

The School Snapshot Survey: Winter 2019

1: Curriculum

Research report

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IFF Research



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Executive Summary

This report covers the curriculum related findings from the fifth (Winter 2019) wave of the School Snapshot Survey. In the Winter 2019 wave, a total of 802 surveys were conducted with school leaders and 1,013 surveys with teachers. In this report leaders includes staff that are headteachers, deputy headteachers, assistant headteachers and acting headteachers. The term 'teachers' refers to classroom teachers only. Where results are presented for both groups combined this is noted by reference to 'leaders and teachers'. The survey covers a range of educational topics - this report focusses on the leaders and teachers views on a range of policy areas relating to the curriculum.

Refer to the 'Workforce' and 'Support for Pupils' reports for findings on the other educational topics explored in the survey.

National support programmes

There are a range of national support programmes that have been funded by the Department for Education. Leaders and teachers were asked whether they were aware, and leaders were asked whether their school had participated in, the following four programmes: Maths Hubs; Science Learning Partnerships; Music Education Hubs; and Lessons from Auschwitz (for secondary schools only).

Overall, leaders and teachers were more likely to be aware of Maths Hubs (84%) than Lessons from Auschwitz (75%), Science Learning Partnerships (46%), or Music Educations Hubs (41%).

As in the Winter 2017 and Winter 2018 waves, in Winter 2019 Maths Hubs remain the most commonly used programmes over the previous 12 months (67%), followed by Lessons from Auschwitz (37%), Music Education Hubs (28%) and Science Learning Partnerships (21%). Since 2017 the use of Maths Hubs has significantly increased year on year; from 56% in Winter 2017, 62% in Winter 2018, to 67% in Winter 2019. On the other hand, there has been a significant decrease in the proportion of secondary schools that participated in Lessons from Auschwitz (37%), compared with Winter 2018 (45%) and Winter 2017 (42%). A similar trend has occurred with Music Education Hubs; fewer schools had used/accessed them in Winter 2019 (28%) than in Winter 2018 (34%).

Practical science resources

Primary teachers and secondary teachers that teach science were asked whether they had sufficient equipment and facilities to carry out different types of practical science activity, including: teacher demonstrations, practicals with large groups, and practicals with individuals or in pairs.

More than four-in-five teachers (84%) agreed that they had sufficient equipment to carry out teacher demonstrations. Around three-quarters said the same for carrying out practicals in larger groups (73%) and just less than half of teachers (49%) reported to have sufficient equipment to carry out practicals with individuals or pairs.

Although levels of agreement were similar across the statements between primary teachers and secondary teachers who teach science, secondary teachers were significantly more likely to agree strongly that they had sufficient equipment to carry out teacher demonstrations (47% vs. 24%), practicals in larger groups (43% vs. 15%) and practicals with individuals or pairs (25% vs. 13%). Therefore secondary teachers were more confident that they had the equipment to conduct practicals in each of the three ways listed.

GCSE reform

From September 2015, the Government reformed GCSEs and introduced the new GCSE exams in a series of waves. Maths was included in the first wave of new GCSEs introduced in September 2015.

Secondary maths teachers were asked how confident they felt in teaching the reformed GCSE. Overall, 95% felt very or quite confident and no teachers were not confident. This is a significant increase compared to Winter 2018 when 85% were very or quite confident and 10% of teachers were not confident.

Maths

Advanced Maths Support Programme

The Advanced Maths Support Programme (AMSP) aims to increase participation in the advanced maths qualifications and improve the teaching of these qualifications. One quarter (24%) of secondary school leaders had heard of the programme, rising to over a third in schools with the lowest proportion of FSM pupils (36% compared to 16% of schools with the highest proportion of FSM pupils).

Receiving the Advanced Maths Premium

The Advanced Maths Premium was introduced by the DfE to support secondary schools and colleges in raising participation in advanced post-16 maths. Just under a fifth (18%) of secondary schools that teach pupils aged 16 and above reported had received this funding (25% were unsure).

Of the 18% of secondary schools that received the Advanced Maths Premium, school leaders reported that they planned to use the premium in three main ways:

- *To increase resources*: 74% were planning to secure additional teaching resource/equipment and 53% were planning additional teachers.
- To extend the post-16 maths offer: 74% were planning additional classes and 37% were looking to widen the number of Level 3 qualifications on offer.
- To promote participation by using promotional activities (54%).

