



Department
for Education

Use and perceptions of curriculum support resources in schools

Research report - July 2018

CooperGibson Research



Social Science in Government

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Executive Summary

DfE commissioned CooperGibson Research (CGR) to conduct in-depth qualitative research with senior leaders and teachers in primary and secondary schools in England. The research aimed to explore the types and format of curriculum resources currently being accessed and used most often by schools and individual teachers, the challenges faced, how teachers judge the quality of curriculum resources, and the current gaps and priorities for the development of future resources.

This research examined curriculum resources as accessed and used by senior leaders and teachers in a range of school settings, to support teaching and learning. For this purpose, 'curriculum resources' were defined as tools that linked directly to curriculum delivery. Continuing professional development (CPD) and training, and physical equipment such as computer hardware and mobile devices were not included in the scope of the research. However, where the latter were mentioned by individuals taking part in the interviews as having an impact on the use of curriculum resources, this has been noted.

Note on resource types

The following resources were considered during the interviews, and are referred to throughout the findings:

Online/printed resources: tools such as worksheets, lesson plan templates, videos that can be accessed via websites (either requiring membership/subscription or freely available to download).

Digital resources: mobile applications, software packages and tools that are interactive and can be used for setting and completing tasks (e.g. on a computer/mobile device).

Physical resources: predominantly textbooks and literary texts/library books, and revision guides.

Methodology

Seventy telephone interviews were carried out with senior leaders and teachers across a range of primary and secondary schools in England (42 interviews across 18 secondary schools, and 28 interviews across 21 primary schools, with a higher quota for secondary to allow for representation from a range of subject areas). Senior leaders and teachers participating in the interviews were spread across the nine English regions. The sample was also stratified to ensure a mix of schools were recruited across size of school, Ofsted rating, attainment levels and school type. The interviews were semi-structured qualitative

discussions lasting approximately 45 – 60 minutes, with interviews undertaken with senior leaders and teachers from the same schools where possible.

Further detail on the methodology and breakdown of sample can be found in section 1 of the main report.

Curriculum planning

In secondary schools, the curriculum planning process was led specifically by Heads of Department. Schemes of work (sequenced plans to show delivery over a period of time, by subject) were developed by discrete departments. The role of senior leaders was generally to oversee this process. Both senior leaders and teachers viewed this plan/scheme of work as a curriculum resource because it provided a strategic overview of the requirements for teaching and learning that needed to be met over a period of time (term/year). Individual lesson plans then provided a summary of the day-to-day work to be covered with pupils to meet the needs of a specific cohort.

Primary schools' approaches to the use of schemes of work was more mixed than those found at secondary level. Commonly, primary schools did not use schemes of work but would plan lessons based on topics or themes.

Where it took place, collaborative planning (particularly between schools in Multi-Academy Trusts (MATs)) was seen to provide advantages in terms of workload reduction, sharing expertise and resources, and allowing comparisons to be made in performance between schools.

Individual lesson planning

In terms of using resources specifically for planning individual lessons, several primary schools reported drawing on subscription services to help planning for certain subjects. In primary schools, teachers tended to access and develop resources for individual lessons independently. In secondary schools, there was mixed responsibility for accessing and developing resources for individual lessons. Often the responsibility lay primarily with the Heads of Department who then worked with staff in their teams to develop lesson plans, and review and access lesson resources, often by sharing tasks across the team. Individual teachers or small groups then took responsibility for planning and resourcing specific lessons, topics or terms.

Using and accessing existing resources

A wide variety of resources were being accessed and used by respondents for a range of purposes. The Appendix to this report contains a full list of the 250 existing resources mentioned during the interviews, a description of each, and the number of respondents

that reported using each. It should be noted that regular use of resources did not always equate to individuals holding a positive view of that resource, or finding it easy to use. Sometimes respondents noted that they had joined subscriptions to gain access to resources. They then felt they should continue to use a resource for longer than they would have liked to because they had to continue paying for access, whilst others had not yet identified suitable replacements of better quality.

Nearly all respondents said that general internet searches were a key means of accessing resources; secondary schools also reported that exam boards/awarding organisations were a key source. Where there were set core or shared resources identified by middle or senior leaders, individual teachers regularly supplemented these with resources they identified for themselves. In this context, 'core' or shared resources refers to a set of resources identified or developed for use across an entire year group, key stage (KS), subject area or school, which all teachers had access to. Less commonly, senior leadership team (SLT) members noted that early career teachers were more likely to stay up-to-date with the latest tools available.

Workload associated with accessing resources

It was commonly suggested by teachers that using existing resources in general did not always reduce their workload, because their time was taken in identifying, accessing, and then tailoring resources to need. Teachers in secondary schools, particularly, reported that they would collaborate with other staff to develop resources. These were often saved on a shared drive or via cloud-based storage. This was viewed as a helpful approach as it enabled teachers across departments, schools, and even groups of schools to access a bank of resources.

Accessing resources did not appear to be a problem, although there were challenges reported in identifying and finding specific types of resources, particularly at primary level. Computing and literacy (specifically support with writing) were occasionally mentioned by primary teachers; other subjects where gaps in resources were reported by primary school teachers were religious education (RE), science, French, geography and history. Finding resources for KS3 in general was also mentioned as being more difficult than other key stages at secondary level (see Challenges and Gaps section below).

Resource types

A variety of resource types were accessed by senior leaders and teachers. Interview respondents across all school types said that they commonly draw on the following resource types:

- Pupil resources

- Lesson and curriculum planning tools
- Diagnostic tests/assessment tools
- Schemes of work
- Teacher guides

A range of resource formats were preferred by teachers and senior leaders, although preferences varied by phase, and within secondary schools by subject. Primary school teachers reported preferring:

- Library and textbooks for literacy and numeracy, and digital resources and/or downloadable/online worksheets for other subject areas
- Apps for specific areas such as teaching pupils with special education needs (SEN) and KS1 phonics
- Tactile, hands-on resources to provide interaction, engagement, and skills development

Secondary school teachers reported that:

- Although typically thought of as a physical resource rather than a curriculum resource, interactive whiteboards or 'smartboards' which present digital resources, were useful both for behaviour management, as well as teaching and studying.
- Textbooks/key texts were used as a framework for teaching and planning (rather than working through them systematically during lessons), as they wanted to ensure that all lesson content was linked tightly to exam specifications. They were also used as reference tools for pupils during independent study; working through a textbook in a fixed, regimented style was not regarded to be engaging or motivating for pupils during lesson delivery itself. Small numbers of teachers mentioned the use of e-textbooks, as these were felt to be cost-effective, engaging and more likely to remain up-to-date.

Respondents in both primary and secondary schools reported that their schools were reducing the number of hard copy worksheets used during lessons. This was primarily to reduce the cost of printing/copying, and also to ensure that resources remained motivating for pupils. Digital resources, for example, were perceived to be more interactive and engaging for pupils with a broader range of visual aids, compared to working through activities on a static page.

SLT members noted that they often perceived tools that had been developed in-house or in collaboration with other schools to be high quality resources, as they knew that these

had been informed by current practitioners, peers who understood the setting and pupil needs, or were reflecting changes in exam specifications that they could not find in other resources available to them. At secondary level, this also meant that schools could create resources that established a foundation for content required at KS4 that could be developed at KS3. This was to help embed knowledge and skills to assist with a smooth transition for pupils (and likewise for the KS4 to KS5 transition).

Tailoring resources

When seeking the most relevant resources, or tailoring resources for specific pupil groups (such as different ability groups, pupils with English as an additional language (EAL) or pupils with SEN), teachers (across both phases) commonly reported that:

- Online/printed resources such as downloadable worksheets could be tailored and adapted to need most effectively
- Digital resources such as apps and education packages/software could be adapted by teaching style, as well as by level of challenge for pupils

Teachers commonly reported adapting resources to tailor content by pupil need, particularly for pupils with SEN or those with EAL. Others selected specific formats for working with individual cohorts (e.g. apps tailored for SEN and EAL, additional texts to read in order to add challenge). Teachers less commonly gave examples of how they tailored resources to provide challenge for higher ability pupils, especially at secondary level. This gap was also reflected in their requests for more resources to give them ideas about how to provide depth and challenge to higher ability pupils.

The work required to set up digital resources to meet individual pupil need was noted by all respondents to be time-consuming. However, once the initial work was done to set these programmes up, it was felt that a greater amount of tailoring was possible compared to working with textbooks or worksheets alone.

Effectiveness and quality

When respondents were asked what features they looked for to judge whether a resource was 'high quality', they commonly reported that resources should be:

- Adaptable
- Cost-effective
- Complementary to national curriculum objectives
- Visually engaging – using imagery, diagrams, colour

- Written and developed by peers/practitioners

When determining which resources they consider high quality, common approaches by teachers were:

- Listening to recommendations of peers
- Drawing on professional experience, and that of more senior colleagues
- Sampling and trialling resources to inform a decision on their effectiveness
- Measuring outcomes/impact of resource on pupil outcomes
- Trusting materials produced by exam boards/awarding organisations or professional bodies/associations

Although teachers early in their careers may find resources quickly, which were also up-to-date, it was noted by SLTs that a mentoring process was required to help new teachers develop judgement as to what resources are effective or high quality.

Challenges and gaps

The key challenges for accessing and using curriculum resources were reported to be cost, and not having enough time to find, review and tailor resources. Overall, respondents did not feel that resources which were currently available met the criteria of being 'knowledge rich' (see section 4.2). This was felt to be due, in part, to changes in GCSE specifications and a new grading system, leading to a limited number of resources having been developed so far. It was therefore felt that over time this may improve, as more resources are developed. Thus, although there was felt to be a wide range of resources available, a number of specific gaps were identified:

- Resources reflecting new exam specifications and grade boundaries, particularly for GCSE (including assessment materials, specimen papers and exemplar answers for the new GCSE specifications)
- Identifying resources that tailored content to meet different pupil needs/ability levels
- Progression guidance to support transition between key stages
- At primary level, resources for computing, and English (specifically supporting writing and the use of different genres in writing), geography, history, science, religious education (RE), and French, and resources for teachers in secondary schools who teach a subject they are not specialist in (e.g. humanities, science)
- Resources for KS3 (generally across all subjects, rather than subject-specific)

Senior leaders and teachers suggested that resources could be improved if a shared central database of resources was created, cost reduced, quality assurance increased, and by teachers having more time to review and tailor resources.

Points for consideration

Several areas for future consideration have been identified. Further detail is provided in section 6 of the main report.

- Interview respondents reported that searching, identifying and adapting resources were time-consuming tasks. Although there are resource banks available online or through subscription services, it was felt that the quality and relevance of these could be variable. An independent, impartial resource hub may be beneficial in the long-term. This should be regularly updated, with content linked to the curriculum, and ideally adopting a quality assurance process overseen by current practitioners/educators.
- In terms of improving or identifying gaps within existing resources, respondents focused on resources to support curriculum delivery more strongly than curriculum planning. Where they reported a need for additional resources or could identify areas for resource development, both senior leaders and teachers spoke about curriculum resources for specific subject areas, or for developing approaches to teaching.
- Substantial activity is taking place in schools to create, tailor and differentiate resources for different pupil needs. Much of this work takes place in collaboration with peers, across KS/year/subject groups and is moderated by current practitioners. Research to identify existing high quality, differentiated, curriculum specific materials, and work with schools on sharing them more widely, and promoting good practice could provide wider access to these tailored resources.
- The introduction of a national quality mark for resources would provide some confidence to teachers and schools more broadly that resourcing (and therefore budgeting) decisions were informed by an additional layer of quality assurance. Likewise, schools should be encouraged to ensure that the resources they use are being evaluated regularly against pupil outcomes and progress.
- High levels of engagement with new resources among early career teachers, and associated mentoring from SLTs in judging their quality, appears to leave a gap in activity among mid-career teachers. Teachers that have been in the profession for around ten years may require support to ensure that they keep up-to-date with pedagogical, subject-specific and resource developments (and for staff to be able to use the new resources available to them, particularly software programmes, as a result).

- Teachers and senior leaders identified a gap in resources due to the time lag between delivery of new exam and curriculum specifications, and the availability of high quality and cost effective resources, linked directly to their content.
- Resources should support teachers to differentiate lessons on a wider range of levels. A need for resources to facilitate a deeper understanding and provide more challenge was particularly evident, along with additional resources at KS3, in humanities-based subjects at primary level, and for EAL pupils at secondary schools.

1. Introduction

The Government is committed to providing greater support for teachers and schools in raising teaching standards, and in 2017 announced a new Curriculum Fund *‘to encourage the development of high quality teaching resources by organisations, including by leading cultural and scientific institutions. These resources will help teachers deliver the government’s new curriculum while reducing workload and giving them more time to focus on what they do best – teaching’*.¹ This fund, alongside the development of a simpler system of responsibility and accountability,² is intended to boost a programme of support for teachers and schools in assisting with planning, marking and the reduction of workload. This includes the design and delivery of a wide-range of materials, resources and tools that teachers/schools can access and draw upon in the planning and delivery of the curriculum. It is, however, fundamental to ensure that any new resources are fit-for-purpose, accessible, offer high quality support and are good value. This research was therefore both necessary and timely to inform the work of the Department for Education (DfE) in the implementation of a curriculum fund.

DfE commissioned CooperGibson Research (CGR) to conduct in-depth qualitative research with senior leaders and teachers in primary and secondary schools in England. The research aimed to explore the types and format of curriculum resources currently being accessed and used most often by schools and individual teachers, the challenges faced, how teachers judge the quality of curriculum resources, and the current gaps and priorities for the development of future resources.

1.1 Aims

The project aimed to gather qualitative evidence on the use of curriculum resources in schools, and by individual teachers, and to identify any gaps where future development of resources may be required.

1.2 Objectives

- Explore schools’ approaches to accessing and developing curriculum resources and how schools manage workload around resource access and development
- Identify the types and formats of curriculum resources teachers are using most often, and why

¹ DfE (2018), ‘Boost for school standards with primary literacy drive’;

<https://www.gov.uk/government/news/boost-for-school-standards-with-primary-literacy-drive>

² DfE (2018), ‘Reducing teacher workload’; <https://www.gov.uk/government/publications/reducing-teachers-workload/reducing-teachers-workload>

- Establish how senior leaders and teachers identify and judge high quality curriculum resources and what they look for in a high-quality, knowledge rich resource
- Identify ways in which schools or Multi-Academy Trusts (MATs) are using and sharing resources
- Understand the challenges or barriers to accessing and using curriculum resources, any gaps or unmet needs, identify whether there are critical areas for future development, and priority areas for future resources by phase/key stage (KS), subject area, and format.

1.3 Methodology

In order to understand the use of curriculum resources, a qualitative methodology was employed, with a total of 70 in-depth telephone interviews carried out with senior leaders and teachers in schools across England.

