies that schools were active in using PDG funding to build relationships with the local community. About one third of interventions are working in partnership with other schools (39% in primary and 33% in secondary), and 29% of interventions run by schools in Communities First areas were delivered with a local community first partnership. Only 4% of primary school interventions and 14% of secondary school interventions report a

large impact on involvement with the local community. One case study school (secondary) ran a community engagement programme to improve attendance. This included school outreach, such as building bird boxes for local primary schools, and activities such as DJing and walking. They could evidence a positive change in attendance, but could not fund the programme longer term.

Types of intervention funded using the Pupil Deprivation Grant

3.22 The Welsh Government guidance, which covered the Schools Effectiveness Grant (SEG) as well as the Pupil Deprivation Grant, outlines three national priorities as:

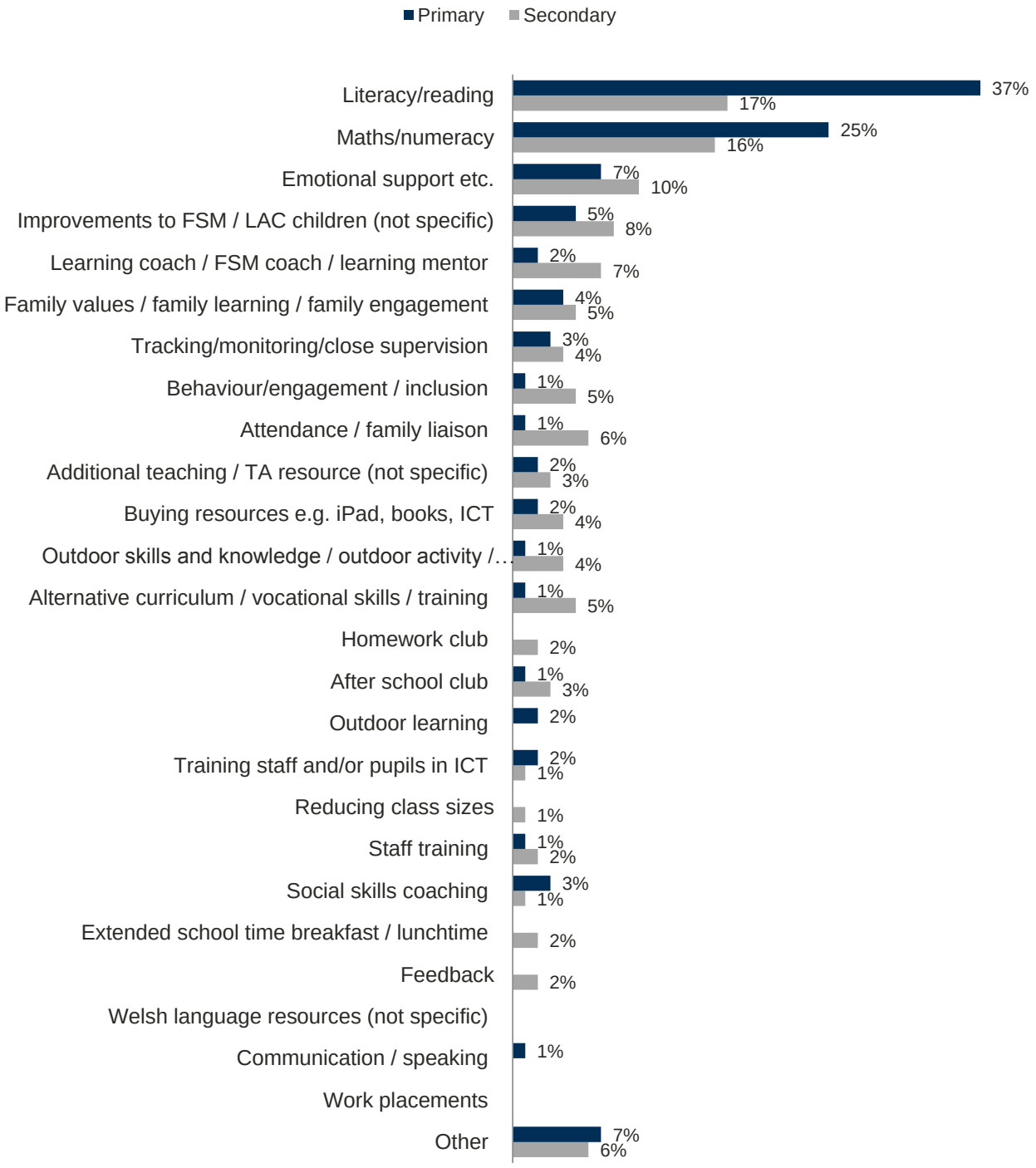
- Improving literacy;
- Improving numeracy; and
- Reducing the impact of poverty on educational attainment.

3.23 Literacy and numeracy are covered by the SEG and pupil deprivation is covered by the PDG. The guidance related specifically to the PDG is not prescriptive in terms of what sort of interventions schools should be running but, as outlined earlier, asks that schools take an evidence-based approach to planning interventions which will meet the needs of the pupil cohort within their school. The part of the guidance which relates specifically to the PDG does state that literacy and numeracy are weaker among e-FSM pupils but also states that effective communication and family engagement can have a positive impact on outcomes, especially for deprived pupils.

3.24 In primary schools almost two thirds of interventions are aimed at improving literacy and numeracy skills, with 37% aimed at literacy and 25% aimed at numeracy. Secondary schools are running literacy and numeracy interventions (17% literacy and 16% numeracy) but are also running a broad range of other interventions.

Secondary schools have a greater focus on softer skills with interventions aimed at self-esteem, behaviour, attendance and coaching / mentoring. Case study schools saw the SEG and PDG as complementary funds which is reflected in the choice to run numeracy and literacy interventions which they saw as key to overcoming the attainment gap whilst bolstering basic skills in literacy and numeracy. In addition, case study schools reported working with parents and pupils to tackle issues such as behaviour and attendance.

Figure 3.6 – Type of interventions funded by the PDG



Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014

Question: *Please provide a short description for each intervention you fund using PDG, including its name, desired outcome, who delivers it, whether it's one-to-one or group work or if it's an additional resource or systems?*

Source: Ipsos MORI survey

3.25 The Welsh Government Guidance outlines a clear rationale for targeting attendance and behaviour.

> "Evidence shows that certain factors which exist in children and young people's lives place them at a greater risk of disengagement from school. Children and young people exposed to these factors are over-represented amongst those who are absent from school, exhibit poor behaviour, and who are excluded from school. Disengagement from school serves can exacerbate what are already difficult circumstances for the child or young person."

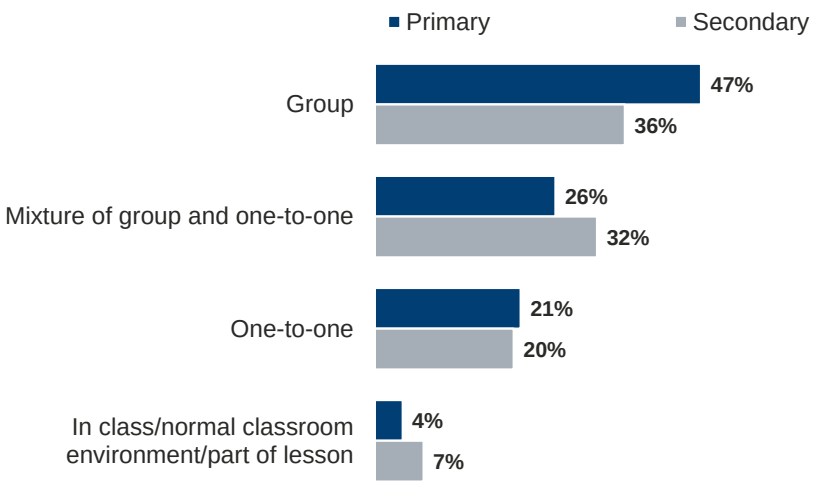
3.26 The guidance also states an expectation that attendance among e-FSM pupils will improve by use of the grant. As shown above, schools are targeting interventions primarily at numeracy and literacy, rather than at attendance, well-being and behaviour (especially in primary schools). However, data from the survey shows that schools are reporting a greater impact overall on well-being than they report on attainment, in spite of schools targeting maths and literacy primarily. In addition, primary schools report a greater impact on attendance than secondary schools, in spite of being less likely to target attendance than secondary schools. Overall 67% of interventions (65% in primary and 68% in secondary schools) are reported to have a large impact on pupil well-being compared to 56% on attainment (59% in primary and 54% in secondary).

3.27 This suggests that while schools might target basic skills first, in doing so they are working with pupils to improve other, softer, outcomes such as emotional well-being.

The delivery of Pupil Deprivation Grant interventions

3.28 The Welsh Government guidance is not prescriptive in terms of how and by whom interventions are delivered, but instead asks schools to take an evidence-based approach to planning. The majority of interventions are delivered in groups (36% in primary and 47% in secondary) or in one-to-one sessions (32% in primary and 26% in secondary) by a class teacher or teaching assistant. Primary schools are significantly more likely to make use of teaching assistants, and secondary schools are using a wider range of staff (including non-teaching staff). This is reflective of the wider range of interventions that secondary schools are delivering (discussed earlier) including putting more focus on attendance and well-being.

Figure 3.7: How interventions funded by the PDG are delivered

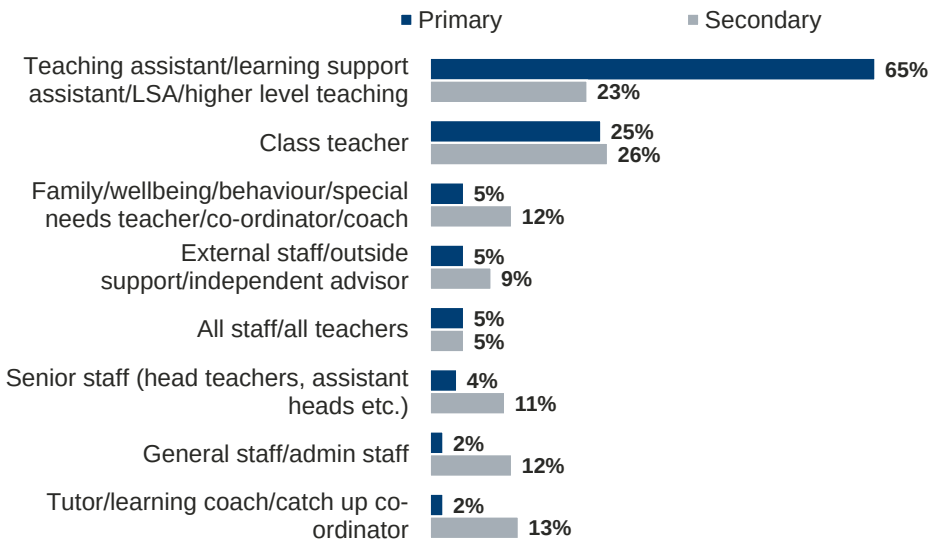


Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014. Figure shows responses given by at least 5% of respondents.