Winter 2019 Curriculum Infographic

1. Curriculum

National support programmes

Leaders and teachers were aware of the following **DfE funded programmes**:

Maths Hubs



75% Lessons from Auschwitz (secondary)



Science Learning **Partnerships**



Music **Education Hubs**

41%

Between Winter 2018 and Winter 2019, there have been significant changes in the use of some of the programmes across all schools:





VS. 45% in 2018



21% VS.

23% in 2018

62% in 2018



VS 34% in 2018

Practical science resources

Primary teachers and secondary teachers that teach science said that they had sufficient equipment and facilities to:

Carry out teacher demonstrations:

P: 84%



Allow pupils to carry out practicals in larger groups:

P: 72%



S: 79%

Allow pupils to carry out practicals individually or in pairs:

P: 49%



S: 51%

Secondary teachers were significantly more likely to strongly agree with each statement



GCSE reform



Confidence in teaching reformed GCSE in Maths:

95% Confident

0% Not confident

A significant improvement compared to Winter 2018, when 85% of teachers felt confident and 10% not confident.



Advanced Maths Support Programme

24% of secondary leaders had heard of the Advanced Maths Support Programme (AMSP).



36% of schools with the lowest proportion of FSM pupils



16% of schools with the highest proportion

57% of secondary schools that teach pupils aged 16 and above had not received AMSP funding.



18% Had received funding 25% Did not know

Receiving the advanced maths premium

Secondary schools that received the Advanced Maths Premium planned to use the premium in three main ways:



Promote participation

Increase resources

54% Promotional activities

74% Equipment **53%**

Teachers

the post-16 offer

74% Additional classes **37%**

Widen L3 qualifications

Background

This report covers the curriculum related findings from the Winter 2019 School Snapshot Survey. Since Winter 2017, this survey has been conducted bi-annually to better understand the opinions of leaders and teachers in primary and secondary schools on a range of educational topics.

Methodology

A sample of 1,666 schools was drawn from the Department's database of schools, 'Get Information about Schools' and these schools were invited to take part in both the school and teacher components of the School Snapshot Survey. A further 300 schools were selected just to take part in the teacher component.

At each school, one leader was surveyed (predominantly via a telephone methodology) and up to three teachers were surveyed (using a combination of online and telephone interviewing). A total of 802 surveys were conducted with school leaders and 1,013 with teachers. This was split by primary and secondary schools as shown in Table 1. Of the leaders, most were headteachers (73%) and just less than one in five were deputy headteachers (18%) (see the appendices for more detail).

Table 1. Completed surveys by teacher level and school type

	Leaders		Teachers	
	Primary	Secondary	Primary	Secondary
Completed surveys	401	401	519	494

Fieldwork took place between 4 November – 20 December 2019.

Interpreting the findings

Data presented in this report are from a sample of teachers and senior leaders rather than the total population of teachers and leaders. Although the leader sample and the teacher sample have been weighted to be nationally representative (by school and by teacher demographics), the data is still subject to sampling error. Differences between sub-groups and previous waves are only commented on in the text if they are statistically significant at the 95 percent confidence level, unless otherwise stated. This means there is no more than a 5 per cent chance that any reported differences are a consequence of sampling error.

Depending on the question, responses from school leaders have been weighted to represent the school view or to represent their individual view as a senior teacher (see the Technical Report for more details on the weighting). The report attempts to make this distinction clear by referring to responses from schools when the school-based weighting has been applied, and referring to leader responses when the teacher-based weighting (which utilises individual demographic details) has been applied. At the school-level we have used the general population of schools for weighting, however when comparing results by academy status or by level (i.e. primary schools vs. secondary schools) it is worth noting that in the general population the majority of secondary schools (68%) are now academies whereas only 32% of primary schools are academies.

Free School Meal (FSM) entitlement is used as a proxy for deprivation levels at the school. All schools in England were put into a list of ascending order of the proportion of pupils that they have that are entitled to FSM. This ordered list was then split into five equal groups (or quintiles). Quintile 1, which is referred to as the 'lowest proportion' throughout the report represents the schools with the lowest proportion of pupils entitled to FSM. The proportion of pupils entitled to FSM increases progressively as the quintiles increase. Schools in the 'highest proportion' quintile (quintile 5), represent the schools with the highest proportion of pupils entitled to FSM. In the report, significant differences tend to be tested between schools with the lowest proportion of FSM pupils and schools with the highest proportion of FSM pupils.