To ensure a broad spread across England, a sample of primary and secondary schools was selected at random from the register of schools and colleges in England, Get Information About Schools (GIAS). The sample was selected according to the following criteria:

- Location across nine geographical regions of England
- Phase of education (primary, secondary)
- Size of school relative to the phase of education
- Deprivation level: categorised by the percentage of pupils in the school receiving Free School Meals (FSM)
- Urban versus rural school locations
- Ofsted rating
- Attainment: primary – based on the average percentage of pupils meeting expected standards in reading, writing and mathematics; secondary – based on the average Attainment 8 score for all schools in England
- School type: Membership of a MAT, single academies, and Local Authority (LA) maintained schools

The sample selection proportionally represented the number of schools according to three key variables: region, phase and school size. The sample of schools was then drawn randomly to fit these criteria and the sample was monitored during fieldwork to maximise coverage of the additional variables shown above.

The semi-structured interviews were designed to take 45-60 minutes, with a higher quota of teachers in secondary schools to allow for coverage of a range of subjects. Where possible, interviews were completed with teachers and leaders linked to the same schools (i.e. one senior leader and one (primary) or two (secondary) classroom teachers per school). However, some schools could only provide either a senior leader or a teacher to take part in the research and these were then supplemented by contact made to other schools where required.

Using the collated sample contacts (see 1.4), an introductory email was sent to each school outlining the purpose, aims and approach for the research. This email was followed-up with a telephone call to clarify the purpose of the research and to gain agreement at senior level to participate, and the contact details of suitable respondents. In some cases where a generic email address was available, an initial call was made to establish the best address to send the introductory email to. Further emails and telephone calls were made as necessary to gain agreement to participate, and establish convenient times for interviews.

1.4 Sample

In total, around 700 schools were contacted to take part in the research and a final sample of 39 schools was achieved (21 primary schools and 18 secondary schools). The overall sample breakdown by school and respondent type is provided in Tables 1 and 2.

Table 1: Sample breakdown by school

Sample criteria		Number of schools
Region	North East	2
	North West	7
	Yorkshire & Humber	5
	East Midlands	4
	West Midland	3
	East of England	4
	London	5
	South East	1
	South West	8
Size	Large	13
	Medium	10
	Small	11
Ofsted rating	Outstanding	9
	Good	23
	Requires Improvement/Inadequate	7
Attainment	Primary Above National Average	4
	Primary Below National Average	10
	Secondary Above National Average	27
	Secondary Below National Average	15
	N/A	14
Type	Primary MAT	7
	Primary Academy	0
	Primary LA Maintained	14
	Secondary MAT	6
	Secondary Academy	8
	Secondary LA Maintained	4

Table 2: Sample breakdown by respondents

Characteristics		Primary	Secondary
Total		28	42
Teacher type	Senior leaders*	15	19
	Teachers**	13	23
Stage taught	Early Years Foundation Stage (EYFS)	3	
	KS1	6	
	KS2	13	
	KS3		31
	KS4		35
	KS5		16
Length of time in teaching profession***	Less than 5 years	3	5
	5 or more years	25	36
Secondary only: main subject area taught ³	English		5
	Mathematics		4
	Science		6
	Humanities (history and geography)		10
	Modern foreign languages (MFL)		2
	Other (e.g. arts/PE/computing)		13

*of which 9 also had teaching responsibilities

** of which 8 were middle leaders in primary schools and 22 were middle leaders in secondary schools

***one respondent from a secondary school did not provide this information

³ Note that several respondents taught more than one subject or were able to provide feedback across a range of subjects. For example, one Head of Humanities taught citizenship and ethics. For the purposes of the sample breakdown they are counted under 'other', as per their main subject taught. However, they were also able to offer feedback relating to humanities subjects. Likewise, in some schools MFL subjects were in the same department as 'humanities' (and therefore a Head of Humanities was also able to provide feedback relating to MFL). Two secondary school SLT members did not have current teaching responsibilities and therefore their subject was not recorded in Table 2.

1.5 Methodological considerations

The research faced a number of challenges, particularly in recruitment, which had implications for the final sample:

- **Timing:** The February half term and Easter holiday periods occurred during the fieldwork period. The Easter holiday period in particular caused challenges due to variations in scheduling across different geographical areas in England (this meant that the holiday period spanned four weeks), and adverse weather conditions meant that many schools were closed for several consecutive days during the fieldwork period. As a result, a number of schools felt they were particularly busy and although they initially agreed to take part in the research, a larger than typical number of respondents either failed to confirm interview times, cancelled, or failed to take part in their booked interviews. Four schools expressed an interest in taking part in the research but were unable to do so within the fieldwork timeframe.
- **Self-selection:** Schools were able to select whether they would like to take part in the research. Schools also nominated or volunteered senior leaders and teachers to take part in the research. Furthermore, the participation rate was far lower than we typically experience. It is therefore possible that the schools and respondents who agreed to take part in the research differ in some way to those who did not - for example, those who feel more confident in terms of accessing and using curriculum resources.
- **Recruitment approach:** The original methodology involved requesting a senior leader and one teacher (primary) or two teachers (secondary) to participate per school. Response to the request was low however, and so to reduce burden and maximise the possible sample size, it was necessary to adapt our recruitment approach, where schools could provide just a senior leader or a teacher to take part.
- **Length of service:** Whilst researchers aimed to speak to teachers with a range of experience, schools often volunteered more experienced teachers, such as Heads of Department or KS. This resulted in a sample that included more teachers who were further into their career, compared to teachers with less than 5 years' experience. Whilst it is difficult to determine the extent to which this affected the overall findings, any notable differences by length of service have been highlighted in the report where found.

1.6 Notes on reading this report

- This research examined curriculum resources as accessed and used by senior leaders and teachers in a range of school settings to support teaching and

learning. For this purpose, 'curriculum resources' were defined as tools that linked directly to curriculum delivery such as: Schemes of work, textbooks, assessment tools, digital resources. Items that were not included in the scope of the research were CPD and training, and physical equipment such as computer hardware and mobile devices. However, where the latter were mentioned by individuals taking part in the interviews as having an impact on the use of curriculum resources, this has been noted in the report.

- Throughout the report, 'schools' refers to LA maintained schools and academies (including those in MATs) unless stated otherwise.
- The findings present a 'snapshot' view of the ways in which senior leaders and teachers access and use curriculum resources. They do not explore how this use changes over time, but where changes are made (e.g. during review of resource use) any reasons given for this have been noted in the report.
- Throughout, where resources are referred to as being 'tailored' this refers to meeting individual pupil need. However, where respondents spoke about making changes to resources, for example, to suit teaching styles or lesson content, this is referred to as 'adapting' resources.

2. School policy and approaches to accessing and developing curriculum resources

This chapter provides an overview of senior leaders' policies and approaches to accessing and developing curriculum resources. The first section provides a broad overview of how schools approach curriculum planning, and then discusses how they access and develop resources for individual lessons. It also explores how teacher workload⁴ is managed through the use of resources.

Key findings

Differences were noted in primary and secondary schools' approaches to curriculum and lesson planning.

Primary

- Curriculum planning would typically take place by year group or key stage (KS). Planning was thematic and linked to the national curriculum.
- Sometimes schools had designated subject leads or 'subject champions' to encourage and monitor depth and breadth of study.
- Approaches to the use of schemes of work was mixed. Primary schools less commonly used schemes of work (compared to secondary schools) as they were perceived to be too rigid or prescriptive, or to stifle the creativity of teachers.
- Where schemes of work were used, they tended to be just for certain subjects and often were part of a subscription service or subject teaching package.
- Individual lesson planning was primarily teacher-led. Some collaboration in lesson planning was evident within the year group for medium-sized and larger schools, or within the KS for smaller schools.
- Primary schools which were part of Multi-Academy Trusts (MATs) tended to plan individually for their own school. Just one of seven MAT schools planned their curriculum in collaboration with the other primary school in their trust. However, sharing of plans and resources was more common.

⁴ Reducing teacher workload is a key policy focus for DfE; for more information on research and actions to tackle teacher workload since 2014, see: <https://www.gov.uk/government/publications/reducing-teachers-workload/reducing-teachers-workload#background>

Secondary

- Curriculum and lesson planning processes were typically led by Heads of Department. The role of senior leaders was generally to oversee the process.
- Schemes of work were developed in-house for every subject or course, often by 'working backwards' from GCSE and A Level examination specifications, in some cases back to Year 7. Individual lesson plans were then developed from the schemes of work.
- Planning tended to be conducted discretely by department, although collaboration between departments was evident in a small number of secondary schools.
- Secondary schools in MATs sometimes collaborated to review or align curriculum plans and develop schemes of work. These plans were then adapted and refined by the individual schools to meet the needs of their own pupils.

Workload management

Schools implemented a number of strategies to manage workload around resources.

- Sharing resources and planning was a common method of managing workload. Resources were typically stored on a shared drive via cloud-based storage.
- Planning and resources were formally reviewed at least annually, although 'ongoing review' each time they were used was deemed to be good practice. Some schools timetabled dedicated time for planning and reviewing resources.
- Teachers noted that using existing curriculum resources did not always reduce their workload, due to the time required to identify, access and tailor resources to need.

2.1 Curriculum planning

It was common for schools to develop formal sequenced plans or frameworks for curriculum delivery ('schemes of work'), either by term, theme, or subject. This planning varied between primary and secondary schools in terms of the timeframes or themes covered, as did collaborative approaches. These differences are discussed in more detail below.

2.1.1 Planning: primary schools

Primary schools' approaches to planning was more mixed (compared to those at secondary level). Schemes of work tended not to be as common as secondary schools,

and instead curriculum delivery would be based on themes, core education objectives and school priorities, and linked to the national curriculum.

'Because reading, vocabulary, cultural literacy, and language are a real issue in this [local area] ...[the teacher] takes a good quality text and for a term the children will be interrogating that text. All of the activities, the learning, all of the knowledge, the skills [from]...other areas of the curriculum [are based around the core text]. For example, one of the books the year threes are doing is looking at volcanoes...[But] everything is very much about enquiry...So, linked to the text we'll have what we call a whole school enquiry question. This term it was 'Where in the world can a book take you?' We leave it quite open ended. Teachers then choose a text which they know would hopefully hook the children and in terms of the curriculum, teachers have got an idea about where they want the learning to go'. (Primary academy – Principal)

In the few primary schools where schemes of work were adopted, these also generally corresponded to the themes or topics to be covered across the school year.

'We tend to work with a creative curriculum, we have themes. We cross-reference this with the national curriculum. This is how we have done the whole of the curriculum map'. (Primary LA maintained school - Headteacher)

Reasons for not creating schemes of work in primary schools included the perception that they were too rigid or prescriptive, or that they stifled the creativity of teachers. Perceived frequent changes to the national curriculum were also mentioned as a reason for not developing schemes of work.

'I'm not a fan of schemes as such. We do a lot of dipping in and out, that way we get the best of everything without having to stick rigidly to a scheme of work that I think ties teachers down too much and loses creativity'. (Primary School - Headteacher)

'We do a two-year curriculum cycle in our school. I don't find that we reuse planning and schemes very often as by the time you have got to the end of the two-year cycle there are usually changes made to the curriculum'. (Primary MAT - Early Years Foundation Stage Teacher)

Planning in primary schools would take place either by year group or KS. Several primary schools had designated subject leads or 'subject champions' to encourage and monitor depth and breadth of study in different subject areas across the school. One school had created what it termed a 'maths hub'. This meant that two teachers were working together to develop schemes of work for maths across the whole school, rather than for

their own year only.⁵ Where this approach by year/KS was not taking place already, it was being considered. For example, one senior leader was looking at the option of creating 'key stage teams' for this purpose.

2.1.2 Planning: secondary schools

In secondary schools, schemes of work were developed for all subjects, typically by year group, and these were used as the basis for lesson planning across the academic year. The mapping process was typically led by Heads of Department. The role of senior leaders was generally to oversee this process, rather than lead it themselves. However, both senior leaders and teachers viewed this plan as a curriculum resource because it provided a strategic overview of the requirements for teaching that needed to be met over a period of time (term/year). Individual lesson plans (see section 2.2) then provided a summary of the day-to-day work with pupils.

This work tended to be carried out discretely by each department. In a small number of secondary schools, collaboration also occurred between departments.

'For example, I link with our Head of History as our Head of Faculty and he is working with the Faculty lead in English, to make sure that when we are doing World War One, they are doing Wilfred Owen. It makes all of those collaborative things easier because you can see the bigger picture of the school'. (Secondary academy - Assistant Principal and Director of Humanities)

Some secondary schools described 'working backwards' from GCSE and A Level exam specifications to map the curriculum and schemes of work across all year groups right down to Year 7. This was based on the view that Year 7 is the 'first year' of GCSEs and that planning based on exam specifications ensured that pupils were always working towards the objectives and standards required for GCSEs.

Due to recent changes to GCSE specifications and grading system,⁶ a small number of secondary schools had re-worked their curriculum mapping and planning across all year groups to match the new 9 to 1 GCSE grading system.

'A lot of their mapping and planning has been to do with looking at the end point with the GCSE levels and ultimately what does that '9', that '8', that '7' look like. Then mapping that right back in terms of, what will progression look like in terms of a Year 7 compared to a Year 11, so that these students are sufficiently

⁵ This 'Maths Hub' had been set up within the school, and was not part of the national programme run by the Department for Education (DfE), the National College for Teaching and Leadership (NCTL), and the National Centre for Excellence in the Teaching of Mathematics (NCETM): <http://www.mathshubs.org.uk/>

⁶ Information about the new GCSE grades for parents can be found at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/706497/Parent_factsheet_FINAL_.pdf

challenged and prepared to access their target grades on the new GCSEs'.
(Secondary LA maintained school - Headteacher).

2.1.3 Collaborative approaches to planning

The curriculum planning process was broadly similar in schools that were part of Multi-Academy Trusts (MATs) compared to LA maintained schools, as they still tended to plan individually for their own school. Only one MAT primary school senior leader said their school planned their curriculum in collaboration with the other primary school in their trust.

'We develop out our curriculum map and a long-term plan working with the other school across the trust, and the Curriculum and Learning Director then develops a medium-term plan, from where we plan all the resources'. (Primary academy - Assistant Headteacher)

Collaboration in curriculum planning between secondary academies in MATs was more mixed. MAT secondary academies sometimes collaborated; with senior leaders in charge of curriculum and faculty, or subject heads of department from across the MAT working together to review or align curriculum plans and develop schemes of work. These plans were then tailored and refined by the individual schools to meet the needs of their pupils. Collaborative planning was seen to provide advantages in terms of workload reduction, sharing expertise and resources and allowing comparisons to be made in performance and assessment between schools.

'As part of the MAT, a couple of years ago we took some steps to try and align some of those curriculums across the key stage 3 and 4 across the academies. With the idea of reducing workloads and with the idea of getting all of the heads of English into a room together and over a couple of days, produce a really fantastic key stage 3 curriculum, for example. Then the off shoot of that is that you are able to compare assessments and share resources and do that at a MAT level as well. We are quite far down the road with that, although there are some changes and tweaks that need to be made'. (Secondary MAT - Assistant Principal and KS3-5 teacher of computing)

In other MAT secondary schools, curriculum planning tasks (e.g. developing schemes of work) were allocated to staff across the schools and then shared back with all schools. Where MAT schools were not working together during planning, individually developed resources were still shared with other schools in the trust.