Question: *Please provide a short description for each [intervention], including its name, desired outcome, who delivers it, whether it's one-to-one or group work or if it's an additional resource or systems*

Source: Ipsos MORI survey

Figure 3.8: Who delivers interventions funded by the PDG



Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014. Figure shows responses given by at least 5% of respondents.

Question: *Please provide a short description for each [intervention], including its name, desired outcome, who delivers it, whether it's one-to-one or group work or if it's an additional resource or systems?*

Source: Ipsos MORI survey

3.29 Case study schools were delivering a mix of group and one-to-one coaching, especially in literacy and numeracy. One primary school, for example, was using teaching assistant time to deliver one-to-one additional reading using PDG funding. The Sutton Trust Toolkit highlights one-to-one teaching as being more costly but more effective than group work. One case study school was moving from a one-to-one model to small groups in spite of demonstrating good results with the one-to-one model, for cost reasons.

3.30 Another priority of the Welsh Government guidance is that schools adopt a whole school strategic approach to tackling disadvantage. Five percent of interventions (in primary and secondary) were delivered by all staff or all teachers and some case study schools had implemented whole-school systems such as positive behaviour codes, and attendance protocols.

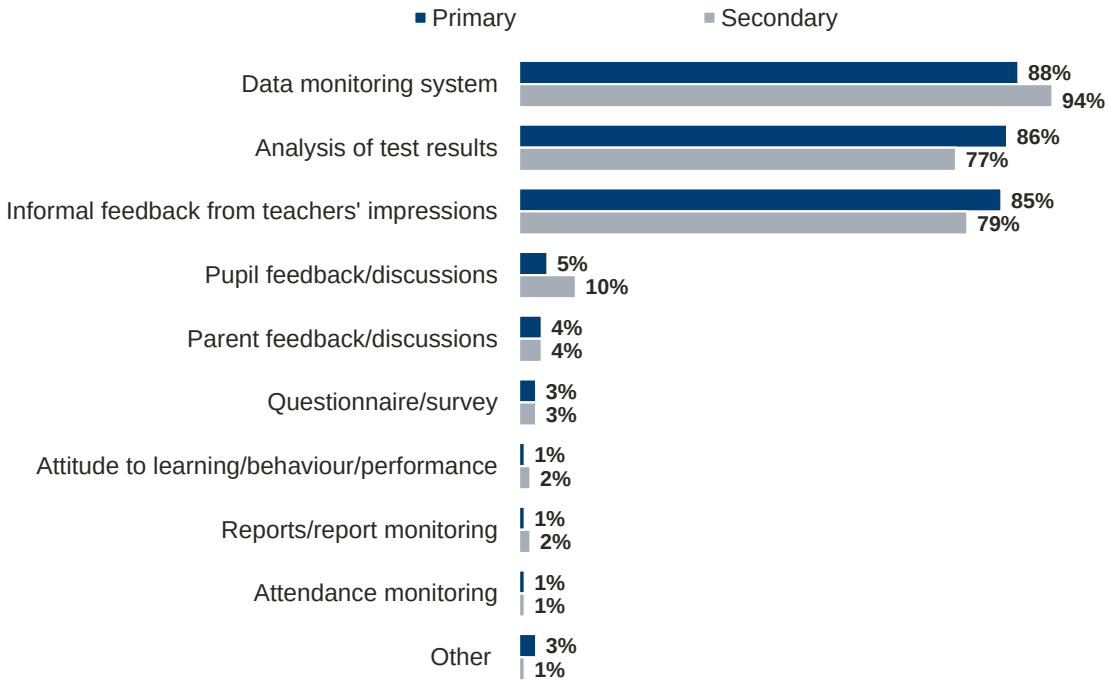
Measuring impact

3.31 The Welsh Government guidance asks schools use the following measures of outcomes from PDG investment:

- Teacher assessment;
- Reading and numeracy tests data;
- Annual performance data for achievement of Level 2 Threshold including English/Welsh (L2) and the end of Key Stage 4;
- Attendance and exclusion data;
- Estyn reports.

3.32 Our survey and case studies found that schools were using a mix of formal and informal sources to measure impact. Data monitoring systems are reportedly used by primary schools to measure 88% of interventions and by secondary schools to measure 94% of interventions. Test results were used to monitor 86% of interventions in primary schools and 77% in secondary schools. In addition to this, 85% of primary schools and 79% of secondary schools report using informal feedback from teachers. There were some small, but significant, differences in the way impact was measured between interventions with different intended outcomes

Figure 3.9 How schools measure the impact of the PDG



Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014. Figure shows responses given by at least 1% of respondents.

Question: *In which, if any, of the following way(s) do you monitor the impact of [the intervention]?*

Source: Ipsos MORI survey

3.33 Many case study schools reported using in-depth monitoring systems. Several tracked outcomes across a range of measures using a system they had bought into the school (for example, SIMS or INCERTS). A few schools were using the Boxall profile. In one school this entailed weekly monitoring and recording of measures relating to social, emotional and behavioural areas; pupils were scored by both the Teaching Assistant running the intervention they were receiving and their class teacher.

3.34 Regardless of the system used, case study schools typically monitored pupils on a range of indicators, including test results, and measures of emotional and social well-being such as PASS (Pupil Attitudes to School and Self) and SEAL (Social and Emotional Aspects of Learning). Case study schools also relied quite heavily on informal teacher feedback to gain a more rounded understanding of pupil progression. Monitoring data was reviewed regularly (in some cases weekly or fortnightly, and usually at least once per term). Some schools, particularly at the secondary level, had a data

manager with responsibility for monitoring data; in other schools this was the responsibility of the head teacher or assistant head teacher.

3.35 Several schools noted changes in the ways they monitored pupils as a result of the PDG. For example, one school noted that they now monitor the impact of interventions specifically rather than monitoring pupil outcomes generally: several schools used pre- and post-intervention scores to monitor the impact of their PDG activity. One school described how their monitoring was tied to the nature of the intervention they funded: for example, in relation to a Restorative Practice intervention, they reviewed numbers of detentions and behaviour issues; for literacy and numeracy support they reviewed baseline and exit scores, as well as National Literacy and Numeracy testing data.

3.36 Another school noted how they now monitored outcomes among specific groups of pupils (e.g. e-FSM, LAC) as a result of the PDG.

Role of PDG co-ordinators and Welsh Government guidance

3.37 When prompted, virtually all schools surveyed report using at least one of the Welsh Government guidance documents relating to the PDG: only 4 of 201 schools could not recall whether they used the guidance. Schools were less likely to report using the short guidance for practitioners from December 2013 than the 2013-2015 guidance document[31]. The Welsh Government guidance was the most commonly used external source of evidence and guidance used by schools (see figure 3.2 above). Most of those using the guidance reported finding it useful (78% primary and 91% secondary), although only one in five reported that it was 'very' helpful (21% primary, 18% secondary). It is notable that secondary schools report finding the guidance more helpful than primary

31 In total 52% of primary and 75% of secondary schools reported using the short guidance; 90% of primary and 97% of secondary schools reported using the 2013-15 guidance.

schools; it will be helpful to explore the reasons for this in the second year of the evaluation.

3.38 Feedback from case study schools suggested that schools found the guidance clear. There were mixed views about the monitoring requirements: many case study schools expressed frustration about multiple reporting requirements (to LAs and Consortia staff). However, a few schools felt that completing the paperwork helped with planning and evaluation activity.

3.39 While schools considered the grant guidance to be clear, and evidently had understood the key aims of the PDG, there remains some ambiguity about the intended beneficiaries of the PDG, and in particular whether the e-FSM/LAC criteria are used primarily as a mechanism to allocate funding or describe the intended beneficiaries of the grant.

3.40 Case study schools report consulting with PDG co-ordinators to review the way they are spending the PDG. A number of case study schools who elected to target the PDG more broadly than e-FSM/LAC had sought approval from co-ordinators to ensure their spending conformed to the terms of the Grant.

4 Outputs

4.1 This chapter explores the key outputs relating to PDG activity, including the amount of new activities focussed on raising standards among disadvantaged pupils as a result of the PDG being introduced, the number and profile of pupils benefitting from PDG-funded interventions, and the numbers of staff who have received training as a direct result of the PDG.

Survey evidence highlights that a significant amount of new activity is funded via the PDG: over half the interventions currently funded (59% primary, 71% secondary) were not run in schools prior to the grant's introduction. Even where activity pre-dated the PDG, it has usually been scaled up as a result of the additional funding available to schools.

Evidence on the sustainability of this activity is mixed: while schools report that a significant amount of activity could be continued even if the PDG were cut (albeit on a smaller scale), this is likely to reflect the significant amount of supplementary funding schools invest in PDG initiatives rather than the self-sustaining nature of interventions. Schools are investing in a significant amount of staff training and resources using the funding. However, there are significant running costs associated with many interventions in the form of staff time.

The evaluation demonstrates that 60% of primary pupils and 72% of secondary pupils benefitting from PDG-funded interventions are e-FSM or LAC. These figures reflect schools' use of broader definitions of disadvantage than e-FSM/LAC alone.

The status and sustainability of PDG-funded interventions

4.2 An average of 3.4 (primary) and 5 (secondary) interventions per schools are funded through PDG. The average cost per intervention amounts to £5,839 in primary and £17,069 in secondary schools.

4.3 The scoping study and early case studies highlighted that PDG-funded interventions often include initiatives that pre-date the introduction of the grant, and that were previously funded through other revenue streams. In order to determine the impact we might expect as a result of introducing the PDG, it was important to estimate the extent to which the PDG was associated with new

activity, or the scaling up of initiatives, rather than changes to the accounting lines for activities that were already in place.

4.4 The survey findings corroborate evidence from the case studies which suggests that schools are able to scale up activities as a result of PDG funding being available, and introduce a significant amount of new activity to support disadvantaged pupils. Over half the interventions funded by the PDG are new activities that had not run in the school prior to the PDG funding being available (59% primary, 71% secondary interventions). Schools with a relatively large proportion of e-FSM pupils were particularly likely to report introducing new interventions. Even where activities pre-dated the PDG they had typically been run on a smaller scale in the past (64% primary, 77% secondary[32]).

4.5 Schools report that a significant amount of activity currently funded through the PDG would be sustainable if the grant were cut, albeit on a smaller scale in many cases. Schools report that around a third of the activities currently funded via the PDG would be discontinued (32% primary, 32% secondary). However, for around half the interventions currently in place (51% primary, 53% secondary), schools would continue to run scaled-down provision of the same intervention. For a small proportion of interventions currently funded by the PDG, discontinuing the PDG would not affect delivery (16% primary interventions, 14% secondary interventions).