Due to rounding to the nearest whole number, percentages may not total to exactly 100% or precisely reflect statistics provided in the data tables. Further information on the overall study methodology and weighting approach is available in the Technical Report.

Curriculum

Leaders and teachers were asked to provide their perspective on a range of policy areas relating to the curriculum, including national support programmes, practical science resources, GCSE reform, advanced maths support programme and receiving the advanced maths premium.

1.1 National support programmes

There are a range of national support programmes that have been funded by the Department for Education. Some of these programmes include:

- The Maths Hubs programme, which brings together mathematics education professionals in a collaborative national network of 37 hubs, each locally led by a lead school or college, to develop and spread excellent practice, for the benefit of all pupils.¹
- Music Education Hubs, which are groups of organisations such as local authorities, schools, art organisations, community or voluntary organisations. They work together to create joined-up music education provision, respond to local need and fulfil the objectives of the hub.²
- Science Learning Partnerships, which combine local expertise in teaching and learning in science, facilitating CPD, and providing school-to-school support. They are led by local teaching school alliances, schools and colleges with excellence in science, higher education institutions, and other local partners with cutting-edge expertise in science.³
- The Lessons from Auschwitz Project which is run by the Holocaust Educational Trust and aims to increase knowledge and understanding of the Holocaust for A Level pupils and to clearly highlight what can happen if prejudice and racism become acceptable. It is run with secondary schools only. ⁴

¹ http://www.mathshubs.org.uk/

http://www.artscouncil.org.uk/music-education/music-education-hubs

³ https://www.stem.org.uk/science-learning-partnerships

⁴ https://www.het.org.uk/lessons-from-auschwitz-programme

Awareness of programmes

All leaders and teachers were asked whether they were aware of four national support programmes funded by the DfE: Maths Hubs; Science Learning Partnerships; Music Education Hubs; and Lessons from Auschwitz.

Results are from all leaders, all primary teachers and the secondary teachers that taught the subject relevant to the national programme (e.g. secondary maths teachers for maths hubs) are shown in Figure 1. Overall these leaders and teachers were more likely to be aware of Maths Hubs (84%) than Lessons from Auschwitz (75% - secondary leaders and secondary history teachers only), Science Learning Partnerships (46%), or Music Educations Hubs (41%).

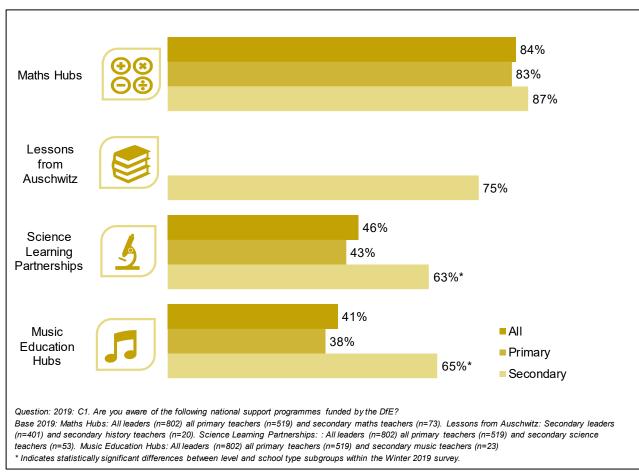


Figure 1. Awareness of national support programmes

Secondary leaders and science teachers were significantly more likely to be aware of Science Learning Partnerships than primary leaders and teachers (63% vs. 43%). Similarly, secondary leaders and music teachers were significantly more likely to be aware of Music Education Hubs than primary leaders and teachers (65% vs. 38%).