2.2 Individual lesson planning and resources

In terms of using resources specifically for planning individual lessons, several primary schools reported drawing on subscription services to help planning for certain subjects, most commonly mathematics, but English (including phonics), French and physical education (PE) were also mentioned. These subscriptions often provided schemes of work, lesson plans and other lesson resources for schools to use. However, there were clear differences in the policies for accessing and developing resources for individual lessons for primary schools compared to secondary schools.

In primary schools, teachers tended to access and develop resources for individual lessons independently, whilst sometimes it was overseen by senior leadership, heads of year/key stages, or subject leads/expert practitioners. Lessons and resources were based on and planned around the overall school curriculum plan, framework, or scheme of work, where used.

'Planning of lessons is teacher-led. We don't have a policy that says they have to follow with a scheme of work, just as long as it follows the curriculum'. (Primary academy - Assistant Headteacher and KS2 teacher)

In most primary schools, lesson and resource planning was conducted by teachers individually, or it was overseen by a curriculum co-ordinator or subject leaders. Less commonly, teachers collaborated to develop lesson plans and agree resources. In medium-sized and larger schools with multiple form entry,⁷ teachers would work in year group teams, whereas in smaller schools, collaboration would be between teachers in the same KS.

'Teachers work in teams for each year group, working alongside each other overseen by an assistant head to make sure the resources are of a high quality and meet the needs of the children they are teaching, and that is adapted every year'. (Primary academy - Assistant Headteacher)

Irrespective of whether teachers planned lessons individually or collaboratively, sharing of lesson resources was common, and encouraged, across all primary schools. Schools in MATs also shared resources with other schools in their trust often, or less commonly with other schools in local area partnerships or networks.

In secondary schools, there was mixed responsibility for accessing and developing resources for individual lessons. Most commonly, responsibility lay primarily with the heads of department, who were often described as having a high degree of 'autonomy' to develop the plans and resources they needed. Heads of Department worked with staff in their teams to develop lesson plans, and access and review lesson resources, often

⁷ Multiple form entry refers to schools that admit more than one class per year group.

through collaborative work, by sharing tasks across the team. Individual teachers or small groups took responsibility for planning and resourcing specific lessons, topics or terms.

'In all departments we work collaboratively, and the school is well structured for the curriculum leads to do this every Wednesday afternoon. They will generate generic resources then all classroom teachers have autonomy to adapt these as long as they are appropriate to meet the needs of the students'. (Secondary LA maintained school - Associate Headteacher and KS3/4 teacher of sciences)

In a minority of schools, the Head of Department or a resources co-ordinator had full responsibility for all lesson resources for their department.

'We have a faculty structure. There are faculty leaders, and members of staff who have specific responsibility for resources. They also manage the faculty planning time'. (Secondary academy - Headteacher)

Where senior leadership were involved, their role tended to be for quality assurance purposes or overseeing budget spend. Approaches to budget management for the purchasing of resources were mixed. In some schools, a budget was allocated to each department and then managed by the Head of the Department (who could then choose what resources to purchase). In other schools, resource budgets were held by the senior leadership team (SLT) and requests to purchase specific resources would be submitted by Heads of Department. In cases where a significant investment was required, or where they were purchased for the whole school, senior leaders would have the final responsibility.

Similar to primary schools, sharing of lesson plans and resources was common across secondary institutions. Resources for individual lessons were shared within faculty or subject teams, ensuring staff had access to the best resources and also to provide an element of standardisation in the teaching of a subject area. Typically, secondary schools had a shared point of access for these resources where all resources could be accessed by all staff. However, only a minority of SLTs mentioned actively encouraging the sharing of resources *between* faculties (i.e. emphasising a whole school approach⁸), to exchange ideas and best practice.

'We have centralised systems for each faculty that are online, where people have access to resources...The very best of lessons are on the central base, which teachers can adapt to their classes'. (Secondary academy - Assistant Headteacher and KS3 teacher of RE)

'We do encourage collaborative planning as much as we can. Then you get fresh ideas. So, as well as our schemes of work, if someone has a good idea for a

⁸ 'Whole school approach' refers to practices or systems adopted by all staff across the same school.

*lesson, we put it on the central database so that everyone can see it and share it'.
(Secondary academy - Assistant Principal and Director of Humanities)*

Respondents commonly stated that they reviewed resources on an annual basis; however, several suggested that it was good practice to ensure that resources were under 'ongoing review' and reflection. In one school this included evaluating resources as part of termly staff meetings and reflection, during which teachers would add notes and ideas on the resources to files (including how they had been used and where a particular approach had worked well). Building in this continual evaluation cycle of resources to delivery was felt to ease the subsequent planning for the next academic year. Smaller numbers (in secondary schools) noted that the frequency of review was decided upon on a Faculty/Department basis.

2.3 Managing workload

In relation to managing the workload specifically associated with accessing and developing curriculum resources, interview respondents most commonly noted that they would collaborate with other staff to share the tasks required (searching for and identifying resources relevant to specific topics/lessons, evaluating them for relevance and suitability, tailoring resources to meet a range of pupil needs and to reflect the school context). Indeed, senior leaders generally believed that it was important for staff to work collaboratively to reduce workload and improve the quality of curriculum resources.

'The biggest impact on workload is planning collaboratively. You can access quick resources, but, is it giving you the impact you need for your setting? It's about schools giving teachers time to evaluate and adapt resources to their setting. There are lots of things out there, 5 minute lesson plans etc, but that doesn't suit everybody, they still need to be adapted in some way'. (Secondary academy – Headteacher and teacher of KS3–5 dance)

Strategies for collaborative working ranged from staff formally working together in teams on curriculum and resource planning and development, to staff talking and sharing ideas and resources they had accessed themselves (e.g. during breaks or staff briefings). Sharing out tasks within teams or departments was also common, particularly in secondary schools, as this enabled a distribution of workload across staff, and a reduction in duplication of effort. This included examples where schools encouraged staff in different departments, year groups or subject areas to work together and schools which were part of MATs would collaborate, split tasks and share resources and ideas.

'One of the...things that we do is every week, the lead practitioner emails out his top five resources that he has come across that week. We are

always looking for new things. We have this on our staff website, so staff can access it all the time. Twice a half term we have a [departmental] CPD meeting where we look at planning and resources. It's always on the forefront of our agenda really. That's something that has been new to the academy this academic year and it has been amazing really. It's made such a difference'. (Secondary academy – teacher of KS3/4 maths)

Resources were often saved on a shared drive, or online using a cloud-based storage service, providing the ability to share and access resources easily from school or for example, from home. A small number of primary schools also mentioned employing support staff with specific responsibilities for supporting teachers with curriculum resourcing tasks, such as photocopying.

It was commonly suggested by teachers that the use of existing resources, including commercial products, did not always reduce their workload, because their time was taken in identifying, accessing and then tailoring resources to need: these activities were reported to add to workload.

'The commercial products are not necessarily the way forward in terms of reducing workload. If there was one database, with all schools' resources on, that schools are willing to share with one another; that would be a tremendous tool'. (Secondary academy - Headteacher)

The internet was regarded as a helpful general resource for locating video clips, subject-specific information and activities to support individual lessons. General internet searches and social media feeds were felt to save time and reduce the workload involved in accessing and creating resources. Resources that provide a 'starting point', with examples of questioning and activities to use were also felt to have a positive impact on workload, as teachers could then build on these resources during their lessons. Some digital resources were felt to support workload, for example by already being smartboard compatible, or enabling pupils' work to be differentiated and marked by the software itself.

3. Accessing and using curriculum resources

This section of the report summarises the curriculum resources that interview respondents reported commonly accessing and using. This does not focus on findings specific to resources regarded as high quality, but all of those mentioned by teachers and senior leaders during interviews. It includes discussion of the formats used and preferred, and the types of resources used to tailor teaching to meet individual pupil ability/needs ('differentiation'). Respondents also provided feedback on the staff responsible for accessing resources, how this was done, and how easy the process of accessing them was perceived to be.

Note on resource types

The following resources were considered during the interviews, and are referred to throughout the findings:

Online/printed resources: tools such as worksheets, lesson plan templates, videos that can be accessed via websites (either requiring membership/subscription or freely available to download).

Digital resources: mobile applications, software packages and tools that are interactive and can be used for setting and completing tasks (e.g. on a computer/mobile device).

Physical resources: predominantly textbooks and literary texts/library books, and revision guides.

Key findings

Access

- A wide variety of resources were being accessed and used by senior leaders and teachers, for a range of purposes.
- General internet searches were a key means of accessing resources for both primary and secondary schools. Secondary schools also reported that exam boards/awarding organisations were a key source.
- Other common sources included in-house resource banks, subscriptions to specialist resources websites, teacher networks (colleagues/social media/school collaborations/clusters).

- Individual teachers regularly supplemented core or shared resources used across their school or department with resources they identified for themselves.
- Accessing resources did not appear to be a problem. However, it did not always equate to easy access to *high quality* resources. Resources that were used regularly were not always perceived positively, or regarded as easy to use.
- Challenges were also reported in identifying and finding specific types of resources, particularly for non-core subjects at primary level, key stage 3 (KS3) at secondary level, resources for pupils with English as an additional language (EAL) and those with special educational needs (SEN).

Use

Resources schools most commonly used were:

- Pupil resources: worksheets, apps, physical resources (primary), online/digital resources, textbooks.
- Lesson and curriculum planning resources: lesson plans, exam board specifications and schemes of work (secondary).
- Diagnostic tests/assessment tools: specimen papers and exemplar answers (secondary), apps/software/online tools.
- Online resources were noted as 'convenient': easily accessible, easy to tailor, and easy to enable schools to build up a bank of resources in-house.
- Digital resources (software programmes through which pupils could access questions to complete) were used for independent study in class, homework, and assessment of progress, and provided engagement and immediate feedback.
- Most secondary teachers used textbooks as a framework for teaching and planning (rather than working through them systematically during lessons), as they wanted to ensure that all lesson content was linked tightly to exam specifications.
- Practical, hands-on resources were particularly important for primary schools to provide immediate engagement and interaction with a topic, and skills development. In terms of using textbooks or workbooks, primary school teachers generally noted the use of these for numeracy, spelling and grammar exercises. Generally primary school teachers appeared to use downloadable/online worksheets and digital resources rather than physical books.

- Schools often mentioned reducing the number of hard copy worksheets that were used during lessons, primarily due to the cost of printing/copying, but also because they were felt to be less engaging.
- Although 'equipment' was not in the scope of this research, secondary school teachers spoke about the use of interactive whiteboards or 'smartboards' as useful tools for behaviour management and teaching.
- Teachers tailored resources to meet different pupil needs such as higher/lower ability, EAL and SEN, e.g. tailoring online resources or differentiating apps/education packages by level of challenge and teaching style.

3.1 Common channels of access

Interview respondents were asked how they find and access curriculum resources. Nearly all respondents (across the range of school types) said that general internet searches and exam boards/awarding organisations were their key means of accessing resources. Some would go directly to online platforms due to their familiarity, although they did not always like these (see later discussion). Other common responses were:

- Accessing in-house resource banks and/or shared drives in schools
- Subscriptions to specialist resources websites
- Teacher networks including colleagues in school, or those known via social media or through school collaborations/clusters

Sharing of lesson resources was common for both primary and secondary teachers and, as noted in section 2.3, schools usually had a central server or online sharing facility where resources were stored.

'We have all of our resources on a [shared drive] so that you can actually access it. Every test, every audio file, they have all been put on there. Any colleague who wants to get hold of the sound files for any chapter of a textbook can find it. It took a lot of time and organisation, but it's worth it as it makes life easy afterwards'. (Secondary academy – Head of Modern Foreign Languages (MFL) and teacher of KS3/4 MFL)

In addition, individual teachers noted that they would regularly access publicly accessible social media groups and accounts to keep up-to-date with new resources, and ask for advice on which resources were high quality (for more detail on assessing quality and effectiveness of resources, see section 4). These accounts or groups were reported to be managed, or contributed to by other teachers, thereby creating an informal professional network.

Individual teachers reported that they regularly supplemented any core or shared resources with those they identified for themselves. This was primarily to help them differentiate or adapt lessons to their pupils and style of teaching, to keep their resources up-to-date and provide new ideas.

'Different members of staff take on responsibility for resourcing [schemes of work] and providing the core resources. Within that, each member of faculty differentiates to take account of ability of the group. We have [central shared drives] and more and more we are putting everything onto [these], so that over time we are building up a fully differentiated, resourced scheme of work for each unit. We are quite a motivated team, so people do tend to do things in their own time as well'. (Secondary LA maintained school - Head of English and teacher of KS3/4 English)

In terms of keeping up-to-date with new resources, some senior leadership team (SLT) members noted that early career teachers were more likely to find resources quickly and stay in touch with the latest tools available (for example through their more common use of social media accounts). They then cascade this knowledge to colleagues in school.

'NQTs ... will have more up to date knowledge...[and] would know what is new in the curriculum and what new resources are out there. I see them as coming in to teach me what they have learnt, they know how to access different resources and are more up to date on teaching methods'. (Primary LA maintained school - Assistant Headteacher and teacher of KS2)

Indeed, just one of the early career teachers interviewed (all within their first two years of qualifying) said that they had found it difficult to access resources.

'I don't find it easy to find what I want. You have to do quite a bit of trawling around. There's quite a bit of trial and error. You look at something and think 'is this actually what I want?' There's something in there that wasn't on their description that doesn't suit your children and what they are learning'. (Primary academy – teacher of KS2)

3.2 Ease of access

Accessing resources appeared to be fairly straightforward for most teachers and senior leaders interviewed, although some mentioned technical difficulties due to ICT infrastructure issues (e.g. downloading material from online sources can be problematic for school firewalls). The availability of resources online and via social media was felt to make access easier for teachers, as resources could be quickly found through these channels.

Although accessing resources did not appear to be a problem, there were challenges reported in terms of identifying and finding specific types of resources, for example those related to particular topics and subjects. Finding resources for core subjects such as English and mathematics was perceived to be easy for both primary and secondary respondents. Subjects for which teachers reported difficulty in accessing resources were: history, geography, drama, design and technology, and PE. This was perceived to be due to a general lack of resources for these areas, but also resources not being up-to-date. Finding resources for KS3 in general was also mentioned as being more difficult than other key stages (for more detail on gaps in resources, see section 5).

It was also commonly noted by respondents that easy access to resources did not necessarily equate to being able to easily access *high quality* resources (for discussion on effectiveness and quality of resources, see section 4).

3.3 Commonly used resources

In terms of the type of resources that they use, it was clear that senior leaders and teachers in primary and secondary schools were accessing a wide range of resources. This variation tended to correlate with the reason for use, with senior leaders and teachers stating that they commonly draw on five types of resources that related to different aspects of curriculum delivery (Table 3). The Appendix to this report contains a full list of specific named resources mentioned during the interviews, a description of each, and the number of respondents that reported using each.