4.6 The fact that so much activity would be sustained if PDG were cut should be considered in the light of the significant amount of supplementary funding schools currently provide. As such, it is difficult to interpret the degree to which schools have developed activities that are self-sustaining – for example, because staff are now trained in new ways of teaching or mentoring, resources are available, or systems are in place – versus the degree to which other funding would continue to be used. However, the evidence from the survey and case studies tends to suggest that a significant amount

32 Based on initiatives that pre-dated the introduction of the PDG (142 primary, 66 secondary interventions).

of staff time is being funded using the PDG and ongoing funding would be required to maintain the same level of activity. According to survey data, 46% of primary interventions and 50% of secondary interventions are delivered by staff specifically recruited to deliver the intervention.

4.7 Set against this, however, is a significant investment in staff training (as highlighted in section 4.3 below). Furthermore, over half the interventions funded by the PDG involved investing in resources and materials. Most commonly, material investments covered books/toys/games; teaching resources and materials; and IT and online resources.

4.8 Case study schools also referenced changes in the school culture as a result of the PDG. The PDG had helped to focus their minds on considering how best to tackle the effects of disadvantage, and had helped to raise awareness among staff about how to achieve this. One case study school, for example, had set up a focus group of staff that met regularly to consider issues relating to the effects of being disadvantaged. Another school noted that the PDG had helped to increase the focus on this group of pupils and forced the school to consider how to get best value for money from interventions targeted at them.

Pupil beneficiaries

4.9 An average of 3.4 (primary) and 5 (secondary) interventions per school are funded through the PDG. The mean number of pupils benefitting from each PDG-funded intervention is 35 in primary schools and 174 in secondary schools (see Figure 4.1, below) [33].

4.10 Primary school interventions are typically small-scale, and rarely cover more than 50 pupils. By contrast, interventions at secondary level show a greater variety of scale and reach, and include more large-scale and whole-school initiatives. In reflection of this, a

33 Schools were asked to discuss the three most important interventions funded via PDG.

greater number of staff are involved in delivering PDG interventions in secondary schools (33 compared with 9 in primary schools).

Figure 4.1: Total number of pupils targeted as part of each intervention during 2013-14[34]

Number of pupils each intervention targets	Primary %	Secondary %
Up to 20	51	12
21-50	30	27
51-100	12	21
101-200	4	20
201-300	1	7
301 or more	1	13
Not stated/ not applicable	*	*

Source: Ipsos MORI survey
Base: 785 interventions across 201 schools surveyed (457 primary, 328 secondary interventions), Feb – Apr 2014

4.11 A significant proportion of the beneficiaries of PDG-funded interventions are not, according to Welsh Government definitions, eligible to receive the interventions. As depicted in Figure 4.2 the mean number of pupil beneficiaries who are e-FSM and LAC is much smaller than the numbers receiving PDG-funded interventions. This reflects the fact that schools typically use a broader definition of disadvantage than e-FSM or LAC status alone, and target some interventions at pupils with poor attainment.

34 Proportions calculated by taking: number of e-FSM pupils receiving intervention + number of LAC pupils receiving intervention / number of pupils in total receiving intervention. Data calculated for each intervention described by schools (schools asked to select most important three interventions to provide details for during interview).

Figure 4.2: Profile of eligible pupils and beneficiaries of PDG-funded interventions

	Primary N	Secondary N
Mean number of pupils in school*	179	855
Mean number of e-FSM pupils in school*	25	132
Mean number of LAC pupils in school**	3	9
Mean number of beneficiaries per PDG-funded intervention**	35	174
Mean number of beneficiaries per intervention who are e-FSM**	17	68
Mean number of beneficiaries per intervention who are LAC**	3	6

Source: Ipsos MORI survey data** and NPD data*
Base: 344 primary and 234 secondary interventions where respondents provided information on the total number of beneficiaries, Feb – Apr 2014

4.12 Looking in detail at eligibility data for interventions schools fund using the PDG demonstrates that an average of 60% of primary pupils and 72% of secondary pupils who are benefitting from PDG-funded interventions are e-FSM or LAC (see Figure 4.3).

Figure 4.3: Proportion of beneficiaries of PDG-funded interventions who are e-FSM/LAC[35]

	Primary %	Secondary %
Up to 20%	18	13
21-40%	19	16
41-60%	15	16
61-80%	11	11
80-100%	32	44
Not applicable/ not stated	5	*
Mean	60%	72%

Source: Ipsos MORI survey** and NPD information*
Base: 344 primary and 234 secondary interventions for which pupil beneficiary numbers were provided, Feb – Apr 2014

35 Proportions calculated by taking: number of e-FSM pupils receiving intervention + number of LAC pupils receiving intervention / number of pupils in total receiving intervention. Data calculated for each intervention described by schools (schools asked to select most important three interventions to provide details for during interview).

Staff benefits

4.13 Schools were asked about any staff training or development involved in the delivery of the interventions they funded using PDG. Seventy percent of primary school interventions and 58% of secondary school interventions involved some form of staff training or development. Schools described a variety of training practices, including external and internal training, as well as specialist training on literacy/numeracy and pastoral support.

Figure 4.4: Staff training and development involved in delivery of main PDG interventions (showing top six responses)

	Primary interventions %	Secondary interventions %
External training/ LA training/ short course/ away day	26	13
In house training/ on the job training	11	13
Specialist literacy and numeracy training	9	8
One/a few staff members were trained, then trained others	5	5
Software or IT training	3	3
Specialist pastoral support training	2	5
Other training (not specified)	14	12
No training/ not applicable	30	42

Source: Ipsos MORI survey
Base: 457 primary and 328 secondary interventions funded by PDG, Feb – Apr 2014

4.14 Case study schools were using PDG funding to train staff in specific areas of need, which varied from school to school and covered academic and softer skills. One primary school was using the PDG funding for additional training for teachers to deliver Key Stage 2 literacy for "threshold pupils". Other schools (primary and secondary) were using the PDG funding to train teachers to tackle issues such as well-being and behaviour. One secondary school

trained four members of staff to deliver a positive behaviour programme, and one primary school was delivering training through the nurture group network of which they were a member.

5 Outcomes

5.1 This chapter attempts to explore the potential impact of the introduction of the PDG on pupil performance. This is done in two ways: first, through analysing the perceived impact of PDG-funded interventions according to those participating in the survey and, second, through in-depth analysis of pupil outcomes using the National Pupil Database.

Most teachers felt PDG interventions were having a positive impact on pupils. They were more positive about the impact of PDG-funded initiatives on outcomes such as pupil engagement and well-being, than on outcomes such as attainment and attendance.

At the national level there has been a narrowing of the attainment gap in some measures of achievement at Key Stage 2 and Key Stage 4. However, this improvement pre-dates the introduction of the PDG and at Key Stage 2 the rate of improvement among e-FSM pupils is unchanged since its introduction. Improvements cannot therefore be attributed to the introduction of the PDG with any confidence. Despite a narrowing gap in attainment nationally at Key Stage 4 there are some caveats: first, improvements in GCSE attainment among e-FSM pupils are balanced against proportionately fewer e-FSM pupils being entered for GCSEs in core subjects; second, improved progress among e-FSM pupils at Key Stage 4 in 2012 and 2013 is likely due to improvements at Key Stage 2.

Perceptions of impact

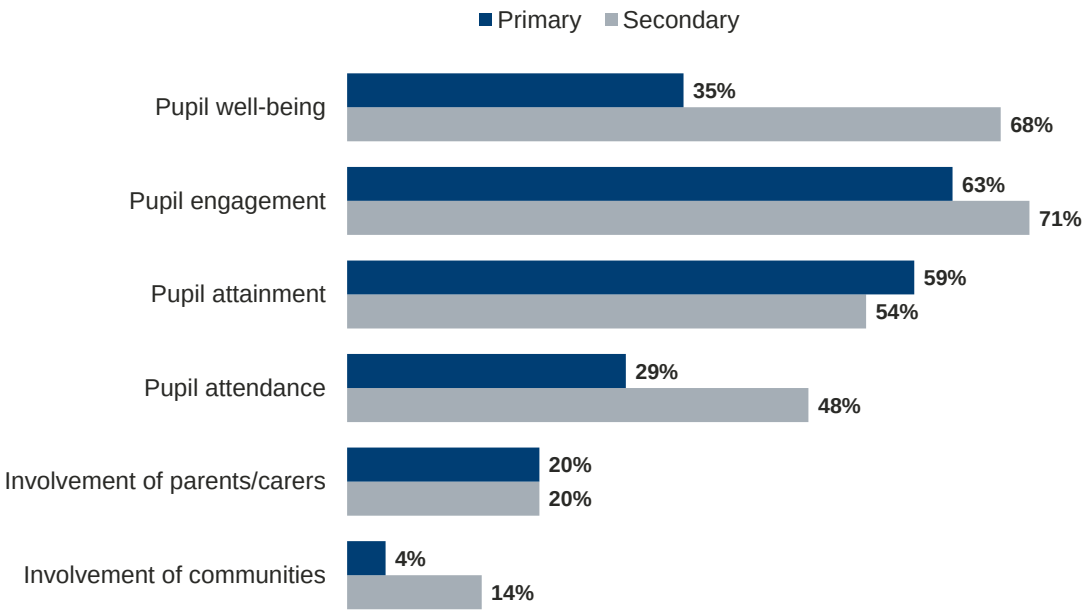
5.2 Survey respondents were asked to say whether they thought interventions funded by PDG were having a positive or negative impact. Their perception is that the vast majority (90% primary, 83% secondary) of interventions are having a positive impact, and that for the rest (10% primary, 17% secondary) it is too early to judge. Respondents believe that the PDG has had a relatively large impact on pupil engagement and well-being. However, they are less

confident about the scale of the impact on pupil attendance and the involvement of parents/carers and communities. Just over half of respondents (59% primary, 54% secondary) think that the PDG has had a large impact on pupil attainment, and only a minority (5% primary, 3% secondary) think the impact on attainment has been small.

5.3 It is notable that respondents who have found the Welsh Government guidance useful are slightly more likely to say that the PDG is having a large impact on pupil attainment (60% of those that said it was useful).

5.4 Large improvements in pupil engagement, pupil well-being and pupil attendance are more likely to be reported in schools with relatively large proportions of pupils e-FSM (and therefore in receipt of relatively large amounts of PDG funding). Larger improvements in the involvement of communities are also more likely to be reported in schools in Communities First areas (16%), providing some evidence that the use of matched funding may be stimulating wider uptake of community-based interventions.

Figure 5.1 – The impact of the PDG interventions: areas where the impact of the PDG is reported as 'large'



Base: 201 schools surveyed , Feb – Apr 2014. All responses

Question: *And how much of an impact has the PDG had on… involvement of communities / involvement of parents/carers / pupil attendance / pupil attainment / pupil engagement / pupil well-being*

Source: Ipsos MORI Survey

5.5 Case study schools perceived large impacts from the PDG funded activity they carried out. Interventions focussed on literacy and numeracy often had wider positive impacts. For example in one school, Teaching Assistants reported that children benefited from having adult attention, someone to talk to, and establishing a nurturing relationship. As a result, children are more confident and comfortable in the classroom. They are also less disruptive in class because they can keep up with the work and engage with activities.