Across primary and secondary schools there were some significant regional differences in the awareness of these programmes:

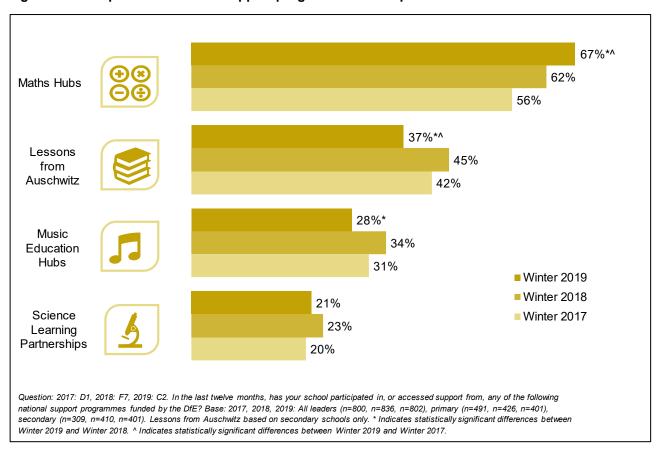
- Compared to the average (84%), awareness of Maths Hubs was significantly more prominent among leaders and teachers in Yorkshire and Humber (95%) and the North East (94%), and significantly less prominent among leaders and teachers in the East of England (73%) and London (76%).
- Leaders and teachers in Yorkshire and Humber (53%) were significantly more likely to be aware of Music Education Hubs (compared with the average, 41%). Whereas, leaders and teachers in the South East (35%) and London (29%) were significantly less likely to be aware of Music Hubs (compared to the average,41%).
- Leaders and teachers in the North West were significantly more likely to be aware of Science Learning Partnerships (52% compared to average (46%).

Participation in programmes

As in the Winter 2018 and Winter 2017 surveys, school leaders that were aware of the national support programme were asked whether their school had participated in or accessed support from any of the four national support programmes. Among all schools (including those with leaders that were aware and not aware of the programmes), Maths Hubs were the most commonly used programme (67%), followed by Lessons from Auschwitz (37% among secondary schools), Music Education Hubs (28%) and finally Science Learning Partnerships (21%).

There have been some significant changes in the use of the programmes compared with previous years. Since 2017 the use of Maths Hubs has significantly increased year on year from 56% in Winter 2017, 62% in Winter 2018, to 67% in Winter 2019. On the other hand, there has been a significant decrease in the proportion of secondary schools that participated in Lessons from Auschwitz in the last 12 months (37%), compared with Winter 2018 (45%) and Winter 2017 (42%). A similar trend has occurred with Music Education Hubs: fewer schools in Winter 2019 reported participating / accessing this programme in the previous 12 months (28%) than in Winter 2018 (34%).

Figure 2. Participation in national support programmes in the previous 12 months



In Winter 2019, there were some significant differences in the use of Maths Hubs, Music Education Hubs, and Science Learning Partnerships between primary and secondary schools. Primary schools were significantly more likely to have participated in Maths Hubs (69%) and Music Education Hubs (30%) than secondary schools (55% and 21% respectively). This trend matches the findings from Winter 2017 and Winter 2018. On the other hand significantly more secondary schools reported participation in Science Learning Partnerships (32%) compared to primary schools (19%). Again, the same trend was found in Winter 2017 and Winter 2018, as illustrated in Figure 3.

69%* 64%* ■ Primary ■ Secondary 59%* 55% 53% 45% 36%* 33%* 38%* 30%* 27% 32%* 33%* 21% 🧾 20% 19% 20% 17% 2019 2017 2019 2018 2017 2019 2018 2017 2018 ⊕⊛ Science Learning **Maths Hubs Music Education** Hubs **Partnerships**

Question: Winter 2017: D1, Winter 2018: F7, Winter 2019: C2. In the last twelve months, has your school participated in, or accessed support from, any of the following

Figure 3. Proportion of schools that have participated in programmes, by primary and secondary school level and survey wave

There were some differences in participation in the programmes by region:

national support programmes funded by the DfE? Base: 2017, 2018, 2019: All leaders (n=800, n=836, n=802), primary (n=491, n=426, n=401),

* Indicates statistically significant differences between primary and secondary schools within the Winter 2019 survey
Indicates statistically significant differences by percentage points between Winter 2019 and Winter 2018.

secondary (n=309, n=410, n=401).