Table 3: Types of resource and how they are used

Resource type	Examples of resources	How used
Pupil resources	These include all materials used in lessons and for setting homework/independent study projects. Examples include: textbooks, other reference books, worksheets, online resources, apps, physical resources (particularly in primary schools, or science/technology/arts lessons at secondary level).	Textbooks were generally used for reference and planning purposes. In some secondary subjects such as English or humanities, most pupils would have their own individual copy for reference and revision, rather than core teaching in class. The latter would be supported through the use of worksheets, software (such as apps), and physical resources/hardware (such as interactive whiteboards). Digital resources were often used by teachers to set homework/independent study tasks.

Resource type	Examples of resources	How used
Exam board/awarding body resources	Tools to support planning activity tended to include information from exam boards/awarding organisations (e.g. specification material and guidance/syllabus).	Curriculum resources were not just regarded as tools for pupil support, but also for lesson and curriculum planning. This was particularly the case for resources from exam boards/awarding organisations. These would be regarded as expensive but important by SLTs, and thus schools often bought them in small numbers and teachers would refer to them during planning sessions to ensure coverage of content, skills development and depth of understanding.
Diagnostic tests/assessment tools	These cover a range of resource types including test questions/papers, exemplars, tracking/monitoring progress and specialist apps or software used to support individual needs.	Teachers regarded specimen papers/model answers to be very important tools in supporting pupils' preparations for exams. More broadly, apps and software that set independent study tasks could be used to track progress and tailor study, so that individual pupils could practice specific skills/knowledge. Specialist software was also employed to support pupils with special educational needs (SEN) and English as an additional language (EAL).
Schemes of work	Generally developed in-house or shared across MAT schools/ collaborative partners. This included tools such as curriculum and individual lesson plans.	These were used to support planning, to ensure coverage of curriculum content and to help to smooth pupil transition between key stages (i.e. by tracking content, approaches and concepts across the key stages so that pupils develop familiarity with these early on and build on them).

Resource type	Examples of resources	How used
Teacher guides	Either subject knowledge or pedagogy guides.	As with tools for supporting lesson and curriculum planning, these tools were not regarded as ‘pupil’ resources as such, but those that supported teachers to develop their delivery of the curriculum, pedagogical approaches and current evidence-based research into the most effective methods for teaching different subjects, and tailoring content according to the needs/ability of individual pupils. Teachers commonly appreciated ideas on pedagogy where they were not subject specialists.

Individual lesson resources were often accessed, tailored, or created by individual teachers. Where they had access to resources through a shared drive, as noted elsewhere in this report, teachers recognised the need to tailor worksheets, and activities in textbooks and other resources to suit teaching styles and individual pupil needs.

3.3.1 Use versus perceptions

It should be noted that regular use of specific resources did not always equate to individuals actually liking that resource or finding it easy to use. This was most common with one particular online source of downloadable materials; although it was fairly common for respondents to report accessing this resource, opinion of the resource from those who used it was split. In rare cases, respondents had stopped accessing it altogether. For example, teachers commented that they found the quality or accuracy of resources accessed through the website to be variable and were concerned that it was not possible to preview or read reviews of paid-for resources until they had been purchased. Although some found it difficult to search for relevant resources via the online system, several said that they continued to use it because it was the most central source and they appreciated the rating system provided as a guide for identifying useful material.

Often, secondary Heads of Department reported that they would be using subscription services because they find specific elements of them useful (e.g. teacher guides). They reported that if a subscription was ended, the school lost access to the useful elements and so they would continue to subscribe to and access the resource even though it was felt to be less cost-efficient as a result. This suggests a need for subscriptions that offer a range of access options. Sometimes, senior leaders noted that they would not stop using

a resource in school until a replacement had been identified; therefore, this meant that less-liked resources would continue to be accessed whilst schools were actively looking to change them (for discussion on resource quality and judgements on effectiveness, see section 5).

3.4 Preferred formats

A range of resource formats were preferred by teachers and senior leaders, although preferences varied by phase, and by subject within secondary schools. These included the online, digital and physical resources as outlined in the introduction to this section.

3.4.1 Online resources

Teachers from both primary and secondary schools noted that online resources are 'convenient' as they are accessible, easy to tailor, and enable schools to build up a bank of resources in-house. A common point raised by both primary and secondary school teachers, and SLT members, was that schools were reducing the number of hard copy worksheets that were used during lessons. This was primarily to reduce the cost of printing/copying, to ensure that resources remained motivating for pupils (using worksheets regularly was felt to be a less engaging approach).

Early career teachers mentioned creating their own resources using formats such as presentation slides, making games, puzzles, and other interactive activities to engage pupils. They liked to share ideas for these, for example through networks of teachers with whom they had completed their initial teacher training, or who they connected with via social media. An MFL secondary teacher reported that audio-visual resources sometimes seemed dated, so they were creating their own transcripts from clips of recent films to help pupils to develop their vocabulary and pronunciation, using formats that they would recognise and readily engage with.

3.4.2 Digital resources

Across primary and secondary schools, digital resources tended to be used for setting independent study tasks to be completed in class or as part of homework. These were software programmes through which pupils could access questions to complete, for example for practicing mathematical concepts.

In primary schools, apps on mobile devices were used directly in schools, particularly at KS1. This was said to be useful for phonics teaching and for pupils with special educational needs (SEN):

'From a SEN point of view, we work a lot from the [tablets]. I have a [pupil] who cannot use a pen or pencil [due to a disability] so he uses an app...that

suits his needs. He can drag words in from different places. This also works well for children with English as a second language because it will read what they have written'. (Primary LA maintained school – SEN co-ordinator and KS2 lead)

A small number of teachers (across both phases) noted caution around using digital resources, particularly for setting homework activities, where there may be pupils unable to access the required technology, or where teachers felt that they could not control the level of challenge/content sufficiently to suit pupil needs.

3.4.3 Physical resources

Respondents from primary schools noted that the schools maintain a range of hard copy library books (fiction and non-fiction) that were used particularly for literacy and reading, and which had been collated over several years.

'We use banks of texts that we have collected over the years and then rotate those around our classes'. (Primary academy – English lead and teacher of KS2)

In terms of using textbooks or workbooks, primary school teachers generally noted the use of these for numeracy, spelling, and grammar exercises. However, generally primary school teachers appeared to use downloadable/online worksheets and digital resources rather than physical books.

'The explosion of the internet and [video sharing sites] and [mobile devices has] revolutionised the instant access to record and upload. For me I would say because of this cultural change, I buy way less books now than before [to help with planning and lessons]. I buy them out of my own pocket if I do buy them, because I want to keep them to help me make my own resources'. (Primary academy – teacher of KS1/2 music)

In secondary schools, textbooks were felt to be important for planning lesson content at KS3/4, and were mentioned by teachers in music, MFL, geography, history and religious education (RE). Science and maths teachers in secondary schools referred less commonly to the use of textbooks. Most secondary teachers used textbooks as a framework for teaching and planning (rather than working through them systematically during lessons), as they wanted to ensure that all lesson content was linked tightly to exam specifications.

'We've got some...textbooks and we get snippets out of things and points that we think are valid and we make our own [resources and lesson plans] from that as we want to tailor it for our [pupils]'. (Secondary LA maintained school – Head of Music)

'Whilst the text book informs all of my planning, I rarely have them out in lesson. I might refer to them for a ten-minute chunk of time if there've got a good activity in them or something like that'. (Secondary MAT – Head of Humanities and teacher of KS3–5 citizenship)

Some teachers also distributed copies so that pupils had a reference tool during independent study. For example, a KS3/4 science teacher in a secondary LA maintained school noted that textbooks were used to 'supplement' the worksheets and practical lessons planned by teachers. An MFL secondary teacher said that each pupil had their own textbook, which included vocabulary lists. However, separate tasks (e.g. worksheets) were set to engage pupils during class time rather than asking them to work through the textbook, which was felt to be less motivating.

An MFL teacher and a science teacher both mentioned that the school had subscribed to e-textbooks. For languages, this included sound files so that pupils could interact with the book and listen to the language being spoken; in science, digital books were perceived to be more cost-effective as a large number of pupils could access them concurrently, they were useful in practical lessons, and they were more likely to be up-to-date.

Literary texts were important for secondary school English. A secondary English teacher said that they requested pupils to have the same copy of the literary text being studied at KS4 as this supported lessons and discussions. The school requested that pupils purchase their own texts, except for disadvantaged pupils for whom the school would purchase copies. A Head of English in a secondary academy noted that all lesson delivery was based around the novels being covered by pupils (all key stages).

Across schools more broadly, however, it was noted that textbooks may be less current than other (digital) resources, and the cost of purchasing updated textbooks was perceived to be prohibitive for some.

A small number of teachers, in design and technology, English, and humanities (geography and history), felt that textbooks were more appropriate for higher ability pupils, or for those studying at KS5 (as other resources such as worksheets were felt to be more adaptable at KS3/4).

'We never use textbooks in the English Department...Textbooks aren't very easy to use for lower ability groups. It's one of the reasons why we don't use them. I think they can be really difficult to access. Sometimes the organisation of them. The reading level of them... We do have inspection copies that we may [draw] ideas from. But we're not a textbook based department'. (Secondary LA maintained school – Head of English)

One type of curriculum resource that appeared to be specific to primary schools was practical/hands-on, tactile resources such as building blocks, 3D shapes, and

construction toys. These were felt to be useful both by teachers and SLT members to provide immediate engagement and interaction with a topic among pupils, as well as skills development. In addition, primary school teachers mentioned arranging trips and interactive activities to spark interest and enable pupils to connect directly with a theme or topic.

Although 'equipment' was not in the overall scope of this research, it is worth noting that secondary school teachers commonly spoke about the use of interactive whiteboards or 'smartboards' as useful resources. They suggested, for example, that these were useful both for behaviour management as well as teaching. This was because they were reported to keep pupils engaged whilst also enabling teachers to bring together approaches into one place (i.e. audio, visual and textual resources). Secondary school teachers and SLT members reported that digital resources such as apps were useful as they provided 'immediate feedback' to pupils, and young people engaged with them. Thus, digital resources were perceived by respondents to be 'a bit more exciting' for pupils.

3.5 Tailoring resources to meet pupil need

When tailoring resources to ensure they were suitable for different groups of pupils, teachers (across both phases) commonly reported that:

- **Online resources could be tailored and adapted to need most effectively.** For example, from Early Years through to KS2, the vocabulary, level of numeracy challenge, or length of texts to read from activity sheets could be amended. For KS3/4, resources were amended to reflect individual progress and targets. It was important in secondary schools particularly that although approaches and resources could be tailored by teachers for different classes, the content remained consistent across cohorts, and in line with syllabus and curriculum requirements.
- **Digital resources such as apps and educational packages/software could be differentiated by teaching style, as well as by level of challenge for pupils.** For example, teachers reported that the settings of digital resources could be changed so that pupils accessed tasks that were appropriate to their own needs and stages of understanding/development. These appeared to be particularly useful for subjects such as English at secondary level.

'The apps have different access points depending on what their grades are. One app... the [pupils] have a different log-in depending on their target grades. This is set up by the teacher which involves a lot of work initially but once it is set up it works really well'. (Secondary LA maintained school – Senior Assistant Headteacher and teacher of KS4 English)

'It's like a [presentation] sharing tool. You load [the resource] on your staff computer. It flashes up a code on the whiteboard and then the students all have their own gadget; we have [tablet devices] in school, so the kids access the code and then they work their way through the [presentation slides]. You can either do it teacher led, so that they don't control the speed at which they work through the activities. Or you can do it student led, here they can flit backwards and forwards'. (Secondary LA maintained school – Head of English and teacher of KS3/4 English)

Most teachers suggested that they would select the format of resources to tailor by pupil need, particularly for pupils with SEN or EAL.

'We might have to change the font size for those with a visual impairment, for those with handwriting problems we use large paper - we print [resources] off rather than project, and give them worksheets to write on rather than sharing. The higher ability [cohorts] cope better with [engaging with resources via] the Smartboard'. (Secondary MAT - Curriculum Leader for Maths and teacher of KS3–5 maths)

Visual resources were noted by most interview respondents to be useful for a wide range of pupils and subjects, for example as prompts for younger or lower ability pupils, for those with EAL. A small number of teachers mentioned using physical resources such as puppets for pupils who did not like to speak out in class.

The work required to set up digital resources (apps and software programmes) was noted by all to be time-consuming. This generally related to the initial work needed to set up apps and other software (e.g. setting work tasks for each individual pupil specific to their need), training teachers on how to use more complex programmes, tailoring content to individual pupil targets, or finding different formats to meet different needs. This was all initially perceived to be time-consuming, but once set up teachers felt that they could tailor teaching more than they felt was possible to by using textbooks or resources produced by exam boards/awarding organisations. Sometimes teachers noted that they felt the latter did not provide enough in terms of meeting individual needs and challenging pupils.

'The differentiation is a problem. I don't think that it's something the people who are writing the resources necessarily consider'. (Secondary LA maintained school – Head of Music and teacher of KS3 music)

Respondents across phases were able to identify a range of methods that they used to tailor resources for low and middle achievers (e.g. peer study, interactive activities, simplifying language, exercises to develop basic skills and factual recall, and

'scaffolding'). They also commonly noted tailoring resources to support pupils with SEN and EAL.

However, tailoring resources to provide challenge for high achievers was much less commonly talked about by teachers, especially at secondary level. They were aware that they needed to 'provide challenge' but provided much less detail in terms of how this was achieved. At KS4, this appeared to reflect a more general comment emerging from the discussions that the change to the 9 – 1 grading system meant that it was currently difficult to assess what 'challenge' at the higher end looked like, for example in terms of what knowledge and skills were needed. In KS3, teachers wanted more ideas and resources to help them to stretch pupils with 'above expected progress' in particular.

A small number of examples of tailoring resources to provide challenge were identified. For example, to challenge pupils at KS4, a teacher noted that they used KS5 resources that the school had accumulated over time but may not be using for current specifications. These resources provided additional reading on topics being covered at KS4. Where teachers did talk about challenging higher ability cohorts, this tended to be achieved through additional reading and text-based work rather than digital resources.

4. Effectiveness and quality

This section examines how interview respondents defined and perceived the effectiveness and quality of resources, and the ways in which this was applied to the resources they access and use. To gather these perceptions, senior leaders and teachers were asked to describe how they knew which resources were high quality, the features that they looked for in 'high quality' resources, and how often resources were reviewed in order to ensure they remained relevant and up-to-date.

Key findings

- Common approaches to judging the quality of resources were listening to recommendations of peers, drawing on professional experience and that of senior colleagues, sampling and trialling resources and measuring outcomes/impact for pupils.
- Secondary school teachers in particular trusted materials produced by exam boards/awarding organisations or professional bodies/associations.
- Social media was noted as an increasingly important channel for sharing ideas, keeping up-to-date with new resources and gathering peer advice.
- Key features that teachers and senior leaders looked for in high quality resources were: adaptability, cost-effectiveness, visual engagement, and being written by peers/practitioners. It was perceived that high quality resources should also align with national curriculum objectives and encourage enquiry-based studying and independent thinking.
- However, they commonly reported that a lot of the resources currently available do not meet all the criteria for being high quality and 'knowledge rich', due, in part to recent exam specification changes (particularly GCSEs). It was felt this may improve over time.
- It was also commonly noted that secondary resources do not always encourage 'deep learning' or provide sufficient stretch/challenge. As such, teachers and senior leaders felt it important to combine sources to ensure they were high quality.
- The highest quality resources were often perceived to be those developed in-house, as they were developed by peers, informed by current practice and took account of school setting and pupil needs.