5.6 Similarly, breakfast clubs and after-school clubs may be targeted at all pupils, but staff perceive a particular benefit for disadvantaged pupils, in that it helps to settle children who might otherwise be disruptive.

5.7 One primary school noted that a nurture group they had run had had a large positive impact on pupil well-being and behaviour. The group had helped to settle the pupils, including basic measures such

as sitting at the table, being able to hold a conversation with the teacher or other pupils, being more engaged and focussed, and sharing and turn-taking. For example, the nurture classes had transformed the behaviour and social skills of a girl who had been disruptive and didn't engage. "She would hide under the table and wouldn't want to come out. Now she appears completely settled and involved in activities."

Impact analysis

5.8 In this section of the report we examine the potential impact of the Pupil Deprivation Grant on educational outcomes at the national level. Specifically we are concerned with differences in the educational outcomes of e-FSM pupils versus non-FSM pupils before the PDG was introduced and after the PDG was introduced. However, throughout the analysis we are also minded to report changes in overall educational outcomes, since it is necessary to see whether any narrowing in outcomes between e-FSM and non-FSM pupils is the result of relatively greater improvements in outcomes for e-FSM pupils or a relative decline in educational outcomes of non-FSM pupils.

5.9 In assessing the potential impact of the Pupil Deprivation Grant we use a wide range of different educational outcomes (Figure 5.2) This includes measures of attainment at the end of Key Stage 1 (or Foundation Phase), end of Key Stage 2, and GCSE results at the end of Key Stage 4. It also considers the relative progress made in pupil assessment between Key Stage 2 and Key Stage 4. Lastly it also considers the potential impact on attendance/absence.

Figure 5.2: Measures of educational outcome

Absenteeism	% of ½ day sessions absent	% of ½ day sessions with unauthorised absence	
FP/KS1 Attainment			
Achieving Expected Level	KS1 Maths	FP Maths	
	KS1 Language	FP Language	
	KS1 Science		
	KS1 CSI*		
Key Stage 2 Attainment			
Achieving Level 4	Maths	*Achieving Level 5*	Maths
	English/Cymraeg		English/Cymraeg
	Science		Science
	Core Subject Indicator*		Core Subject Indicator*
Key Stage 4 Attainment			
A grades	GCSE Maths	*C grades*	GCSE Maths
	GCSE English/Cymraeg		GCSE English/Cymraeg
	GCSE Science		GCSE Science
	As in GCSE Maths, Science *and* English/Cymraeg		Cs in GCSE Maths, Science *and* English/Cymraeg
	3 Grade As - any GCSE subject	*GCSE points*	Capped to best eight GCSE grades
Progress KS2-KS4		Language (i.e. English or Cymraeg)	
	Maths	Science	

5.10 In order to try to identify the possible impact of the Pupil Deprivation Grant we are primarily concerned with the educational outcomes of e-FSM pupils before and after it was introduced. Since the Pupil Deprivation Grant was introduced during 2012-13 this means we can compare educational outcomes in 2011-12 with 2012-13 (the latest year for which educational outcomes are currently available). But since every school with an e-FSM pupil receives the Grant, and since the size of the grant is the same for every e-FSM pupil, there is no 'control' group of schools (and hence pupils) who have e-FSM pupils but did not receive the Grant. Instead our main analytical

approach is to compare the relative achievement of e-FSM pupils versus non-FSM pupils – many of which could be in the same schools as e-FSM pupils. This assumes that the Pupil Deprivation Grant only has an impact on e-FSM pupils in each school, which according to our analysis above is not always the case. Nevertheless, the main aim of the Pupil Deprivation Grant is to reduce the 'gap' between the educational outcomes of e-FSM pupils and non-FSM pupils – so that is what this analysis presents. However, it is still possible that any reduction in the 'gap' in outcomes (we prefer to use the term percentage (%) differential) over these two years could be due to the impact of other interventions or general improvements in the educational system. To help distinguish the impact of the Pupil Deprivation Grant from broader changes, insofar as it is possible to do so, we also consider changes in the % differential in educational outcomes between e-FSM and non-FSM pupils before the Pupil Deprivation Grant was introduced, i.e. between 2010-11 and 2011-12. Indeed, we find that, in the main, the % differential in educational outcomes between e-FSM and non-FSM pupils improved (i.e. declined) between 2010-11 and 2011-12, before the Pupil Deprivation Grant was introduced.

5.11 Therefore, the following analysis is based on three years of education outcomes in 2011 (school year 2010-11), 2012 (2011-12) and 2013 (2012-13). Figure 5.3 summarises the data provided to the evaluation team by the Welsh Government from the National Pupil Database (NPD) for individual pupils who were assessed at

the end of Key Stage 1/Foundation Phase[36], Key Stage 2 and Key Stage 4 in those three years. Typically this includes the educational achievements of over 30,000 pupils at the end of each Key Stage and in each year. Figure 5.3 also summarises the attendance data of individual pupils made available to the evaluation. In contrast to assessment data this is available for all pupils in nearly all year groups (approximately 360,000 pupils).

36 During these three years the curriculum for pupils up to Year 2 changed to the Foundation Phase. This is reflected in the number of pupils with either Key Stage 1 attainment data or Foundation Phase data in 2010-11 and 2011-12. It should also be noted that approximately 2,000 pupils are missing Key Stage 1 attainment data in 2010-11. These pupils were introduced to the Foundation Phase earlier than the majority of other pupils and hence have Foundation Phase attainment data. However, for the purposes of this evaluation they are not included. Davies et al 2013 provides further information about the transition between Key Stage 1 and Foundation Phase outcomes and specifically examines the differential achievement of pupils eligible for free school meals of those missing from this analysis.

Figure 5.3 – Number of pupils available for analyses of educational attainment by year

Year	End of stage attainment data				Progress
	KS1	FP	KS2	KS4	KS2-KS4
2010-11	30,366		32,227	34,138	31,973
2011-12		32,589	31,675	33,510	31,593
2012-13		33,055	30,764	34,932	33,216
TOTAL	30,366	65,644	94,666	102,580	96,782

5.12 The analysis of educational outcomes is structured in the following way. First we look at the overall levels of educational outcomes and the % differential between e-FSM and non-FSM pupils for absenteeism, Key Stage 1 / Foundation Phase attainment, Key Stage 2 attainment and Key Stage 4 attainment. Finally we examine the estimated influence of being e-FSM on all these educational outcomes after controlling for other characteristics also associated with differences in educational outcomes.

5.13 In examining a range of educational outcomes and in numerous ways we are keen to develop an overall 'picture' of the possible impact of the Pupil Deprivation Grant, rather than focus on individual measures of educational achievement.

5.14 Please note that the analysis presented here is calculated on unrounded figures, while the figures show rounded figures for ease of interpretation. Any apparent discrepancies are due to rounding effects.

Figure 5.4 – Summary of number of pupils used in the analysis of attendance

Year of Study	Stage	2010-11	2011-12	2012-13	TOTAL
N1	FP	1	0	0	1
N2	FP	1	0	2	3
Reception	KS1/FP	82	52	33	167
Year 1	KS1/FP	32,783	33,202	34,014	99,999
Year 2	KS1/FP	32,099	32,863	33,228	98,190
Year 3	KS2	31,512	32,055	32,854	96,421
Year 4	KS2	30,813	31,527	32,013	94,353
Year 5	KS2	31,766	30,858	31,496	94,120
Year 6	KS2	32,318	31,773	30,782	94,873
Year 7	KS3	33,111	31,988	31,427	96,526
Year 8	KS3	34,123	33,096	31,981	99,200
Year 9	KS3	35,430	34,078	32,962	102,470
Year 10	KS4	34,290	35,451	34,024	103,765
Year 11	KS4	34,163	33,555	34,763	102,481
KS4+1	KS4	19	42	27	88
KS4+2	KS4	3	4	0	7
KS4+3	KS4	1	3	0	4
TOTAL		362,515	360,547	359,606	1,082,668

Absenteeism by FSM status

5.15 There has been an overall improvement in the proportion of half-day sessions with a reported absence over the three years (Figure 5.5). The percentage of sessions with an absence has fallen from 7.6% in 2011 to 6.8% in 2013. This improvement has occurred for both e-FSM and non-FSM pupils, and overall there has been relatively little difference in the amount or rate of progress in attendance between the two groups. In terms of the percentage point difference e-FSM pupils appear to have made the greatest improvement – the percentage of sessions with an absence has fallen by -0.8 percentage points compared to -0.6 percentage points amongst non-

FSM pupils in 2011-12. And in 2012-13 the percentage of sessions with an absence fell by -0.3 percentage points compared to -0.1 percentage points for non-FSM pupils. However, since the proportion of half-day sessions with an absence for e-FSM pupils is 65.5% (higher than the proportion of sessions for non-FSM pupils in 2011) the rate of progress between 2011 and 2012 in attendance for e-FSM pupils is actually slightly lower than that of the non-FSM pupils (-0.037 compared to -0.048). Although this is only a marginal difference it does mean that the % differential of absence by e-FSM pupils compared to non-FSM pupils worsened by 1.6% between 2011 and 2012 (from 65.6% to 69.0%). However, and crucially to this evaluation, the rate of decline in the percentage of sessions with an absence for e-FSM pupils was greater than the equivalent percentage for non-FSM pupils between 2012 and 2013 (-0.015 compared to -0.009), which meant that the overall % differential between e-FSM and non-FSM pupils improved between 2012 and 2013 (from 69.0% to 67.2%). Nevertheless, it should be noted that the % differential in 2013 was still slightly worse than it was in 2011 – two years before the Pupil Deprivation Grant was introduced.

Figure 5.5 – Absence

	% of sessions with absence			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	6.8	6.1	6.0	-0.6	-0.048	-0.1	-0.009
e-FSM	11.2	10.4	10.1	-0.8	-0.037	-0.3	-0.015
All	*7.6*	*7.0*	*6.8*	*-0.7*	*-0.046*	*-0.1*	*-0.010*
% Differential[s]	65.6	69.0	67.2	3.4	0.025	1.6	0.012

5.16 In terms of the proportion of sessions with unauthorised absence there has been very little change over the three-year period (Figure 5.6). The overall percentage of sessions with unauthorised absence was 1.2% in 2011, 1.0% in 2012 and 1.1% in 2013. Although levels

of unauthorised absence for e-FSM pupils is nearly 2.5 times greater than non-FSM pupils (with a 249.3% differential in 2011) there has been a measurable improvement (i.e. decline) in the percentage of sessions recorded as unauthorised absence amongst e-FSM pupils between 2011 and 2012, but almost no improvement between 2012 and 2013 after the Pupil Deprivation Grant was introduced. This is reflected in both the percentage point difference and rate of progress between the first two years (-0.3% points) compared to the last two years (0.0% point difference). However a small increase in the percentage of unauthorised sessions amongst non-FSM pupils between 2012 and 2013 has meant that despite little change for e-FSM pupils the % differential in 2013 was lower than in the previous two years (239.5% compared to 249.3% and 250.2%). This provides a good example of the need to consider absolute measures as well as the % differential over time, since although the 'gap' in unauthorised absence was smaller after the introduction of the Pupil Deprivation Grant in 2013 this seems to be the result of more unauthorised absence amongst comparator, non-FSM, pupils.