- Maths Hubs: Schools from East Midlands showed the highest level of participation (78%), significantly greater than the average across regions (67%). The lowest participation was recorded in the East of England (57%) and West Midlands (57%). These regional trends are similar to Winter 2018, when schools from East Midlands were more likely to use Maths Hubs (77%), while schools in the East of England (42%) were less likely, compared to the average across regions (62%)
- Music Education Hubs: Schools from the South West showed the highest level of participation (49%), significantly higher than the average across all regions (28%). In comparison, less than a fifth of schools in West Midlands (17%) had participated. These regional trends are also similar to Winter 2018, when schools from the South West were significantly more likely to participate (52%), and schools from the West Midlands were significantly less likely to participate (20%), than the average across all regions (34%).

- Science Learning Partnerships: Schools from West Midlands were significantly less likely to have participated (12%) than the average across all regions (21%).
- Lessons from Auschwitz: Although schools from West Midlands were significantly less likely than average to have participated in all the other programmes, they showed the highest level of participation in Lessons from Auschwitz (49%), significantly higher than the average across all regions (37%).

There was also some variance by the proportion of pupils entitled to FSMs. Schools with the lowest proportion of FSM pupils were significantly less likely (54%) to have participated in Maths Hubs compared to those with the highest proportion of FSM pupils (67%).

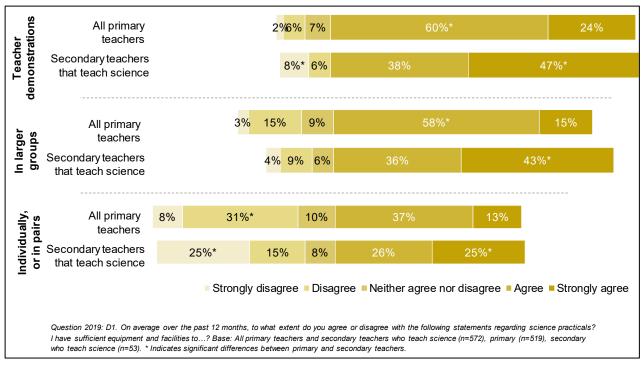
1.2 Practical science resources

In Winter 2019, all primary teachers and secondary teachers that teach science were asked whether, on average over the past 12 months, they had sufficient equipment and facilities to:

- Carry out teacher demonstrations. Overall 84% agreed (84% among primary and 85% among secondary science teachers)
- To allow pupils to carry out practicals in large groups. More than seven in ten (73%) teachers agreed (72% among primary and 79% among secondary teachers).
- To allow pupils to carry out practicals as individuals or in pairs. Overall 49% agreed (49% among primary and 51% among secondary teachers)

Although levels of agreement were similar across the statements between primary teachers and secondary teachers who teach science, as shown in Figure 3 secondary teachers were significantly more likely to 'strongly agree', and therefore be more confident that they had the equipment to conduct practicals in each of the three ways listed.

Figure 4. Teacher views on whether they have sufficient equipment and facilities for science practicals



A lack of access to the resources needed to carry out their science lessons appears to be linked to overall job satisfaction. Teachers were asked how satisfied they were in their job, and those who gave a low score were significantly more likely to report that they did not have sufficient equipment and facilities to carry out each of these science practical teaching methods compared with teachers that were satisfied with their job.⁵ Among those that were dissatisfied with their job:

- 15% disagreed that they had sufficient equipment to carry out teacher demonstrations, compared to the 7% that were satisfied.
- 38% disagreed that they had sufficient equipment to carry out practicals in large groups, compared with 12% of teachers that were satisfied.
- More than half (58%) disagreed that they had sufficient equipment to carry out practicals in individuals or pairs, compared with the third of teachers (35%) that were satisfied with their job.

Teachers in schools with an Ofsted rating of 'requires improvement' were significantly more likely to report that they did not have sufficient equipment and facilities to carry out teacher demonstrations compared to 'good' schools (20% vs. 8%). Teachers in schools that 'require improvement' were also significantly more likely to report not having sufficient equipment and facilities for carrying out practicals in large groups (33%, significantly higher than the 17% of teachers from 'good' schools or the 11% from 'outstanding' schools).

In terms of regional differences, teachers from schools in the South West were significantly less likely to say that they have the resources for pupils to carry out practicals individually or in pairs (37%, compared with 49% average across regions); in larger groups (64%, compared with 73% average across regions); or to carry out teacher demonstrations (75%, compared with 84% average across regions).

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⁵ For more information on job satisfaction please see the Workforce report.