4.1 Judging quality

Interview respondents were asked how they knew which resources were of high quality.

The majority said that they would **act on the recommendations of others** - particularly other teachers. This included colleagues in-school or across collaborations, as well as those that they connected with through social media platforms and when attending conferences and exhibitions.

'I think if you have that level of recognition from lots of teachers, it's [going to be] a useful resource'. (Secondary academy – Principal and teacher of key stage 3 and 4 (KS3/4) dance and drama)

Social media platforms were reported to be becoming an increasingly powerful, effective, and immediate form of sharing ideas, gathering feedback on pedagogical approaches, collaborative resource development/drafting, and offering advice and support to peers. Teachers reported appreciating social media forums for the discussions taking place among other practitioners, and being able to connect quickly with others who could share experiences and practice.

Other common approaches to judging whether resources were of high quality were:

- **Professional experience of senior teachers:** some senior leadership team (SLT) members felt that this was an area where they could provide support for less experienced teachers. Whereas newly qualified teachers (NQTs)/early career teachers may locate new resources, SLT felt they were able to provide support and mentoring in terms of reviewing resources and judging whether they were of high quality. This was particularly the case for resources accessed via a subscription.

'If it was an external resource...a senior leader will be expected to look at it and see that it is of a high enough quality and would meet the needs of the children and the teachers [before it is accessed]'. (Primary academy - Assistant Headteacher)

- **Samples/trials of resources:** It was commonly noted by teachers and SLTs that directly working with resources could be the most effective way of judging whether an approach is successful. This was often combined with measuring pupil outcomes (described below), as the effectiveness of the trial was often based on whether it supported pupils progress in their development of knowledge, understanding, or skills.

'So if we tried something and it didn't go well, then we will change it next time. Teachers make notes in the theme folders, so if something didn't work one year and they changed it, they will make a note of that and why. So, if the children don't

understand something then it didn't work'. (Primary LA maintained school - Headteacher)

- **Exam boards/associations/awarding organisations:** Early career teachers/NQTs in secondary schools often looked for recommendations by exam boards/awarding organisations. Teachers and SLTs very commonly reported ensuring that anything new produced by exam boards/awarding organisations was reviewed, as this would be important for schools to cover. Although they reported trusting the resources developed by exam boards/awarding organisations and were careful to ensure they had accessed resources relevant to exam specifications, SLT members (secondary level) also said that they were wary about investing in these resources as they did not know how long these would remain up-to-date. They were also perceived to be expensive. As a result, resources from exam boards/awarding organisations tended not to be purchased in bulk, but one copy would be bought to inform planning and the development of other resources to meet needs. In this latter respect, teachers mentioned looking at resources developed by a range of professional associations to inform their development of resources – e.g. the Arts Board, Association for Language Learning, Journal of Chartered College of Teaching, Geographical Association and the Holocaust Education Trust.
- **Outcomes/impact for pupils:** It was important to several respondents that the benefits of new resources were evaluated in terms of the impact on pupil outcomes. This would include for example, tracking data via a new app being used, to evaluate whether pupil scores were improving through use.

4.2 Features of high quality resources

When asked about specific features looked for in high quality resources, teachers commonly noted that these needed to be:

- **Adaptable** to the needs of individual teachers/classes/pupils; this included the need to be 'age appropriate' but with the ability to differentiate tasks to fit the needs of a cohort
- **Cost-effective** - budgetary constraints were often a consideration, and some teachers noted that they used tools that they didn't feel were the best, but that provided the most support relative to the cost
- **Complementary** to national curriculum objectives, particularly encouraging enquiry-based studying and challenging pupils to develop independent thinking
- **Visually engaging** – using imagery, diagrams, colour

- **Written and developed by peers/practitioners** who were still engaged with school settings, and understood changing specifications and the level of detail required for important aspects of resources such as ideas for tailoring them to meet pupil needs/different ability levels

During the discussions, senior leaders and teachers were asked about their experience of 'knowledge rich' resources.⁹ These were defined as resources that met the following criteria:

- Content being sequenced appropriately to build on conceptual understanding
- Content being accurate, and technical vocabulary used with precision
- Providing opportunities to encourage 'deep learning' of materials
- Offering clear guidance for teachers on how to use resources effectively

It was commonly perceived that the resources currently available do not meet all the criteria for being high quality and 'knowledge rich' (as a result they would tailor existing resource, or create their own). This was felt to be due, in part, to changes in the curriculum, particularly for GCSEs, and that over time this may improve as more resources become available after the changes.

Some secondary school respondents felt that many resources do not effectively encourage deep learning/stretch or challenge. Teachers felt it necessary to combine sources to ensure that all the elements of the resources they used were of sufficient quality, and acknowledged that it was difficult for curriculum resources on their own to fulfil the 'challenge' function. Overall, it was felt that there would be a benefit from having more suggested questions, discussion topics, and activities to encourage deeper learning, which teachers could choose from based on the needs of their pupils.

It was emphasised by secondary SLT in particular that it was important to use resources 'in conjunction' with one another – for example, reliance on online software through which maths activities could be set for pupils to complete outside of school was perceived to be an unsuitable approach if it was not possible to tailor tasks appropriately to individual pupil need/ability, or where other resources were not used alongside it.

'There might be some great quality resources out there, but it needs teachers to engage and adapt [them]. Even if teachers did the quality assurance, our teachers would still need to review it for their setting'.
(Secondary academy – Headteacher and teacher of KS3–5 dance)

Respondents in primary schools were concerned that digital resources needed to be efficient in terms of training requirements – if a resource was complex, this required more

⁹ DfE (2017), 'The Importance of Knowledge-Based Education'; <https://www.gov.uk/government/speeches/nick-gibb-the-importance-of-knowledge-based-education>

time for staff training in order to gain the maximum benefit from it and this could create challenges (see section 5 for more detail on challenges to accessing and using resources).

SLT members noted that high quality resources were often tools that had been developed in-house, or in collaboration with other schools as they knew that these had been informed by current practitioners, peers who understood the setting and pupil needs, or were reflecting changes in specifications that they could not find in resources currently available to them. At secondary level this also meant that schools could create resources that established a foundation for content required at KS4 that could be developed at KS3. This was to help embed knowledge and skills to assist with a smooth transition for pupils (and likewise for KS4 to KS5).

Respondents also referred to current journals and magazines that were written by peers/practitioners, and provided a focus on developing specific elements of pedagogy. For primary SLTs, developing resources in-house was perceived to be an effective way to ensure that resources linked to the themed nature of much of the lesson delivery. Cost savings were also a consideration when developing resources in-house.

It was emphasised by a small number of SLT members that resources needed to be engaging for pupils and therefore written in an appropriate language

'[they are] not teacher resources, they are student resources...one of the things less experienced teachers find difficult [is to] translate down'. (Secondary academy – Assistant Principal and teacher of KS3/4 drama)

5. Challenges, gaps, and potential solutions

This section examines the challenges that interview respondents identified when accessing and using curriculum resources, the gaps in current provision, and the suggestions they made for improving the current offer.

Key findings

Challenges

Common challenges to accessing and using curriculum resources were:

- The cost of resources, in particular subscription-based resources and textbooks.
- The time to find, review, and tailor resources due to the high volume of resources available and the variability in quality.
- Finding and identifying appropriate resources was more difficult for teachers who teach subjects they were not specialists in (particularly common in primary schools).

Gaps

A number of specific gaps in resources were identified:

- Resources reflecting new exam specifications and grade boundaries at GCSE level (including assessment materials, specimen papers and exemplar answers for the new GCSE specifications).
- Resources that tailored content to meet different pupil needs/ability levels, particularly stretch/challenge for higher ability, age-appropriate resources for pupils with English as an additional language (EAL), and those tailored for pupils with special educational needs (SEN).
- Progression guidance to support transition between key stages.
- Resources for primary schools in computing, and English (specifically supporting writing, and the use of different genres in writing), geography, history, science, religious education (RE), and French. Resources for teachers in secondary schools who teach a subject they are not specialist in (e.g. humanities, science).
- Resources for key stage 3 (KS3) generally.

Improvements

A number of suggestions were made by senior leaders and teachers for how the accessibility, quality, and nature of curriculum resources could be improved:

- Developing a central database or website where high quality resources could be accessed.
- Reducing the cost of resources. Where resources were chargeable, it was important that schools could view or trial them before purchase. Additional funding for replacing textbooks following curriculum changes would allow secondary schools to update their stocks of textbooks where required.
- Implementing a quality assurance process, whereby resources were reviewed or developed by current educational practitioners (teachers/subject specialists).
- Ensuring resources are adaptable so that teachers were able to tailor them to different pupil needs. More time to review and tailor resources was desired.

5.1 Challenges to accessing and using curriculum resources

5.1.1 The cost of resources

The cost of accessing resources, and limitations of school budgets were perceived as the main challenges which limited access to high quality, 'knowledge rich' resources. This issue was raised by most primary and secondary schools. Respondents reported declining budgets in recent years, which had affected the amount that schools could allocate to resources.

The cost of subscription-based resource services was felt to be a significant barrier, due in part, to perceived high charges, but also because the investment needed to be continued year on year. Textbooks were also seen to require significant investment, and any changes in exam specifications meant that textbooks had to be changed at great cost to schools. In addition, for some schools the cost of resources was perceived to be prohibitive. This meant that schools were unable to renew or replenish physical resources (e.g. textbooks), or invest in technology or software as much as they would like to. In some schools, outdated infrastructure (such as servers and computer hardware) had caused technical issues, leaving staff unable to access resources saved on central servers or via the internet.

The pressure of budgets also meant that choosing the right resources to invest in was a challenge, and a number of schools had invested in resources in the past which had not been fully utilised:

'Of course, funding will always be a challenge. But there is that thing about picking the right one and ensuring you're getting value for money. That you're not just jumping onto the next bandwagon. We have bought resources that people have really wanted, and then after a year they are no longer using them. Because they are too complicated, or that particular member of staff who was really passionate about it has since moved on, so the resource isn't embedded in the whole staff. The challenge is making sure you're buying the right things, and that you are getting value for money out of them'. (Primary LA maintained school - Headteacher)

5.1.2 Time to find, review and tailor resources

The sheer volume of curriculum resources available was commonly identified by primary and most secondary respondents as creating a number of challenges. The time it took to search for, and through resources, identify those which were potentially relevant, and review them for quality and suitability was felt to be a key issue for teachers.

'It's the time that's the problem. There's a ... lot of stuff out there. The problem is that I can spend a lot of time on my [tablet] in the evening looking for it and falling down that rabbit hole. I can get very distracted and spend an inordinate amount of time outside of school enhancing what I deliver'. (Primary academy – Arts Lead and teacher of KS1/2 music)

Respondents generally felt it was easier to make resources themselves rather than spend an excessive amount of time searching online for resources and then finding that they still had to tailor them to the needs of their pupils.

'When I say sometimes it is [easier] to write it, it's to save the length of time spent searching for it to find it in the first place, then checking it all and adjust it for the specific needs of the children that you are wanting to use it with. Then the scale of our school, having to get however many copies of that, we very often as a school will create our own things'. (Primary Teacher - English lead)

'I think the biggest gap is in training. Having teachers meet somebody who knows the subject area in depth and can train them in what to teach the children and then refer them to resources as well. It's not just the resources that have gaps, there is a gap in training teachers how to use them'. (Primary academy - Headteacher)

5.1.3 Lack of subject knowledge

The need for primary school teachers to teach across a range of subjects was felt to cause difficulties, as teachers did not have the necessary knowledge and understanding to seek out relevant resources effectively. Lack of subject knowledge made it more

difficult for primary school teachers to know where to look for resources, what search terms to use, and how to evaluate the appropriateness and effectiveness of resources for pupils once identified. Gaps in resources presented a significant challenge for teachers in these circumstances. Furthermore, accessing ideas about how to teach different aspects of a subject in which they were not a specialist was felt to be a particular challenge.

'For science I find it really difficult to find good science resources. That's a subject I really struggle with. I think for KS1 science, what you can find is very simple, it's very basic and actually the children think a lot more than that. The ideas for how to teach different aspects of science are what I need. How to make it more interesting. A lot of it is either knowledge or fill in this worksheet'. (Primary LA maintained school – teacher of KS1 and English Lead)

A minority of secondary school teachers expressed similar concerns over accessing resources for subjects in which they are not specialists, for example across science or humanities subjects.

5.2 Key gaps in high quality resources

Whilst senior leaders and teachers typically felt that there were 'plenty' of curriculum resources available, not all were felt to be of high quality, and a number of specific gaps were identified.

5.2.1 Resources reflecting current exam specifications

There was split opinion by secondary school respondents around the availability of up-to-date resources. Some felt there was a significant delay in updated resources becoming available after any changes to GCSE examination specifications. A significant time lag was perceived between the introduction of new specifications, and of materials to support teachers in delivering them. It was suggested that resources should be released well in advance of new specifications, to allow teachers the time to plan effectively.

'The writing of resources and approval needs to be included in the timeframe when people are writing new specifications. Otherwise we're starting the course where the textbook [was produced] in June and we're teaching it in September. That's an awful lot of reliance that you're going to be spending a lot of your summer holiday writing and planning for it. I work well with my colleague but there was no time to discuss things and get everything ready and suitable to go. I hope that won't happen again'. (Secondary LA maintained school - Head of Music and teacher of KS3 music)

There was a similar issue in secondary schools relating to the lack of exemplar papers and mock assessment materials. The slow speed of release of these materials was perceived to be a considerable issue for current pupils.

'Specimen papers has been an absolute, massive issue. Across most subjects they have only released one specimen paper. We do our GCSE's over three years, so you've got one spec paper and mark scheme to go off... There are more than one assessment point throughout the year, so to have a range of spec papers that you could actually use to inform your data would be really good'. (Secondary MAT – Head of Department for Humanities and Languages and KS3–5 teacher of citizenship)

Teachers and senior leaders commonly felt that 'you can never have enough' of these types of resources and a number would like a greater variety of specimen questions, test papers and exemplar answers to be available. These resources were felt to be extremely valuable for supporting teachers in identifying gaps in pupil knowledge and helping pupils to understand the way in which examination questions should be answered.

'More exam papers. The exam boards give two, [a resource developer] create three more, but then by the time you have used them all, with various year groups there's not enough. Exemplar answers are the big thing. That comes with a grading so helps you to understand the grades. Students work well with a model, even if it is me writing an answer, they love a model answer - not because they want to copy, because they then know how to structure it'. (Secondary academy – Curriculum lead for humanities and KS3–5 teacher of history)

Some teachers suggested that there needed to be more consultation and ongoing communication with examination boards/awarding organisations to ensure that resources for new specifications were fit for purpose and engaging for pupils. Senior leaders and teachers in secondary schools also wanted more resources to support them in understanding how the new assessment grade boundaries would be applied so that they could better gauge pupil performance and predicted grades.