Figure 5.6 – Unauthorised absence

	% of sessions with unauthorised absence			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	0.8	0.7	0.7	-0.1	-0.053	0.0	0.009
FSM e-FSM	2.8	2.5	2.5	-0.3	-0.052	0.0	-0.007
All	*1.2*	*1.0*	*1.1*	*-0.1*	-0.056	*0.0*	*0.004*
% Differential§	249.3	250.2	239.5	1.0	0.002	-10.8	-0.022

* Rate of progress measured as: (b-a)/(a+b) (e.g. (2013 – 2012)/(2012 + 2013))
§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Key Stage 1 / Foundation Phase outcomes

5.17 The evaluation of the Foundation Phase has demonstrated that comparison of KS1 and FP outcomes is not straightforward (Davies et al. 2013). This is because (a) the core subjects of KS1 and the statutory Areas of Learning are not the same, and (b) even where there was meant to be congruence between the assessment levels in both curricula there appears to be some difference/incongruence in the way teachers have applied these assessments. Despite this it is still possible to consider the relative 'gap' in achievement between e-FSM and non-FSM pupils under each of the two curricula schemes over time in two related subject areas – language and literacy (Figure 5.7) and mathematics (Figure 5.9)

Figure 5.7 – Achieving expected level in language and literacy at age 7*

	2011 Key Stage 1 English/Cymraeg	2012 Foundation Phase Language, Literacy and Communication	2013 Foundation Phase Language, Literacy and Communication
Non-FSM	91.0	88.2	89.7
e-FSM	77.5	71.7	73.7
All	*88.3*	*84.6*	*86.3*
% Differential§	-14.8	-18.7	-17.8

* Expected levels: Level 2 in Key Stage 1 and Level 5 in the Foundation Phase.
§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.8 – Achieving expected level in mathematics at age 7*

	2011 Key Stage 1 Mathematics	2012 Foundation Phase Mathematical Development	2013 Foundation Phase Mathematical Development
Non-FSM	92.2	90.2	91.0
e-FSM	80.7	76.3	77.1
All	*89.9*	*87.2*	*88.0*
% Differential[§]	-12.4	-15.4	-15.3

* Expected levels: Level 2 in Key Stage 1 and Level 5 in the Foundation Phase.
§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.18 In both cases the relatively low achievement of e-FSM pupils compared to non-FSM pupils is evident – proportionately fewer e-FSM pupils achieve expected levels compared to non-FSM pupils in all six assessments. Figure 5.7 and Figure 5.8 also demonstrate that proportionately fewer pupils achieved expected levels in the Foundation Phase outcomes compared to Key Stage 1 outcomes, reflecting some of the incongruence in assessments. In the area of language and literacy, 88.3% of all KS1 pupils achieved expected levels in 2011 compared to 84.6% of all FP pupils in 2012 and 86.3% in 2013 . However, as discussed these figures are not considered to be comparable (Davies et al. 2013).

5.19 Despite this it is still possible to look at the differential between e-FSM and non-FSM pupils in 2011 (using Key Stage 1 outcomes) and in 2012 and 2013 (using Foundation Phase outcomes) in the two subject areas. In both subject areas it appears that e-FSM pupils were significantly less likely to achieve the respective expected levels than their non-FSM counterparts in 2012. In language and literacy the % differential worsened from -14.8 to -18.7 over the two years. The % differential in the area of mathematics also worsened from -12.4 to -15.4 over the two years. However, in 2013, the year the Pupil Deprivation Grant was introduced, the % differential

between e-FSM and non-FSM pupils improved/narrowed, particularly in the area of language and literacy.

Key Stage 2 achievement

5.20 Figure 5.9, Figure 5.10 and Figure 5.11 present the proportion of e-FSM and non-FSM pupils achieving expected levels (Level 4 or above) at Key Stage 2 in Maths, English/Welsh and Science respectively[37]. In all three subjects the % differential between e-FSM and non-FSM is smaller in 2012 than it was in 2011, suggesting relatively greater progress amongst e-FSM pupils in Key Stage 2 assessments compared to non-FSM pupils prior to the introduction of the Pupil Deprivation Grant.

5.21 Following the introduction of the Pupil Deprivation Grant in 2012-13 the % differential between e-FSM and non-FSM pupils continued to decline in all three subjects, again reflecting relatively greater progress amongst e-FSM pupils than non-FSM pupils. However, in KS2 Maths this rate in progress between 2012 and 2013 was lower than it was between 2011 and 2012. In KS2 Science there was a very small increase in the rate of progress made by e-FSM pupils after 2012, but only in KS2 English/Cymraeg was there any noticeable improvement in the relative progress of e-FSM pupil attainment.

37 Similar analyses have also been completed for the proportion of pupils achieving Level 5 in these three core subjects. Although overall fewer pupils achieve the higher Level 5 outcomes, differences between FSM and non-FSM pupils, including changes over time, are very similar to the results for those achieving Level 4 or above. Hence these results are not presented here.

Figure 5.9: Achieving expected levels in Key Stage 2 Maths

	% Achieving Level 4 or above	Progress 2011 to 2012	Progress 2012 to 2013				
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	89.1	90.7	91.3	1.6	0.009	0.6	0.003
e-FSM	71.8	74.6	76.6	2.8	0.019	2.0	0.013
All	*85.6*	*87.6*	*88.4*	*1.9*	*0.011*	*0.8*	*0.005*
% Differential[§]	-19.4	-17.7	-16.1	1.6	-0.044	1.6	-0.047

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.10: Achieving expected levels in Key Stage 2 English/Cymraeg

	% Achieving Level 4 or above	Progress 2011 to 2012	Progress 2012 to 2013				
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	88.2	89.9	91.4	1.7	0.009	1.5	0.008
e-FSM	69.6	72.0	75.8	2.4	0.017	3.8	0.026
All	*84.5*	*86.4*	*88.3*	*1.9*	*0.011*	*1.9*	*0.011*
% Differential[§]	-21.1	-19.9	-17.0	1.2	-0.029	12.8	-0.077

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.11 – Achieving expected levels in Key Stage 2 Science

	% Achieving Level 4 or above	Progress 2011 to 2012	Progress 2012 to 2013				
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	91.3	92.4	93.4	1.2	0.006	0.9	0.005
e-FSM	74.8	77.0	79.8	2.2	0.015	2.6	0.017
All	*88.0*	*89.4*	*90.7*	*1.4*	*0.008*	*1.2*	*0.007*
% Differential[§]	-18.0	-16.7	-14.6	1.4	-0.040	1.4	-0.065

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.22 Given that the % differential in attainment between e-FSM and non-FSM pupils was already declining before the introduction of the Pupil Deprivation Grant it is not straightforward to assume that any continued improvement is the result of the Pupil Deprivation Grant or not. In KS2 English/Cymraeg the improvement in attainment amongst e-FSM pupils does seem to have accelerated after 2012. But this is not observed in the other two subjects. Indeed, progress in KS2 Maths attainment amongst e-FSM pupils slows after 2012. Consequently some doubts remain over whether improvements observed for e-FSM pupils in 2012-13 can be associated with the introduction of the Pupil Deprivation Grant.

5.23 The noticeable improvement in the achievement of e-FSM pupils compared to non-FSM pupils in the three 'core' subjects in Key Stage 2 is also reflected in the proportion of pupils achieving the Core Subject Indicator at Key Stage 2 – that is achieving Level 4 or above in English/Welsh, Maths and Science (Figure 5.12)

5.24 Although e-FSM pupils remain significantly less likely to achieve the CSI than non-FSM pupils in 2012-13 there is considerable improvements in the proportion of e-FSM pupils who achieve this

important benchmark. But as indicated above, it is important to note that this improvement was occurring before the introduction of the Pupil Deprivation Grant.

Figure 5.12 Achieving Key Stage 2 Core Subject Indicator (CSI)

	% Achieving CSI (Level 4 or above)			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	85.0	87.4	88.8	2.4	0.014	1.4	0.008
e-FSM	64.5	67.7	71.2	3.2	0.024	3.5	0.025
All	*80.9*	*83.5*	85.4	*2.6*	*0.016*	*1.8*	*0.011*
% Differential§	-24.1	-22.5	-19.8	1.5	-0.033	2.7	-0.064

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.25 So in the main, we see improvements in the proportion of e-FSM pupils in KS2 achieving Level 4 or above in all three core subjects over recent time. It is also important to note that improvements in the achievement of e-FSM pupils in KS2 have been accompanied by improvements in the achievement of non-FSM pupils also, which in turn highlights the greater rate of improvement of e-FSM pupils compared to non-FSM pupils. However, these improvements were all observed before and after the introduction of the Pupil Deprivation Grant, making it difficult to credit these improvements to the introduction of the Grant itself.

Key Stage 4 achievement

5.26 Figure 5.13, Figure 5.14 and Figure 5.16 demonstrate the comparison in achievement of e-FSM and non-FSM pupils achieving

grades C or above over time in Maths GCSE, English/Welsh GCSE and Science GCSE respectively. Unless stated these results are based on the proportion of pupils being entered for these subjects (although the impact of this is considered later). In Maths and Science the % differential between e-FSM and non-FSM pupils is smaller in 2012 than in 2011, suggesting the relative improvement in achievement amongst e-FSM pupils in these subjects prior to the introduction of the Pupil Deprivation Grant.

5.27 It should be noted that in English/Welsh the overall proportion of pupils achieving a grade C or above was lower in 2012 than in 2011. At the time this led the then Minister for Education and Skills, Leighton Andrews, to call for an internal investigation into the performance in GCSE English Language of pupils in Wales. This investigation highlighted a number of issues relating to grades awarded in 2012, including the methodology for determining grade boundaries, the impact of controlled assessments, and grade boundaries for a small proportion of candidates who took their awards with AQA (Welsh Government 2012). However, of critical importance to this evaluation is the difference in the levels of achievement between e-FSM and non-FSM pupils, and Figure 5.13 suggests that both groups experienced a similar decline in achievement ensuring that the % differential remained unchanged between 2011 and 2012. However, it is not possible to say whether e-FSM pupils were unfairly disadvantaged due to the broader structural changes to the grades awarded in GCSE English Language, and therefore whether the % differential between e-FSM and non-FSM pupils would have declined if these issues had not arisen. Although there is no apparent reason why there might have been some differentiated impact of grading in 2012 on e-FSM pupils it is important to note that the Welsh Government investigation did not consider this, nor the impact on other particular groups of learners.