1.3 GCSE reform

From September 2015, the Government reformed GCSEs and introduced the new GCSE exams in a series of waves. Maths was included in the first wave of new GCSEs introduced in September 2015.

Secondary maths teachers were asked how confident they felt in teaching the reformed GCSE in Winter 2019 and Winter 2018. As Figure 4 shows there have been some significant increases in teachers' confidence over the past year. In Winter 2019, 95% of maths teachers felt very or quite confident and no teachers stated that they were not confident. This is a significant improvement compared to Winter 2018 when 85% were very or quite confident and 10% of teachers were not' confident.

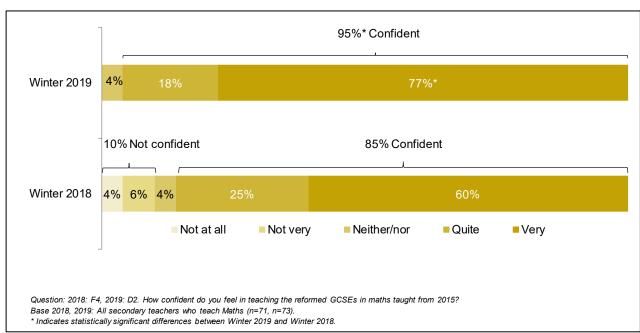


Figure 5. Confidence in teaching reformed maths GCSE⁶

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⁶ Small base sizes prevent subgroup analysis.

1.4 Maths

Advanced Maths Support Programme

The Advanced Maths Support Programme (AMSP) aims to increase participation in the advanced maths qualifications and improve the teaching of these qualifications.⁷ In the Winter 2019 survey, secondary school leaders were asked whether they had heard of the AMSP.⁸ A quarter (24%) had heard of the programme, rising to over a third among schools with the lowest proportion of FSM pupils (36% compared to 16% among schools with the highest proportion of FSM pupils).

Receiving the advanced maths premium

The advanced maths premium was introduced by the DfE to support secondary schools and colleges in raising participation in advanced post-16 maths. The Education and Skills Funding Agency (ESFA) are providing funding to schools from the academic year 2019/2020 to the academic year 2021/2022. The funding will help schools build capacity in teaching maths and in promoting the value of maths to pupils.⁹

Secondary schools that teach pupils aged 16 and above were asked whether they had received advanced maths premium funding for the current academic year. ¹⁰ Over half (57%) reported that they had not received funding, while 18% reported that they had (25% were unsure).

⁷ https://amsp.org.uk/universities/about

⁸ Base: All secondary leaders (n=401)

⁹ https://www.gov.uk/guidance/16-to-19-funding-advanced-maths-premium

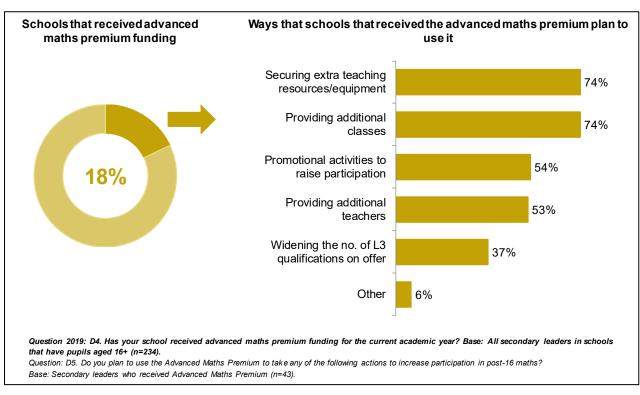
¹⁰ Base: All secondary leaders in schools that have pupils aged 16+ (n=234)

Ways the advanced maths premium was used to increase participation in post-16 maths¹¹

The 18% of secondary schools that had received the advanced maths premium were asked if they planned to use the premium to undertake a range of actions to increase participation in post-16 maths. Of the 43 school leaders that responded, they tended to plan to use the premium in three main ways (and 97% planned to use it in at least one of these ways):

- *To increase resources*: 74% were planning to secure additional teaching resource/equipment and 53% were planning additional teachers.
- To extend the post-16 maths offer: 74% were planning additional classes and 37% were looking to widen the number of Level 3 qualifications on offer.
- To promote participation by using promotional activities (54%).

Figure 6. Schools that received the advanced maths premium and the ways that they plan to use it



¹¹ Small base sizes prevent subgroup analysis.



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