'With the new GCSEs and A levels, not having exam responses or exemplars, we don't have anything to work towards in some cases. When we are entering attainment grades you can't be accurate because we don't know what those grades will look like. That has been a significant issue'. (Secondary LA maintained school – Deputy Headteacher and KS4 teacher of English)

5.2.2 Meeting pupil needs

Whilst teachers and senior leaders acknowledged that it was the role of the teacher to tailor lessons to meet the needs/ability of their pupils, some respondents requested

resources that provided greater support for teachers in this area. In particular, resources for subjects delivered in primary schools other than English and mathematics (e.g. PE and French) were seen to lack support for tailoring lessons according to pupil need ('differentiation').

It was commonly identified by respondents of all types that where they were included, there were three levels of differentiation usually given in resources, and these provided strategies for teaching less able pupils, and stretch and challenge for the more able pupils. However, some teachers suggested that differentiation within the classroom was more nuanced, and five levels of differentiation would make it easier for them to tailor teaching to a greater range of abilities. This was felt to be more important in KS3/4 now that all pupils need to work towards the same examination papers. In particular, poor literacy levels were felt to be having a large impact on some pupils' ability to understand the language being used in GCSE examinations.

It was noted that whilst some resources do attempt to achieve distinct levels of differentiation, in some cases the stretch for higher abilities was insufficient. Furthermore, it was sometimes difficult for teachers to implement sufficient stretch for subjects which were not their specialism, due to their own lack of subject knowledge. It was suggested that tailored resources should offer a range of activities or ways of presenting a task, so that teachers and pupils would have an element of choice.

'I would find it useful if we would have a base level, especially for the GCSE... and then [an example of] something that we could give to the lower students on the same topic and something that we could give to the higher students...Just to give me that guidance'. (Secondary academy – KS3/4 teacher of MFL)

Curriculum resources aimed at pupils with EAL were also identified as a key gap across both primary and secondary phases. Teachers identified a need for more guidance on how to adapt activities for these pupils. Secondary school teachers and SLT members in particular struggled with identifying age appropriate materials targeted to the interests of pupils with EAL, and that aligned with what their peers were studying.

'The big hole in resources I would say are for children that come in new to the country with limited English. We get children starting with literally no English at all. Resources for those students are very poor because they are not pitched at secondary aged students. You're giving them very basic books to read that are pitched for primary aged children, not secondary aged children'. (Secondary MAT – Principal and KS 3/4 teacher of drama)

An increase in the resources tailored for pupils with SEN was also flagged as a need by a small number of secondary teachers. However, this was acknowledged to be a challenging area because pupils with SEN tend to have a variety of very different needs.

As a result, teachers tended to tailor resources to meet the individual needs of each pupil with SEN. However, an increase in the range of resources to support teachers in this would be welcomed.

5.2.3 Progression guidance

More guidance on the progression that pupils should be making at different stages between assessment years was requested by a small number of primary and secondary respondents.

In primary schools, guidance on expectations for Years 2 and 6 were felt to be clear. However, schools felt it would be beneficial to receive greater clarity on the skills pupils should be developing during Years 1, 3, 4 and 5, including specific examples, such as what English texts to teach.

In secondary schools, changes to the GCSE grading system were felt to have impacted upon schools' understanding of pupil progress, and that this had a knock-on effect on mapping the curriculum and progress expected for KS3. However, it was noted that this would improve over time as the new GCSEs became embedded and the understanding of grading filters down to KS3.

5.2.4 Key stage resources

It was perceived by secondary respondents that there was a general lack of resources at KS3. The greater degree of flexibility in the KS3 curriculum was felt to be a main reason for this lack of resource, as well as school budgets prioritising resources for KS4. Consequently, resources designed with progression to GCSEs in mind were often developed by schools in-house, therefore any materials to support this were felt to be beneficial.

Resources aimed at lower ability KS3 pupils, and that were also age appropriate were specifically identified as a gap. Resources used by teachers for this cohort were often originally designed for use with primary school pupils, therefore the language and examples/visuals do not tend to be well targeted to pupils at secondary school.

5.2.5 Subject specific resources

For primary teachers, greater subject specific support was requested as they often have to teach across a range of subjects. Subjects mentioned by two primary teachers were computing, and English (specifically supporting writing, and the use of different genres in writing). Other subjects where greater subject specific support was requested were geography, history, science, religious education (RE), and French (noted by one primary teacher each).

'I think if you do a general search, often it doesn't link you to what you want. For example, I had to help a teacher with geography, they were looking at land use across Britain and the Year 4 teachers were struggling with it. They had to know specifically how land was used for agriculture in different parts of the country. When I [searched] that and typed in primary, I couldn't find anything for primary school children, I could only find documents that were produced for adults.'

(Primary academy - Headteacher)

Subject specific support was also requested by secondary schools, to cover gaps in teacher knowledge, and support them in better understanding the wider context and significance of what they were teaching. It was also felt to be becoming increasingly more common for secondary teachers to teach subjects in which they were not specialists, for example, teaching across science or humanities subjects. Therefore, secondary school teachers noted that more support for those teaching a subject in which they were not a specialist would be welcomed.

One teacher suggested encouraging schools to link closely with universities and teacher training providers, to provide schools with new ideas, help them to keep up-to-date with curriculum changes and to understand the pedagogy behind new materials. Linked to this, a small number of secondary SLT members suggested there was a gap in resources aimed at more experienced teachers.

'I don't feel as though there are as many resources aimed at teachers who have perhaps been teaching ten years or so, looking to refresh. As a professional you don't want to be talked down to, but then again you do need to learn new things. I think that's something where there is a gap'. (Secondary academy - Assistant Principal and Director of Humanities)

Some secondary school humanities teachers felt that there was a gap in high quality, up-to-date resources for subjects such as history and geography, which they felt needed to be 'refreshed' and aligned with current exam board/awarding body specifications. Specifically, multimedia resources such as images, maps, and videos were requested, ideally linked to the curriculum. In contrast, other humanities teachers felt that there were a lot of subject specific resources available online, therefore this suggests that the issue could be related to difficulties in identifying appropriate and up-to-date resources rather than their availability.

5.3 Improving access and availability

Teachers and senior leaders were asked to suggest the types of improvements that could be made in relation to accessing resources. The most common suggestions made

during the interviews centred on reducing the time required to find high quality resources (particularly through the use of a shared database) and reducing the cost of resources.

5.3.1 Shared network or database of resources

A fairly common suggestion of primary and secondary respondents was that a central database or website where high quality resources could be accessed would be useful. Some acknowledged that services such as this do already exist, however the quality of the resources was perceived to be highly variable. It was therefore deemed to be important that any new provision would only provide access to **high quality** resources.

'Having some sort of national network for subject teachers to share resources. They are out there but they are wide and varied...Any regular bulletins maybe, listing some new resources that teachers might find useful. I think the profession would like that'. (Secondary academy – Headteacher and KS3–5 teacher of dance)

Both senior leaders and teachers made suggestions as to the mechanism for this provision, including quality assured, recommended, or educator-developed resources. A feedback mechanism where teachers could comment on the quality of resources, the type of pupils that they worked for and how they had used or adapted them was also mentioned.

'It would help to have a central resource that reviews material so that teachers can pick their own subject and see resources that have been trialled by other people and see the pros and cons'. (Secondary LA maintained school – Associate Headteacher and KS3/4 teacher of sciences)

The ability to search and filter resources by criteria such as KS, year group, subject, topic, learning objectives, and exam board/awarding body was also important, to help teachers to locate specific resources and minimise searching time.

'It would be nice to have some kind of scheme where you have all of your objectives and then a list of all of the resources that would help you support them. Something that's all there and ready for you. An index or a central bank...of all of the resources linked to the objectives. It would save a lot of time spent searching'. (Primary MAT – teacher of Early Years Foundation Stage)

5.3.2 Reducing cost

Reducing the cost of curriculum resources was a common suggestion for improving access, as school budget restrictions often limited the resources that teachers had available to them. Many would like free access to curriculum resources, including

interactive resources which were felt to be very useful but expensive. Where resources were chargeable, it was important that schools were able to view or trial the resources before investing. A one-off charge for access to resources was felt to be financially more viable than the current trend for annual subscription services, although it was also important to respondents that suppliers continue to support and update resources.

For secondary schools, textbooks in particular were seen to be expensive, and one-to-one copies of textbooks were a 'luxury' that many secondary schools could not afford. Furthermore, teachers reported that when any curriculum changes occur, this means that textbooks become out-of-date, reducing their cost effectiveness further: thus schools were moving away from using them. One school was using an online version of a textbook so that hard copies did not need to be purchased, another was asking pupils to purchase textbooks themselves. It was suggested that additional funding should be made available following curriculum changes to allow secondary schools to update their stocks of textbooks where required.

The cost of purchasing and maintaining hardware and infrastructure, such as ICT systems, tablets and other technology was also an issue for some schools. Financial support to help schools to keep up with new technology and techniques was desired.

5.4 Improving the quality and nature of resources

5.4.1 Quality assurance

Whilst most respondents felt that there were a lot of resources available, many had concerns about their quality. Senior leaders and teachers in both primary and secondary schools commonly suggested that this could be improved by a quality assurance process. In particular, respondents felt that resources should be developed or reviewed by experts currently in the education system. Many suggested that teachers would be best placed to do this, because they understand what works in the classroom, and how to implement and tailor resources to meet the varied needs of pupils.

'A bank of resources that have been rated or peer reviewed... If everything is rated by teachers, it means you can better judge the quality'. (Primary academy – KS2 teacher)

'If you felt it came from somewhere which carried weight you would probably be more inclined to look at it.... Maybe something that is... not 'regulated', but some sort of guidance or approval as 'knowledge rich' would be good... Perhaps by teachers, they will know the impact it will have'. (Secondary academy – Headteacher and KS3–5 teacher of dance)

For secondary schools, it was felt that this process should be carried out by specialists in the subject area, to ensure that the resources were up-to-date and based on current teaching methods and knowledge.

'It needs to be a teacher and subject specialist in that area, and they need to be current in that area as it changes a lot'. (Secondary academy – KS3/4 teacher of geography)

It was suggested that this should be a collaborative process to ensure quality, with a number of educators working together to agree on the best resources.

'I feel as though if there could be some kind of quality mark for [a resource] then I would feel happy using it. It could be peer-reviewed, a team of [Heads of Department] could have sat down and said, 'yes, this is a cracking resource, we recommend this'. That would be good'. (Secondary academy - Assistant Principal and Director of Humanities)

For some, quality assurance being provided or facilitated by the Department for Education (DfE) would add extra credence, however, others felt that a quality assurance service should be independent of government. Other suggestions made by smaller numbers of teachers to improve the quality of curriculum resources included:

- Improved proof reading and review of resources to check for errors and quality before publication
- Development of a checklist or set of quality criteria that resources must meet before being published
- Resources developed or approved by other trusted sources, such as examination boards
- Identification of high quality resources being developed by schools in-house
- Resources based on research, and tested to identify impact in the classroom

Attitudes towards examination boards as trusted sources of high quality curriculum resources were mixed. Whilst it was felt that examination boards generally produce accurate resources that are specifically geared towards the examination specification, some respondents felt that they were not sufficiently engaging for pupils. As a result, they were perceived to fall short of the definition of 'high quality' which many teachers expressed.

5.4.2 Tailoring resources

Most respondents in both primary and secondary schools felt strongly that curriculum resources needed to be adaptable. Teachers brought together different resources and

tailored them to their teaching style and to suit the varied needs of pupils, or the context of the school and local area. Based on their experiences of accessing resources as part of lesson planning, teachers felt that tailoring them to meet pupil need was a necessary and unavoidable part of their role.

'When you teach children you have to elicit their prior knowledge and understanding, then you have to fill in the gaps. There is nothing off the shelf that covers everything; it is about staff developing their own material'. (Secondary academy - Deputy Headteacher and KS5 teacher of physics)

'If they were standardised from an external source we wouldn't use them, most are frowned upon because it limits your context, we are semi-rural and very different to a city school, you do need to adapt it'. (Secondary academy - Headteacher)

Concerns were expressed that too much standardisation would also limit teacher and pupil thinking. However, a minority of teachers felt that too much autonomy and adaptability could result in variability in teaching standards, and that some sort of alignment was beneficial for sharing resources, reducing workload and improving outcomes.

'Some people are in favour of complete teacher autonomy. I think that can be dangerous though as well. What we have found in our MAT, is that where we have aligned things, we have for example aligned the English curriculums at key stage 4 around one English exam board across the MAT. Where we have aligned those things, we have been able to share resources and curriculums and have found that we have had greater success in exams than we ever had before'. (Secondary MAT - Assistant Principal and KS3-5 teacher of computing)

5.4.3 Time to review and tailor resources

Some secondary school senior leaders and teachers felt that they needed more time to effectively review and adapt resources to meet the needs of pupils. A minority expressed a desire for more time to develop high quality resources in-house from scratch. However, they were also aware that this time was not easily found in the working day.

'Time is missing. If you spend time looking through resources, it is time not marking or planning, in terms of prioritising that is difficult... More time to find things and then adapt them is needed'. (Secondary MAT – KS3/4 teacher of science)

'If we had more time to think and plan, it would be better, we would feel better, be more efficient, as we would have the time to produce rich and high quality resources'. (Secondary academy - Assistant Headteacher and Director of English)

One secondary school teacher had stopped accessing resources via websites where it was necessary to login first as this was a step that added more time to the process. Another suggested that additional time could come in the form of administrative support to provide assistance in putting resources together. Overall however, respondents reported that they preferred to develop and adapt high quality resources themselves.

6. Conclusions

A wide range of 'curriculum resources' were being used across primary and secondary schools, and for a variety of purposes. Perceptions of what constituted a 'resource' also differed. For example, in secondary schools, physical equipment such as smartboards appeared to be regarded more as a resource to support curriculum delivery than in primary schools. Conversely, respondents in primary schools did not appear to draw on a curriculum map/scheme of work as rigidly as those in secondary schools.

Nonetheless, classroom teachers and senior leaders at primary and secondary schools had searched for, located, and accessed a wide range of curriculum resources, ranging from textbooks to online web-based teaching support services and apps. The extent to which schools invested financially in curriculum resources varied widely, however, where resources were purchased, it was recognised by schools that they had an important role to play in supporting curriculum delivery.

Although a large range of resources were reported to be accessible and available, there was no single resource mentioned by all as being effective or high quality, and each school had its own approach to accessing and using them. Some resources were being used that were not perceived to be the best/most high quality, and were instead used because schools were locked into subscriptions, were considering budgetary constraints, or they had not been able to identify a better alternative.

Some resources were not regarded as 'pupil' resources as such, but those that supported teachers to develop their delivery of the curriculum and pedagogical approaches (e.g. teacher guides, syllabi, journals and articles). This included accessing current evidence-based research into the most effective methods for teaching different subjects, and ideas for tailoring resources to meet individual pupil need/ability. Classroom teachers commonly appreciated ideas on pedagogy where they were delivering subjects in which they did not perceive themselves to be a specialist.