Figure 5.13: Achieving GCSE Maths Grade C or above

	% Achieving Grade C or above			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	64.7	65.8	67.5	1.2	0.009	1.7	0.013
e-FSM	33.5	35.2	36.9	1.7	0.025	1.7	0.024
All	*60.2*	*61.5*	*62.8*	*1.3*	*0.010*	*1.4*	*0.011*
% Differential[§]	-48.2	-46.6	-45.4	1.6	-0.017	1.2	-0.013

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.14: Achieving GCSE English/Welsh Grade C or above

	% Achieving Grade C or above			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	72.4	71.7	72.1	-0.7	-0.005	0.4	0.003
e-FSM	41.8	41.1	41.6	-0.7	-0.009	0.5	0.006
All	*68.1*	*67.3*	*67.4*	*-0.8*	*-0.006*	*0.1*	*0.001*
% Differential§	-42.2	-42.7	-42.3	-0.4	0.005	0.4	-0.004

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.15: Achieving GCSE Science Grade C or above

	% Achieving Grade C or above			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	72.9	73.9	70.9	1.0	0.007	-3.0	-0.020
e-FSM	40.8	43.1	40.3	2.3	0.028	-2.8	-0.034
All	*68.5*	*69.9*	*67.1*	*1.3*	*0.010*	*-2.8*	*-0.020*
% Differential§	-44.1	-41.7	-43.2	2.4	-0.028	-1.5	0.018

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.28 In the year the Pupil Deprivation Grant was introduced the % differential between the proportion of e-FSM and non-FSM pupils achieving Grade C or above in Maths and English/Welsh Improved (i.e. declined) to -45.4% and -42.7% respectively. However, in GCSE Science the % differential worsened to -43.2%. These changes in the % differentials are reflected in the rates of progress made for e-FSM and non-FSM pupils.

5.29 In GCSE Maths (grades C or above) the rate of progress between 2012 and 2013 for e-FSM pupils was 0.024, higher than the rate of progress for non-FSM pupils between those two years (0.013).

However, the relatively greater rate of improvement for e-FSM pupils in GCSE Maths is very similar to the rate of progress observed between 2011 and 2012 (0.025), suggesting that any reduction in the % differential in GCSE Maths achievement between e-FSM and non-FSM pupils was being achieved prior to the introduction of the Pupil Deprivation Grant.

5.30 In GCSE English/Welsh (grades C or above) the patterns of achievement are complicated due to the overall decline in the proportion of pupils achieving grades C or above between 2011 and 2012 as discussed above. However, it appears that in 2012 this decline in achievement was slightly worse for e-FSM pupils than it was for non-FSM pupils (-0.009 compared to -0.005) – suggesting that perhaps issues relating to the awarding of grades in GCSE English may have had a differential effect on e-FSM pupils. However, between 2012 and 2013 the proportion of e-FSM pupils achieving grades C or above in GCSE English/Welsh increased at twice the rate of that of non-FSM pupils (0.006 compared to 0.003), resulting in a lower % differential in 2013 than in 2012. However, it should be noted that this 'gap' is still very similar to that observed in 2011, the year before issues with grading were reported.

5.31 In GCSE Science (grades C or above) the pattern is again different. Despite improvements in the % differential between 2011 and 2012 this worsened again in 2013 (-44.1%, -41.7% and -43.2% respectively). This is largely because proportionately fewer pupils overall achieved these grades in 2013 than in 2012, reflected in the negative % point difference and negative rate of progress between 2012 and 2013 of all pupils (-2.8% points and -0.020 rate of progress). However, the rate of decline between 2012 and 2013 in the proportion achieving grades C or above in GCSE Science was worse for e-FSM pupils (-0.034) than it was for non-FSM pupils (-0.020). This suggests there was no impact of the Pupil Deprivation Grant on GCSE Science achievement for e-FSM pupils in its first year.

Figure 5.16 – Achieving Grade C or above in GCSE Maths, English/Welsh and Science

	% Achieving Grade C or above			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	60.3	61.5	63.5	1.2	0.010	2.0	0.016
e-FSM	28.3	29.6	33.2	1.4	0.024	3.6	0.058
All	*56.2*	*57.5*	*59.9*	*1.4*	*0.012*	*2.3*	*0.020*
% Differential§	-53.1	-51.8	-47.7	1.3	-0.012	4.2	-0.042

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.32 Despite the 'mixed' results for individual core GCSE subjects, the results for the combined Core Subject Indicator are more straightforward (Figure 5.17). Here the proportion of e-FSM pupils achieving grades C or above in all three core subjects (Maths, English/Welsh and Science) increases every year, and at a relatively greater rate than for non-FSM pupils. This results in lower % differentials each year after 2011. Crucially, too, the rate of progress for e-FSM pupils between 2012 and 2013 is more than twice that of the equivalent rate of progress between 2011 and 2012. This results is a significantly lower % differential between e-FSM and non-FSM pupils in 2013.

5.33 However, if we consider these results on the basis of all pupils reaching the end of Key Stage 4 (as opposed to just being entered for GCSEs) we see a slightly different pattern. Figure 5.17 presents the same results as Figure 5.16 this time the results are based on the percentages of all KS4 pupils. This shows that the % differential remains relatively unchanged over time. It also demonstrates there was relatively little progress made between 2011 and 2012 in the proportion of all pupils at the end of KS4 getting grades C or above in the three GCSE core subjects. Furthermore, between 2012 and

2013 there was a fall in the proportion of all KS4 pupils achieving this benchmark.

5.34 By contrasting the results of Figure 5.17 with those presented in Figure 5.16 it is possible to say that the overall rates of progress in achievement of all pupils and, importantly, improvements in the % differential between e-FSM and non-FSM pupils could be due to proportionately fewer pupils being entered for all three GCSEs. Indeed, in 2011 we estimate that 85.3% of non-FSM pupils and 68.3% of e-FSM pupils were entered for the three 'core' GCSEs. By 2013 these figures had fallen to 78.2% and 55.7% respectively. Crucially e-FSM pupils are significantly less likely to be entered for these three GCSE qualifications than their non-FSM counterparts.

Figure 5.17: Achieving Grade C or above in GCSE Maths, English/Welsh and Science (of all KS4 pupils)

	% Achieving Grade C or above			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	51.5	51.7	49.7	0.3	0.002	-2.0	-0.020
e-FSM	19.3	19.5	18.5	0.2	0.004	-0.9	-0.025
All	*46.4*	*46.8*	*44.6*	*0.3*	*0.003*	*-2.1*	*-0.023*
% Differential§	-62.5	-62.4	-62.7	0.1	-0.001	-0.4	0.003

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.35 In order to reflect this apparent shift in proportion of pupils at the end of Key Stage 4 being entered for GCSEs, Figure 5.19 and Figure 5.20 examine outcomes that include GCSEs and equivalent qualifications. Figure 5.18 compares the proportion of e-FSM and non-FSM pupils who achieved at least 156 points in GCSE or equivalent qualifications (this is the equivalent of at least three A

grades in GCSE). Here the % differential measurably improves (i.e. declines) between 2011 and 2012, and then again between 2012 and 2013, with a significantly greater rate of improvement amongst e-FSM pupils compared to non-FSM pupils over time. However, that rate of progress for e-FSM pupils between 2012 and 2013 was about half the rate of progress between 2011 and 2012.

5.36 Similarly, Figure 5.19 presents the total number of capped points for the best eight GCSEs or equivalent qualifications. Again this shows a relatively large improvement in overall levels of achievement, particularly amongst e-FSM pupils. For example, the rate of progress for e-FSM pupils is more than twice that of non-FSM pupils between 2011 and 2012 and again between 2012 and 2013. However, similarly to the results presented in Figure 5.18, the rate of progress for e-FSM pupils between 2012 and 2013 is lower than it was in the previous two years.

5.37 When considered alongside changes in the % differential in GCSE achievements presented above and the proportion of pupils we estimate being entered for GCSE qualifications in 2011, 2012 and 2013, much of the improvement in the achievement of e-FSM pupils noted in Figure 5.18 and Figure 5.19 is quite likely the result of e-FSM pupils successfully undertaking other equivalent qualifications. But importantly, it could also suggest that some of the relative improvements in the achievement of e-FSM pupils in GCSEs noted in Figure 5.13 and Figure 5.16 is due to relatively fewer e-FSM pupils undertaking GCSE qualifications over time.

Figure 5.18: Achieving at least 156 points in GCSE or equivalent qualifications

	% Achieving at least 156 points			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	% point difference	Rate of progress*	% point difference	Rate of progress*
Non-FSM	94.2	95.4	96.4	1.2	0.007	1.0	0.005
e-FSM	77.5	82.5	85.0	5.0	0.031	2.5	0.015
All	*91.6*	*93.4*	*94.6*	*1.9*	*0.010*	*1.1*	*0.006*
% Differential§	-17.7	-13.6	-11.9	4.2	-0.133	1.7	-0.067

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.19: Capped points* in GCSE or equivalent qualifications

	Average capped points in GCSE			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	Point difference	Ratio	Point difference	Rate of progress*
Non-FSM	330	340	348	9.9	0.015	8.2	0.012
e-FSM	248	268	282	20.4	0.039	13.6	0.025
All	*317*	*329*	*337*	*11.7*	*0.018*	*8.5*	*0.013*
% Differential§	-24.8	-21.0	-19.0				

* Of a pupil's best eight qualifications (or equivalent).
§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

5.38 Finally, Figure 5.20, Figure 5.21 and Figure 5.22 consider the relative progress of e-FSM pupils at Key Stage 4 given their individual levels of achievement at the end of Key Stage 2[38] (i.e. when they were aged 11) in each of the three 'core' subject areas: Maths, English/Welsh and Science respectively. In order to calculate a measure of a pupil's progress, or value-added, we compare their

38 Levels of achievement in Key Stage 2 are scored 0 to 5, according to which Level a pupil achieved. Given the small number of pupils who achieved Level 6 at Key Stage 2 these are recoded to 5.

Level of achievement at Key Stage 2[39] with their GCSE grade in each subject.

5.39 Before looking at the results of e-FSM pupils' relative progress between Key Stage 2 and Key Stage 4 it is important to note that this progress is the result of five years of education, and not just the impact of the year in which the Pupil Deprivation Grant had first been introduced. However, as will be shown, this analysis can be important in trying to identify whether improvements in GCSE achievement over time are the result of improvements in achievement earlier in a pupil's educational career (i.e. in their primary years) as opposed to improvements in their achievement within, for example, the last year of secondary school.

5.40 The first observation to make from all three figures is that e-FSM pupils generally make relatively less progress in their levels of achievement between Key Stage 2 and Key Stage 4 than non-FSM pupils, despite relatively more e-FSM pupils not achieving expected levels at Key Stage 2 (Figure 5.9, Figure 5.10, Figure 5.11). However, e-FSM pupils reaching the end of Key Stage 4 in 2012 did make slightly greater progress in Maths and Science than e-FSM pupils reaching the end of KS4 in 2011. This resulted in modest improvements in the % differential in these two subject areas.

5.41 However, in English/Welsh, the average measure of progress for pupils reaching the end of Key Stage 4 in 2012 was almost the same as for pupils in 2011. Given the issues already highlighted about the awarding of grades in GCSE English Language in 2012 this may not be that surprising.

5.42 But of most concern is that the average measure of progress for e-FSM pupils reaching the end of KS4 in 2013 is lower than the average measure of progress observed for the previous two cohorts. It would be disingenuous to use these results to directly assess the impact of the Pupil Deprivation Grant in 2012-13. However, and of

39 For the purpose of calculating the progress from Key Stage 2 to GCSE we recode GCSE grades from 0 to 10; 0=X, 1=U through to 10=A. Although the scores for achievement at Key Stage 2 and in GCSEs are not commensurate with one another the arithmetic difference in the two scores does provide a measure for a pupil's relative progress.*

some significance to the evaluation, it does perhaps suggest that much of the improvements in KS4 outcomes for e-FSM pupils in 2013 outlined above may well be due to earlier improvements in pupil's attainment by KS2 (i.e. in the primary sector). In order for there to have been increases in the proportion of e-FSM pupils achieving benchmark levels at KS4 despite making relatively less progress between KS2 and KS4 suggests that either (a) this cohort had higher levels of attainment at the end of KS2 than previous cohorts, or (b) this cohort made relatively less progress during KS3 than previous cohorts, followed by relatively greater progress in the last few years of their secondary education (i.e. during KS4).

Figure 5.20: Relative progress in Maths between Key Stage 2 and GCSE

	Average measure of progress			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	Point difference	Ratio	Point difference	Ratio
Non-FSM	2.6	2.6	2.6	0.1	0.014	0.0	0.000
e-FSM	1.5	1.6	1.5	0.1	0.033	0.0	-0.011
All	*2.4*	*2.5*	*2.5*	*0.1*	*0.015*	*0.0*	*-0.003*
% Differential[§]	-42.8	-40.6	-42.0				

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.21: Relative progress in English/Welsh between Key Stage 2 and GCSE

	Average measure of progress			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	Point difference	Ratio	Point difference	Ratio
Non-FSM	3.0	3.0	3.1	0.0	0.002	0.0	0.002
e-FSM	2.3	2.3	2.2	0.0	-0.006	0.0	-0.006
All	*2.9*	*2.9*	*2.9*	*0.0*	*0.001*	*0.0*	*0.000*
% Differential§	-23.7	-24.9	-26.8			0.0	

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Figure 5.22: Relative progress in Science between Key Stage 2 and GCSE

	Average measure of progress			Progress 2011 to 2012		Progress 2012 to 2013	
	2011	2012	2013	Point difference	Ratio	Point difference	Ratio
Non-FSM	2.8	2.9	2.7	0.1	0.014	-0.2	-0.034
e-FSM	1.8	1.9	1.6	0.1	0.022	-0.2	-0.067
All	*2.7*	*2.7*	*2.6*	*0.1*	*0.016*	*-0.2*	*-0.036*
% Differential§	-36.6	-35.6	-40.4				

§ % Differential is calculated as ((y-x)/x)*100 (e.g. ((FSM – non-FSM)/non-FSM))*100)
Source: National Pupil Database (provided by Welsh Government)

Modelling the effect of being eligible for free school meals on educational attainment

5.43 An obvious limitation of the descriptive statistics presented above is that there may be other factors other than being e-FSM that may account for some of these differences in the educational achievement of e-FSM pupils compared to non-FSM pupils. For example, it is known that pupils with special educational needs are more likely to be e-FSM than pupils without special educational

needs. There is also some association between being e-FSM and ethnicity.

5.44 To some extent a comparison in the achievement of e-FSM pupils compared to non-FSM pupils over time does not need to be concerned with these other factors if any association between being e-FSM and other important determinants of educational achievement remains unchanged over time. However, if the association between these factors did change over time, although very unlikely over such a short time period and for such a large number of pupils, then it is possible that any indication of relative improvement (or otherwise) may be the result of changes in these other circumstances and not necessarily the direct result of being e-FSM, and hence less likely to be the result of the Pupil Deprivation Grant.

5.45 In order to control for these other characteristics we now present the results of a series of regression models. Each model controls for a variety of key characteristics that are known to be associated with educational outcomes. These are: gender, ethnicity[40], special educational needs and season of birth. The regression models also include an indicator of whether pupils were e-FSM, and it is the estimated 'effect' of this variable that is of primary interest, given the presence of other characteristics, in 2011, 2012 and then 2013.

5.46 The regression models also include a range of indicators that describe the composition of the schools' intakes. Again, the characteristics of other pupils in a school have often been found to be associated with an individual pupil's educational outcomes. Here we control for the proportion of pupils with special educational needs, the proportion of white British pupils and the gender composition of the school's cohort. We also include the proportion of e-FSM pupils, and as with an individual pupil's eligibility for free school meals, we are also interested in whether the association

40 English as an additional language is also considered to be associated with educational outcomes. However, because EAL and ethnicity are often highly correlated we only use ethnicity in these models.

between a school's FSM composition is in any way different in 2013 compared to 2012 and so on.

5.47 Consequently, each regression model attempts to predict to what extent e-FSM pupils are associated with 'good' or improved educational outcomes and the extent to which schools with relatively more e-FSM pupils are associated with 'good' or improved educational outcomes. The same predictor variables are used in 25 different models, each one testing the association with a different measure of educational outcome, ranging from absenteeism, Key Stage 1 or Foundation Phase outcomes, Key Stage 2 achievement, Key Stage 4 achievement and measures of educational progress between Key Stage 2 and Key Stage. In some cases we use logistic regression to estimate the likelihood of achieving a particular level in outcomes if a pupil is e-FSM compared with non-FSM pupils (e.g. achieving Level 4 in Maths). In other cases we use linear regression to estimate how different the outcomes are for e-FSM pupils compared to non e-FSM pupils (e.g. capped GCSE (or equivalents) points). We also use Ordinary Least Squares (OLS) regression for the analyses of absenteeism. We then repeat these models for educational outcomes in 2011, 2012 and 2013 (75 regression models in total). We then use the findings from these models to compare the relative influence of being e-FSM across the three years. In particular, we want to see whether the association found between eligibility for free school meals goes up, down or remains the same over time.

5.48 The results of these 75 statistical models are summarised in Figure 5.23 which presents the odds ratio (for logistic regressions) or estimated coefficient (for linear and OLS regressions) for (a) being e-FSM and (b) the proportion of e-FSM pupils within a school's cohort. Figure 5.23 demonstrates very clearly that e-FSM pupils have, on average, poorer educational outcomes (compared to non-FSM pupils) after controlling for other characteristics. It also shows that pupils in schools with relatively more e-FSM pupils also have, on average, poorer educational outcomes, even after controlling for

their individual characteristics. So, for example, this shows that e-FSM pupils have an odds ratio of 0.352 for achieving grades C or above in Maths, Science and English at Key Stage 4 in 2011 – i.e. they were 65% less likely to achieve this educational outcome compared to non-FSM pupils with similar characteristics and attending schools with similar intake characteristics. The analysis also suggests that the odds of achieving this outcome are further reduced if they attend schools with relatively more e-FSM pupils in their cohort. In another example we see that the educational 'progress' between Key Stage 2 and Key Stage 4 of pupils reaching the end of Key Stage 4 in 2011 is significantly less if they are e-FSM compared to similar pupils who are not e-FSM, and that their progress is further hampered by attending schools with relatively high proportions of e-FSM pupils.

5.49 In 18 of the 25 measures being compared we see that the negative 'effect' of an individual pupil being e-FSM, after controlling for other pupil characteristics, improves in 2012 compared to 2011 (results highlighted in green in Figure 5.23). In other words e-FSM pupils in 2012 would appear to do relatively better than e-FSM pupils in 2011 in these educational outcomes (based on how they compare to non-FSM pupils in each respective year). However, in the other seven measures the association between being e-FSM and achieving well worsens between 2011 and 2012 (results highlighted in red in (Figure 5.23). There would also appear to be no particular pattern to which educational outcomes e-FSM pupils in 2012 did relatively better or relative worse in. There are favourable and unfavourable results in all Key Stages.

5.50 Similar observations can be made when comparing the associations between being e-FSM and educational outcomes in 2013 compared to 2012, after controlling for other characteristics. This time the negative association of being an e-FSM pupil is improved (i.e. the association declines) in 13 of the 25 measures (results highlighted in green in Figure 5.23). However, in 10 measures of educational outcomes the association of being e-FSM worsens (i.e. the negative

association increases) (results highlighted in red in Figure 5.23). It is striking to note, however, that the association between outcomes and the proportion of e-FSM pupils in a pupil's school almost universally improves between 2012 and 2013, i.e. the presence of other e-FSM pupils in a school appears to have less influence on an individual pupil's attainment in 2013 than it did in 2012, albeit a modest improvement in some measures.

5.51 This mixed set of results may not be that surprising given how modest many of the differences in the odds ratios or coefficients over the three years are. Although we are not able to directly compare results over time, and it is equally difficult to compare the 'effect' of being e-FSM across measures using different statistical techniques, it is nevertheless striking that the greatest difference in odds ratios are in the KS2 results, particularly in terms of reaching expected Level 4 or above in all core subjects; the difference in the odds ratio improves by between one to three per cent over each year in these measures. The only other educational outcomes that have a similar scale of improvement are the average number of capped points at KS4, which includes equivalent qualifications. However, it is also notable that these improvements in the achievement of e-FSM pupils were observed before and after the Pupil Deprivation Grant was introduced.

5.52 These results demonstrate the need to consider a wide range of educational outcomes when attempting to evaluate the impact of the Pupil Deprivation Grant. However, in comparison with the results of the descriptive % differentials presented and discussed above this analysis also highlights the importance of the influence of other pupil characteristics. Hence some of the apparent improvements in the % differential between e-FSM and non-FSM pupils could, in some cases, be the result of differences in the characteristics of e-FSM pupils over time (or relatedly, changes in the characteristics of non-FSM pupils over time).