Teachers early in their careers were perceived to find resources quickly and keep updated on new tools that were being produced, particularly through the use of social media platforms, and by gathering feedback and sharing ideas through networks of other teachers; however, some early career teachers did note that they found identifying high quality resources difficult. To support this, it was noted by senior leader team (SLT) members that a mentoring process was required from more senior colleagues to ensure that early career teachers developed professional judgement as to what resources were effective or good quality.

Some common trends emerged throughout the interviews:

- **The development of formal whole-school curriculum plans/schemes of work** was more common among respondents in secondary schools, and tended to be led by Heads of Department for each subject area. In primary schools, planning related more to broad themes to be followed according to year group/key stage (KS). Where they were developed, schemes of work were regarded as being curriculum resources, as they provided a strategic overview of teaching and learning.
- **Individual lesson planning** was undertaken by teachers at both primary and secondary level in order to structure day-to-day delivery, and tailor content to the specific needs of their particular classes.
- **The importance of collaborative working and shared resources** was emphasised by teachers and senior leaders in both primary and secondary schools during all discussions. This included during the development of resources, judging whether resources were high quality, and sharing ideas of how to use resources in different and engaging ways. Many schools reported having internal resource banks on shared drives so that all colleagues could access resources that had been collated over time.
- **There is an increasing prevalence of social media as a means of accessing resources and gathering peer feedback.** This was evident during most of the interviews and appeared to be a particular trend among early career teachers/newly qualified teachers (NQTs) who were using social media forums to share practice, ask for advice, and provide tips on finding and developing resources. It is viewed as a different approach to collaborative working (compared to face-to-face meetings).
- **Resources need to be adaptable to meet the needs of a range of pupils and their ability levels,** across a range of areas. This included: KS3, adding sufficient challenge for high ability pupils, and pupils with English as an additional language (EAL) (or those with lower levels of literacy) in secondary schools, who need to develop basic skills, but would engage better with content/visuals that are more age appropriate than resources designed for primary school pupils. It was important to be able to adapt resources to reflect individual teaching styles and pupil needs, but it was also important that they engaged pupils and motivated them to think independently. Apps and online software were mentioned as useful tools in maintaining pupil engagement through adopting a range of visual, audio and textual aids, and teachers being able to amend settings of these resources to meet the individual progress and targets of each pupil.
- **Textbooks and hard copy resources remain important for providing content, but digital resources are easy to access and often most engaging for pupils to develop skills and understanding.** Textbooks were often used as a framework for lesson planning and as a reference tool for pupils when conducting independent

enquiry. Additional activities were used in classrooms to supplement content in textbooks and add levels of differentiation. Digital resources such as interactive whiteboards were felt to be helpful in promoting positive behaviour; apps could be particularly useful for working with pupils with special educational needs (SEN) and EAL as they provided a lot of visual prompts. It was important however, that teachers kept in mind any pupils that were unable to access digital resources outside of school, and ensure that these groups were not disengaged from independent study as a result

Overall, it was generally accepted that a range of resources, formats and approaches were required to be used in tandem (rather than teachers depending on one type/format) to ensure that curriculum delivery was high quality and met the teaching styles of staff and needs of pupils. Although teachers could access resources easily, these were generally viewed as a starting point; they still needed to be adapted to meet the needs of pupils and the teaching style of that member of staff.

6.1 Points for consideration

The findings of this research indicate that the following points should be considered when developing new resources, or collections/banks of resources:

- **Interview respondents reported that searching for resources for individual lessons, identifying high quality resources, and then tailoring or setting them to meet the individual needs of classes or pupils were all considered time-consuming tasks.** Although there are some resource banks available either online or through subscription services, it was felt that the quality and relevance of these to the current curriculum could be variable. An independent, impartial resource hub may be beneficial in the long-term. This would be a central resource, regularly updated with content linked to the curriculum, and ideally adopting a quality assurance process overseen by current practitioners/educators.
- **In terms of improving or identifying gaps within existing resources, respondents focused on resources to support curriculum delivery more than additional resources to support the development of curriculum/lesson planning.** Where they reported a need for additional resources or could identify areas for resource development, both senior leaders and teachers spoke about curriculum resources for specific subject areas or developing approaches to teaching.
- **A large volume of potentially high quality, differentiated, curriculum-specific resources already exists, which have been created by educators.** Despite the use of the internet by teachers to access and download teaching materials, substantial activity is taking place in schools to create, tailor and differentiate

individual lesson resources for different pupil needs. Schools may purchase specific subscription services, but individual teachers still complement these materials with additional activities to maintain engagement, encourage independent enquiry and challenge pupils at greater depth. Teachers also create additional materials to suit the needs of pupils, offer more age-appropriate content, or to supplement curriculum content in specific subject areas where resources are not perceived to be as easy to locate. Much of this work takes place in collaboration with peers, across KS/year/subject groups and is moderated by current practitioners as a result. The resources, once created, are saved internally through shared drives. Research and evaluation activity to identify these materials, work with schools on sharing them more widely and promoting good practice through case studies and exemplars could provide wider access to these tailored resources.

- **The introduction of a national quality mark for resources would provide some confidence** to teachers and schools more broadly so that resourcing (and therefore budgeting) decisions being made were informed by an additional layer of quality assurance. Likewise, senior leaders suggested that the resources used by schools are evaluated regularly – for example at key data points, and at least annually to identify whether their use is having a positive impact on pupil outcomes and progress (and ensure their cost-effectiveness).
- **High levels of engagement with new resources among early career teachers, and associated mentoring from SLTs in judging their quality, appears to leave a gap in activity among mid-career teachers.** This was highlighted in cases where it was felt that teachers that have been in the profession for around ten years may require CPD or other support to ensure that they keep up-to-date with pedagogical and subject-specific developments (and for staff to be able to use the new resources available to them, particularly software programmes, as a result).
- **Teachers and senior leaders identified a time lag between delivery of new exam and curriculum specifications and the availability of high quality and cost effective resources linked directly to their content.** This suggest there is a need for more resources, particularly for latterly introduced specifications, and a need to ensure that resources are developed so they are rolled out alongside new specifications.
- **Teachers feel a need for more resources to be made available to tailor lessons to a wider range of needs/abilities.** A need for resources to encourage deeper learning and challenge was particularly evident, along with additional resources at KS3, in some specific subjects at primary level, for pupils with SEN and for secondary school pupils with EAL.

Appendix: List of resources used

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
@Schoology	An academic hub for instruction, communication, collaboration, and third-party integration.	1
4Matrix	A software system for the management of school performance data. For use at KS3, 4 and 5. Allows for analyses, comparison, forecast and reporting on the performance of subjects. The progress made by different groups of pupils, the consistency and impact of teaching, and key school performance indicators.	1
Accelerated Reader (by Renaissance)	A learning information system that enables computer-assisted assessment of pupil comprehension of "real" books. A pupil reads a book, takes an online quiz, and gets immediate, regular feedback.	1
Access Maths	A website created to share and store maths resources and maths games for teachers.	1
Access to History	A series of books for pre-university (A-level) pupils. The series is published by Hodder Education.	1
Active Learn - Abacus (by Pearson)	Resources to help plan and structure primary maths teaching. Aided by work books, textbooks, investigations, teaching overviews, yearly overviews, extra lesson suggestions and other tools.	3
ActiveLearn (Pearson's)	Customisable class resources, online homework with a range of hints and learning aids, system to measure progress.	5
ActiveTeach (Pearson's)	Pupil's book pages, full class audio and DVD, printable worksheets and interactive exercises, assessment activities, tests and IWB tools, all on one disk.	2
ActivInspire	Software by Promethean which is a collaborative lesson delivery software for interactive touch boards and whiteboards.	2

¹⁰ Resources mentioned and described by interviewees. Numbers are based on feedback gathered during the qualitative telephone interviews and refers to the number of mentions of particular examples during those interviews.

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Aimhigher West Midlands - My Tutor programme	A widening participation programme. Pupils speak to a tutor online. One to one support. Usually third year university pupils or graduates, to encourage more pupils to go to university.	1
Amazon	To buy new and second-hand books and physical EYFS resources.	4
AQA Exam board	Specifications, online courses and CPD linked to the specifications. Revision guides and all published texts. Specimen exam papers. Teacher Handbook. For planning delivering, assessment and monitoring.	17
Arts Council England	Source of information, advice and guidance re: arts resources, arts learning and education resources, NPO and MPM (National Portfolio Organisations and Major Partner Museums) organisations, etc.	1
ASE (The Association for Science Education).	The ASE is a community of teachers, technicians and other professionals supporting science education. Provides resources, CPD and conferences.	1
Author Jay Raynor	Nonfiction writing / journalism resources.	1
Author Tim Dowling	Nonfiction writing / journalism resources.	1
Barefoot Computing (BT)	Barefoot supports primary educators with the knowledge, skills and resources to teach computer science. Resources aligned to the curriculum. Training, CPD (in-house too), teaching resources and programme of study.	2
BBC	As a source for current information e.g. for geography topics.	7
BBC Bitesize	Learning resources for children, parents and teachers. Videos, audio clips, resources, quizzes, assessments, fact sheets etc are organised by level, subject and topic. Covers KS3 and 4.	5
Big History Project	The Big History Project is a joint effort between teachers, scholars, scientists and their supporters to bring a multi-disciplinary approach to knowledge. Information, galleries, video clips, quizzes etc.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
British Council - Global Learning	Globally themed classroom resources and projects. CPD, International education for teachers (placements etc). School partnerships etc.	1
British Library website	To access resources. Especially for contextual detail.	2
Busy Ant Maths (Collins)	A primary, whole school mathematics course. Includes teachers guide, pupil books, activity books, problem solving and reasoning books, assessment, homework and progress guides, assessment pack and stretch and challenge resources.	1
Canon Press	For example, for literacy heritage texts.	1
Catherine Cheater Schemes of Work For French	Fully resourced scheme of work for primary stage.	1
Charanga	A complete scheme to teach the national curriculum for music. Includes a vast library of songs, topics, instrument courses and creative apps. In-depth support for assessment, SEN and personalised teaching and learning	3
Charities	A source of resources, information and guidance.	1
Chromebooks	A lap top or tablet.	1
City Events	For example, cultural events put on by local city for status/award. One school built its curriculum around this.	1
ClassDojo	A classroom communication app used to share reports between parents and teachers. Teachers track pupil behaviour and upload photos or videos. The gamification style system teaches developmental skills through real-time feedback.	1
ClassroomSecrets	Differentiated primary resources for a variety of subjects. Includes guided reading packs. Variations of question examples that fit in with the 'White Rose Guidance and Examples', to allow pupils to access reasoning and problem-solving.	2
Clicker-7	An app for use with interactive whiteboards. Clicker is a child-friendly writing tool that enables pupils of all abilities to develop their literacy skills. Can be used by SEN pupils who may not have the muscle strength to use a pen or a pencil. Allows text to be dragged in from the internet and create word banks, for example.	2

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Cognitive Ability Test (CAT) at KS 3 led through GL Assessment	Assessment tool.	2
Collins Connect	Digital resources for schools.	1
Collins KS3 Geographical Enquiry	A scheme providing teacher guides and pupil books. Involves critical thinking and discovery through questioning. Assessment and peer assessment opportunities. Case studies and field work resources.	1
Collins Music Express	A complete music scheme for primary school.	1
Collins Revision	KS1 to KS5. Includes Letts Revise books.	1
Complete Mathematics	Support for teaching, including 'Teaching for Mastery' approach, resources, teaching support materials, guidance, homework, assessment, marking and tracking material. Targeted CPD events and face-to-face networking events.	1
Coolgeography	Resources written specifically for the AQA exams. GCSE and A Level.	3
Coordination Group Publications (CGP) for Subject Knowledge Guides	These support the exam boards in all subjects. For planning and delivery and also for assessment.	7
Corbettmaths	Includes free online resources, videos, teacher marking codes, practice papers, conundrums, revision cards, 5-a-day.	5
Cornerstones Education	A group of primary teachers and senior leaders who make a range of creative teaching tools and resources. Schools are helped to deliver a broad and balanced curriculum. The Cornerstones Curriculum is a knowledge and skills-based curriculum. Includes resources, assessment and testing, magazine, podcasts and blog.	1
Curriculum Visions	A safe, internal search engine for resources related to the primary curriculum and topics. Over 800 digital books, core books in print too. Presentations, lesson bundles, video, audio, clip art, wall displays.	2
Department of Agriculture, Environment and Rural Affairs (DAERA).	A source of maps used for KS2 geography for example.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Discovery RE	Detailed medium term RE planning with resources and assessment for EYFS to year 6. Fifty-nine enquiry modules covering Christianity, Buddhism, Hinduism, Islam, Judaism and Sikhism.	1
Doddle	Homework platform and progress reporting system, online teaching and assessment resources. Resources/activities are personalised for different grades.	2
Don Steward Resources	Age 10 to16. Blog and online.	1
Doodle	A homework platform and progress reporting system, delivering online teaching and assessment resources across the secondary curriculum.	2
Dylan William Twitter	A teacher, researcher and writer.	1
Dynamo Maths	Dynamo Maths Assessment identifies and supports pupils at risk of developmental dyscalculia and pupils who are performing significantly below their peers in maths. Contains Dynamo Intervention and incorporates a triple-pathway remediation, with a range of SEN support tools.	1
EBay	Online auction site used for purchasing textbooks.	1
eBooks	As a planning and teaching tool.	2
eChalk	Educational games, simulations, puzzles and activities created with a focus on learning through fun. Primary and secondary resources.	1
Edexcel - Credible Experts	Teachers who work part time for the exam board provide CPD in schools. Resource tips and insight into marking schemes.	1
Edexcel	Access to textbooks, resources, specimen papers, specifications, guides, schemes of learning etc.	8
Education - UK Parliament	Information, booklets, videos, guidance and resources.	1
Education City	Provides interactive teaching and learning materials. Allows homework to be set.	2
Eduquas	Part of WJEC brand. Provides advice, resources and support to teachers delivering their qualifications. Allows diagnostic testing and monitoring.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
EEF (The Education Endowment Fund)	An independent charity dedicated to breaking the link between family income and educational achievement. Amongst other resources, EEF provides information, guidance and toolkits, e.g. Teaching and Learning Toolkit.	1
English and Media Centre (EMC)	Publications including resources, activities, revision workbooks, magazines, courses, blogs for news, debates, recommended sites, reading and resources. Used for planning and delivery.	1
e-resources (general)	Subscription services	1
Espresso - Discovery Education	A cross-curricular digital learning service for teachers and pupils. Integrates digital media into teaching and learning. 23,000 plus digital media resources for all subjects across foundation to KS2. For example, short videos, weekly news bites bulletins, interactive games, images, sounds, fact files, articles, printable resources and prepared assemblies. Updated weekly and curated.	1
Exam Board	Provide schemes of work, subject knowledge guides, support, textbooks, specifications, resources, revision guides and past exam questions. Conferences and online CPD. E.g. Edexcel/ Pearson, Oxford/AQA, WJEC.	26
Exampro (From AQA)	Exampro offers thousands of past GCSE and A-level questions, their related mark schemes and examiner comments, all mapped to the current specifications.	1
examWizard from Pearson	Allows teachers to create tests with past paper questions online. examWizard is a free online resource for teachers containing a huge bank of past paper questions and support. For GCSE and A Level.	1
External Experiences / Trips/ Outreach	A source of resources, information, guidance and teaching. For example arts NPO's (National Portfolio Organisations) such as Hallé Orchestra. Aquariums, etc. Schools can link to the curriculum.	2