Figure 5.23: Summary of free school meal 'effects' on educational outcomes in 2011, 2012 and 2013

	Individual FSM Effect			School % Pupils FSM Effect		
Year	2011	2012	2013	2011	2012	2013
Absenteeism (OLS)						
% Sessions Absent	0.038	0.036	0.034	0.054	0.058	0.043
% Sessions Unauthorised Absence	0.015	0.014	0.014	0.048	0.044	0.039
Key Stage 1 / Foundation Phase (logistic)						
KS1 Maths Level 2+	0.602			0.121		
KS1 English/Cymraeg Level 2+	0.574			0.065		
FP Maths Level 5+		0.604	0.549		0.171	0.334
FP LLC[1] Level 5+		0.545	0.523		0.187	0.218
Key Stage 2 Attainment						
Achieving Level 4 or above (logistic)						
KS2 Maths Level 4+	0.526	0.556	0.573	0.133	0.105	0.185
KS2 English/Cymraeg Level 4+	0.513	0.536	0.550	0.054	0.050	0.113
KS2 Science Level 4+	0.489	0.519	0.538	0.077	0.073	0.117
KS2 CSI[2] Level 4+	0.516	0.529	0.552	0.074	0.074	0.128
Achieving Level 5 (logistic)						
KS2 Maths Level 5	0.523	0.543	0.514	0.225	0.180	0.245
KS2 English/Cymraeg Level 5	0.470	0.450	0.488	0.095	0.107	0.174
KS2 Science Level 5	0.472	0.485	0.474	0.145	0.163	0.215
KS2 CSI[2] Level 5	0.461	0.451	0.469	0.135	0.170	0.170
Key Stage 4 Attainment						
Achieving grade A/A* (logistic)						
GCSE Maths A/A*	0.307	0.296	0.304	0.001	0.001	0.002
GCSE English/Cymraeg A/A*	0.312	0.293	0.316	0.002	0.002	0.003

GCSE Science A/A*	0.316	0.322	0.389	0.003	0.003	0.004
A/A* in GCSE Maths, Science *and* English/Cymraeg	0.237	0.263	0.283	0.001	0.001	0.002
3 x Grade A/A*s in KS4 (any subject)	0.370	0.393	0.371	0.006	0.009	0.020
Achieving grade C or above (logistic)						
GCSE Maths C+	0.382	0.387	0.382	0.005	0.005	0.012
GCSE English/Cymraeg C+	0.356	0.359	0.359	0.002	0.002	0.003
GCSE Science C+	0.362	0.371	0.362	0.004	0.005	0.013
C+ in GCSE Maths, Science *and* English/Cymraeg	0.352	0.350	0.363	0.004	0.007	0.018
KS4 points (linear)	-49.9	-43.9	-40.6	-216.4	-190.5	-160.2
Progress KS2-KS4 (linear)						
Maths	-0.732	-0.702	-0.703	-4.474	-4.539	-4.134
English/Cymraeg	-0.486	-0.495	-0.514	-3.200	-3.355	-3.395
Science	-0.679	-0.669	-0.694	-4.282	-4.464	-4.238

1 – Literacy, Language and Communication (LLC).
2 – Core Subject Indicator (CSI) achieving required levels in English/Welsh, Maths *and* Science.
Source: National Pupil Database (provided by Welsh Government)

6 Conclusions

6.1 The evaluation survey and case studies highlight that the PDG has an important role within a suite of initiatives and funding streams that enable schools to support disadvantaged pupils. The introduction of the PDG is associated with a significant amount of new activity in schools that aims to provide for the needs of pupils identified by schools as disadvantaged. Schools have a good understanding of the aims and directives of the PDG. The PDG activity broadly conforms to the principles set out by the Welsh Government: there is a focus on improving literacy and numeracy (particularly at the primary level) as well as investing in initiatives to increase engagement and improve behaviour and attendance (especially at the secondary level). Schools are making significant investments in staff training in their delivery of PDG interventions. Schools are also using and investing in data monitoring systems, which the case studies highlighted were used to reflect on the effectiveness of the interventions run, and to adjust and review the way PDG funds were spent. There is mixed evidence on the extent to which parents are targeted and engaged as part of the PDG interventions, but the case studies highlight a number of examples that schools perceive as working effectively.

6.2 There appears to be scope for schools to make greater use of external sources of evidence, such as the Sutton Trust Toolkit, particularly at the primary school level. Just under half the schools surveyed used the Toolkit. The use of external and academic sources of evidence is less widespread at the primary than the secondary level. Primary schools were also less likely than secondary schools to report finding the PDG guidance helpful. It will be important to explore this further in the second year of the evaluation case studies, to understand any gaps in the evidence sought by primary teachers, and to investigate any particular concerns about the evidence and recommendations within the Toolkit.

6.3 There remains some ambiguity about how the PDG should be targeted. Schools typically target pupils they identify as disadvantaged based on a range of indicators, rather than e-FSM alone, and use a broader definition of disadvantage than financial deprivation. While this includes e-FSM/LAC pupils, it also extends to a large number of non-FSM/non-LAC pupils. It is worth bearing in mind that schools commit significant additional funds to the PDG in the way they fund interventions, so that schools are not necessarily spending Grant money on non-FSM/non-LAC pupils, although this would be complex to disentangle.

6.4 Schools generally perceive that PDG-funded initiatives have had a large positive impact on outcomes such as pupil well-being and engagement. A smaller proportion perceives large positive impacts on pupil attainment and attendance. The impact analysis to date is inconclusive: at the national level there has been a narrowing of the attainment gap in some measures of achievement at Key Stage 2 and Key Stage 4. However, this improvement pre-dates the introduction of the PDG and at Key Stage 2 the rate of improvement among e-FSM pupils is unchanged since its introduction. Improvements cannot therefore be attributed to the introduction of the PDG with confidence.

7 Annex

Figure 7.1: Example of Logistic Regression: Achievement of expected level in maths at Key Stage 1 (Year=2011)

Logistic regression		Number of obs =			29,838
		Wald chi2(18) =			2729.2
		Prob > chi2 =			0
Log pseudolikelihood = -7466.7739		Pseudo R2 =			0.2375
(Std. Err.adjusted for 1334 clusters in schoolid)					
KS1mat	Odds Ratio	Std Error	P>z	[95% Interval]	
Individual level variables					
non FSM (ref)	-	-	-	-	-
FSM pupil	0.602	0.030	0.000	0.546	0.664
male (ref)	-	-	-	-	-
female	0.921	0.042	0.071	0.843	1.007
white british (ref)	-	-	-	-	-
white other	0.414	0.064	0.000	0.306	0.560
mixed	1.126	0.174	0.441	0.832	1.525
asian	0.833	0.164	0.354	0.566	1.226
black	0.752	0.215	0.319	0.429	1.317
other	1.033	0.162	0.834	0.760	1.405
Action	0.093	0.006	0.000	0.082	0.106
No special needs (ref)	-	-	-	-	-
Action Plus	0.059	0.004	0.000	0.051	0.069
Statemented	0.028	0.004	0.000	0.020	0.038
Born Sept/Nov (ref)	-	-	-	-	-
Born Dec/Feb	0.846	0.060	0.018	0.736	0.972
Born March/May	0.612	0.041	0.000	0.537	0.698
Born June/Aug	0.515	0.033	0.000	0.454	0.584
School level variables					
Pct females	0.768	0.540	0.707	0.194	3.044
Pct white	1.181	0.294	0.503	0.726	1.923
Pct FSM	0.121	0.035	0.000	0.069	0.215
Pct SEN	9.728	3.897	0.000	4.436	21.332
Number of Pupils	1.001	0.000	0.004	1.000	1.001

Source: National Pupil Database

Figure 7.2 – Total amount of PDG received by schools, Apr 13 – Mar 14

	Primary				Secondary			
	Population N	Population %	Achieved N	Achieved %	Population N	Population %	Achieved N	Achieved %
Region								
Central South Wales	324	25%	17	13%	60	28%	12	18%
South East Wales	206	16%	24	18%	37	17%	15	23%
North Wales	359	27%	42	31%	55	25%	14	22%
South West and Mid Wales	432	33%	53	39%	65	30%	24	37%
School size[41]								
Small	530	40%	62	46%	71	33%	24	37%
Medium	440	33%	43	32%	69	32%	22	34%
Large	351	27%	31	23%	77	35%	19	29%
Proportion of e-FSM pupils in school								
Very high/high	466	36%	43	32%	57	27%	20	31%
Average	396	30%	40	29%	90	42%	26	41%
Low/Very low	450	34%	53	39%	68	32%	18	28%
Attainment gap								
Very small/small	438	37%	43	35%	78	39%	25	44%
Average	256	22%	35	28%	39	20%	13	23%
High/ very large	494	42%	46	37%	81	41%	19	33%
English/Welsh medium								
English medium	918	69%	90	69%	154	74%	41	75%
Welsh medium	403	31%	40	31%	54	26%	14	25%
Communities First area								
Yes	n/a	n/a	32	24%	n/a	n/a	36	55%

[41] For primary, defined as small (1- 149 pupils), medium (150-249 pupils), large (250 or more pupils). For secondary defined as small (up to 699 pupils), medium (700-999), large (1000 or more).

These results are commensurate with the amount of Pupil Deprivation Grant that schools participating in the survey reported receiving for 2013-14. For example, according to official data from the Welsh Government approximately 78% of primary schools will have received Grants of up to £20,000 in 2012-13. In the evaluation survey 81% of primary schools say they receive up to £20,000 in Grants.

According to official data from the Welsh Government approximately 27% of secondary schools will have received grants of less than £35,000 in 2012-13. In the survey 26% of secondary school respondents report receiving Grants of less than £35,000.

Figure 7.3: Total amount of PDG received by schools, April 2013 – March 2014

	Percentage of schools			Cumulative percentage		
Amount of PDG (£, 000s)	All	Primary	Secondary	All	Primary	Secondary
Up to 1.5	8	15	-	8	15	0
1.5-4.0	9	18	-	17	33	0
4.0-7.5	9	18	-	26	51	0
7.5-20.0	20	30	11	46	81	11
20.0-35.0	14	13	15	60	94	26
35.0+	39	5	74	100	100	100

Source: Ipsos MORI survey
Base: 201 survey responses (136 primary, 65 secondary), Feb – Apr 2014

The number of staff involved in the delivery of the PDG is related to the number of separate sessions that each intervention involves. and the frequency of the sessions. Interventions that are run over many sessions (151+ per year), and/or run every day typically command more staff time in planning and delivery.

Figure 7.4: Number of staff involved in delivery of PDG interventions by the number of separate session that each intervention involves

Number of separate sessions for each intervention during year	Percentage of interventions			
		By number of staff involved in delivery		
		1-5	6-10	11+
Up to 40		26	23	15
41-80		12	6	7
81-150		12	3	7
151-400		7	8	17
400+		8	10	16
Unsure		*32*	*42*	*28*
n		168	135	275

Source: Ipsos MORI survey
Base: 201 survey responses (136 primary, 65 secondary), Feb – Apr 2014

Figure 7.5: Number of staff involved in delivery of PDG interventions by the frequency that each PDG session is run

Frequency of each session	Percentage of PDG interventions			
		By number of staff involved in delivery		
		1-5	6-10	11+
Every day		26	32	38
A few days a week		41	32	27
Once a week		21	16	17
Less than once a week		12	10	12
n		168	135	275

Source: Ipsos MORI survey
Base: 201 survey responses (136 primary, 65 secondary), Feb – Apr 2014

References

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