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
EYFS Statements	Used as the basis for lesson and activity planning.	1
Facebook	Either Facebook teacher groups for collaborative working, exam boards etc. Or schools have their own Facebook page for communication with home / Information sharing for homework etc.	14
Focus Education	Focus Education provides education resources, inset consultancy and CPD courses, helping to impact teachers and leaders in primary schools, academies, and early years' settings.	1
Foreign Language audio clips	For teaching pronunciation and translation practice.	1
GCSEPod	Pods are 3-5-minute bursts of audio-visual learning, based on specialist subject knowledge for 21 curriculum areas. Every pod is mapped to specific GCSE and IGCSE exam boards. Homework, assessment and revision tasks can be automatically generated. Reporting and assessment function allows teachers to identify and close pupil knowledge gaps. Planning, delivery, revision and assessment.	3
geog.123 (OUP)	A complete scheme for KS3 Geography. Pupil books, on line planning resources, teacher workbooks and handbooks. Includes some Kerboodle material.	1
Geographical Association	For Geography teachers to find events, training, resources and news about Geography. Contains a range of teaching and learning resources to cover all curriculum phases. It includes subject information, activities, case studies, videos, etc.	1
GL Assessments (CAT, NGRT, NGST etc)	Assessment tools. Cognitive Ability Tests and New Group Reading Test (NGRT) to monitor pupils' reading and comprehension and New Group Spelling Test (NGST). Allows teachers to monitor, track progress and report.	2

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Gojimo from The Telegraph	A free revision app. It allows pupils to access over 40,000 practice questions from different exam boards. Quizzes can be downloaded for offline use. Allows progress, strengths and weaknesses to be identified. Also provides pupils with information, from help with essay writing to managing stress and exam pressure.	1
Google	A search engine used to find resources.	7
Google Classroom	Allows teachers to create classes, distribute assignments, send feedback, and see everything in one place.	2
Google Drive	To Store templates, tests, audio files etc, for planning/delivery and to monitor.	5
Google Maps	A resource used in geography teaching and for field work.	1
Google Translate	A free service that instantly translates words, phrases, and web pages between English and over 100 other languages.	1
gov.uk	Information and facts for teaching PSHE/ law etc.	1
Grammarsaurus	Resources for across the curriculum, assessment, tutorial videos. Resources made by teachers and writing moderators.	1
Hamilton Trust	Primary resources for English, maths, science and other topics. A combination of free and subscription. Primary stage.	3
hegarty maths	Online service including maths explanations with modelled examples. All learning is built on pre-requisite knowledge, all videos are followed by bespoke assessments matching the video. Includes a tracking system that allows teachers to collect and focus on pupils' mistakes.	2
History Learning	An online study guide for history pupils. Contains a number of informative pages and teaching activities about key historical events, people and periods.	1
History on the Net	Features articles and podcast episodes on topics such as ancient near east civilizations to 20th century global warfare.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
HistoryChat	A site to talk with librarians about history, good books etc.	1
Hodder Dynamic Learning	Incorporates teaching and learning resources, whiteboard and pupil eTextbooks and question practice elements that form a classroom and homework resource.	1
Hodder Education - Textbooks and revision guides	For planning, delivering and assessment.	4
Huddle	Provides cloud-based secure document collaboration for teams. Used in accessing and developing lesson resources.	2
I See Reasoning - UKS2, An e-book	UKS2 gives a wide range of questions and tasks linked to all areas of the UKS2 maths curriculum.	1
iAchieve	Vocational qualifications online. Provides online learning and assessment materials, endorsed by NCFE. E.G. Food Tech and PE KS4.	1
imoves	A framework for building an active school across primary key stages. Digital platform with over 1,000 curriculum-based active lessons and activities. Interactive movies, supporting lesson plans, tailor-made music, flashcards and assessment.	1
Impact - Journal of the Chartered College of Teaching	Impact, the termly journal of the Chartered College, connects research findings to classroom practice, with a focus on the interests and voices of teachers and educators. Used by one school for its reviews of resources.	1
Inspire Maths	Aa whole-school primary maths programme that supports teaching to mastery. Based on Singapore's maths series, this is a textbook programme with assessment and curriculum support provided by Inspire Maths Online. Supported by face-to-face professional development from UK experts.	1
Interactive Whiteboard	Teaching resource - to disseminate and collaborate e.g. used for shared annotation.	14
iPad	Teaching Resource - to disseminate and collaborate e.g. used for shared annotation.	13

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
IRIS Connect	Provides the tools and support needed to engage in personalised, collaborative professional learning. Helps teachers take evidence-based approaches to improving teaching and learning. A CPD and teaching and learning resource.	1
iTunes	Account held e.g. by music department.	1
Jigsaw	Six planned and resourced half term units of work. The scheme of learning integrates personal, social, health and economic education with an emphasis on emotional literacy, mental health and SMSC, especially spiritual development. Can be delivered to individual classes or whole school.	2
Journals and Magazines	For resources, information and reviews.	2
JustMaths and JustMaths Crossover	A set of resources based around key topics. A focused, targeted support package. A blog also.	2
Kahoot!	A game-based learning platform used in classrooms. Used to introduce new topics or reinforce knowledge. Staff can create their own games or use existing ones.	2
Kerboodle (From OUP)	Works alongside course textbooks. The learning content is customisable and includes assessment materials and reporting tools.	6
Keystag Hiistory	Fully resourced history lessons. Every aspect of leading history for ages 5-19 is covered in detail, from assessment and progression through to curriculum planning, raising standards and guidance for teachers.	1
Kindle	Teaching resource - to disseminate.	1
Kindle	For delivery	1
KS3 Course	A course regarding planning for KS3.	1
Laminated Information Packs	Teacher made.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Learn Sheffield	A not for profit schools company which is focussed on school improvement and owned by Sheffield's schools and colleges in partnership with Sheffield City Council. Learn Sheffield aims to strengthen city-wide partnership work, both within sectors and between them. A source of guidance, information, services, opportunities and resources.	1
Letters-and-sounds	Free resources to help support the DfE Letters and Sounds phonics programme. Printable letter and word cards, printable games, teaching ideas, activities and links to Letters and Sounds games which can be used on computers or on interactive whiteboards.	1
Lexia	Pupils can work independently to develop reading and language skills through individualised learning paths. All pupils can work at their own pace and the teacher is notified (on web-based reports and via email) only when they require support.	3
Linguascope	Linguascope publishes educational resources for Modern Foreign Language teachers and pupils. Including interactive resources for the whiteboard and a range of iOS apps. It serves three different levels of working; Elementary, Beginner and Intermediate.	1
Mapquest	Provides free maps. Resource for e.g. geography planning and delivery.	1
Mark Batty on Facebook	A subject advisor for Edexcel who is offering free advice and information, e.g. on grade boundaries.	1
Mathematics Mastery	The Mathematics Mastery programme is run by a non-profit organisation which works in partnership with schools to provide ongoing, maths-focused training, curriculum resources and specialist support. Primary and secondary plans. www.mathematicsmastery.org/	1
Mathletics	An online learning space providing resources and tools for pupil-driven learning and teacher-led instruction. Reporting tools and adaptive curriculum content, structured and interactive support, with gaming and rewards. EYFS to KS5.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Maths - No Problem!	A series of textbooks and workbooks written to meet the requirements of the maths curriculum. Used as a scheme of work.	1
Maths of the Day	Maths of the Day is an online resource that provides 1000+ lesson plans on how to deliver the maths curriculum through physical activity.	1
MathsBot	Interactive tools and activities to aid the teaching of mathematics. Hundreds of randomly generated questions and answers.	4
Mathsbox	Teaching, monitoring and assessment resources.	1
Mathsframe	Has more than 200 interactive maths games and 300 maths worksheets and assessments linked to the new primary curriculum.	1
mathsteam.org	Resources to prepare children for KS2 SATs. Also progression monitoring resources, mastering maths and resources to stretch more able children.	1
MathsWatch	A set of mathematics resources (videos and worksheets) available to schools via online subscription or via the purchase of individual discs. Planning, delivery, revision and assessment (automatically marked).	2
Maths-Whizz	A virtual maths tutor that provides a learning experience catering to a pupils' individual needs and pace of learning. For use at school and home. Used for differentiated planning and marking, with instant feedback and reporting.	1
Memorable Teaching by Pepe McCray	Resource to guide teachers in their teaching practice.	1
memrise	An online vocabulary learning tool.	1
Monster Maths	An after-school maths programme for primary aged children. Monster Maths holiday camps are run in schools. Also offers private maths tuition to all age groups.	1
Mr Mathematics	Mathematics lessons for GCSE and KS3 teachers. Schemes of work and free downloadable differentiated resources, including flip charts, notebook files, tarsias, excel question generators and qwizdom PowerPoints for example.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Mr. Carter Maths	A collection of printable maths sheets and questions/ activities for the class whiteboard on an array of topics for all levels of schooling.	1
Mrs Humanities	Twitter sharing humanities resources / lesson plans etc.	1
Multi Link Cubes	Colourful, physical resource for EYFS, KS1 maths.	1
Museums	A source of resources, training, educational experiences and visits.	2
Music and Drama Education Expo (A Rhinegold Event)	Speakers and educators present seminars and workshops covering policy and funding; curriculum and exams; practical music-making and hands-on drama workshops. A CPD and networking opportunity for teachers. Publishers, organisations, retailers and manufacturers servicing both music and drama attend to allow resource research and comparisons.	1
Musical Contexts	Provides a bank of tried and tested music resources for primary and secondary ages, used for planning and delivery.	1
Musicroom	Internet musical resources shop.	1
MyMaths	A subscription-based mathematics website which can be used on interactive whiteboards or by pupils and teachers at home based on Adobe Flash. Planning, delivery and assessment.	5
MyPLC	A computer-based resource allowing staff to input a whole scheme of work and units. Pupils have an account and they can grade themselves (red, amber, green) on the basis of what they have learnt in the lesson and across the whole course. Staff can use this data to measure progress and adjust teaching accordingly.	1
National Archives website	To access resources.	3
National Associations	As a source of resources and collaboration.	1
National Curriculum / National Standards	As a resource that teacher plan from.	13
National Geographic	Subscription magazine containing articles related to science, environment, animals, cultures, adventure, travel and history.	1

Name of product/brand / website/ type/exam board/awarding organisation or publisher producing the resource	Description of resource, summarised from resource websites	Number of teachers interviewed using the resource ¹⁰
Nearpod	Nearpod is an interactive classroom tool for teachers to deliver interactive lessons. Like a PowerPoint sharing tool to disseminate and collaborate. Includes a blog for sharing teacher experiences. Resources for planning and delivery.	2
Nessy	Nessy uses a multisensory approach to learning. Games, videos and worksheets to help build confidence and teach reading, writing and spelling skills. Apps to help teach letters, phonics, first words, syllable division etc. Information for educators and parents on types of dyslexia, explanations, strategies, tips, testing, classroom identification and effective solutions. Dyslexia Training available. Nessy Reading and Spelling programme offered.	1
NFER (National Foundation for Educational Research)	Age-appropriate optional tests for years 1-5 to help monitor pupil attainment.	1
Numicon	A multisensory approach to arithmetic teaching for children aged 4-7, and for older pupils with SEN. Numicon uses patterns to represent each numeral. These patterns are structured so that number relationships can be seen in a way not provided by written numerals.	2
OCR Exam board resources	Specifications, specimen papers, advice, revision tools, curriculum resources, texts and guides.	2
Oddizzi	A body of content to build a solid understanding of the people, places and cultures of the world. Includes films, photographs, maps and quizzes. Oddizzi members get involved by communicating together, using the safe ClassPals virtual postcard messenger and by taking part in shared content creation projects.	1
Online Revision Tools	For planning and delivering.	3
Open Futures (SAPERE)	Open Futures is a skills and enquiry-based curriculum development programme, linking learning and life. A spirit of enquiry is fostered and nurtured through the programme's four curriculum strands: Ask it, (provided by SAPERE), Grow, it, Cook it, Film it. Resources and training are provided.	1

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Orchard Games (by Orchard Toys)	Creators of educational games, jigsaws and activities for children.	1
Ordnance Survey Maps	E.g. for geography lessons.	3
Oxford Owl (Oxford University Press)	Expert advice, top tips and activities for home. Educational resources and free eBooks to support children's learning in reading, phonics and maths at primary school and at home. Oxford University Press.	1
Oxford Reading Tree	A range of books to support independent reading and encourage reading for pleasure. Synthetic phonics teaching is supported by a varied choice of writing styles, genres and artwork styles at every level. Underpinned by Oxford Primary English Assessment in order to assess and ensure the progress of every child.	1
Oxford University Press (OUP)	Online digital subscription schemes, providing DVD ROM's of resources. Texts, revision guides and teaching guides.	4
Pearson	Various resources to support Edexcel exam specifications / courses. Digital schemes of work to accompany a textbook scheme. Accompanying assessments and interactive whiteboard resources. E books and Active Learning Books. Schemes of work.	9
Penpals for Handwriting (Cambridge University Press)	Penpals for Handwriting is a complete handwriting scheme for 3-11 year olds. It aims to help children develop a fluent, confident handwriting style. Penpals uses a combination of DVD-ROMS, interactive whiteboard exercises, video clips and paper practice sheets for whole-class teaching and practice books and write-in workbooks for small group and individual work.	1
Philosophy for Children (P4C)	Resources for doing philosophy with children. 'How-to' guides, session plans, concept activities, reasoning exercises, p4c curricula for primary schools, key concepts for secondary schools, original stories and dialogues, picture book recommendations and support materials.	1

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PhonicsPlay	A site packed with interactive phonics games, phonics planning, assessment ideas and many teaching ideas and resources to help children to learn to hear phonemes.	2
Photographs	Various sources, to link to topical curriculum content / to include in information packs for pupil use. Photographs to help pupils to interpret maps and diagrams in geography. For more visual pupils.	4
Physical Resources	E.g. Puppets for secondary MFL for pupils who don't like speaking. Beakers for teaching Capacity in primary school. Wires, bulbs for teaching energy. Outside play apparatus, scales, number fans etc for EYFS/ KS1. Musical instruments. DT equipment, science apparatus.	9
Pinterest	Ideas for activities and resources.	2
PiXL	A not-for-profit partnership of over 1,600 secondary schools, 500 sixth forms, 600 primary schools, and 75 providers of alternative education. PiXL aims to share best practice. Access to resources. Includes revision app for English, maths, history and geography.	11
PlanBee	Ready-to-use primary teaching resources, including lesson plans, worksheets, slides, and other printable resources. Across primary subjects. Used by one school for topic planning.	1
PodBean	Simple podcast publishing solution. Unlimited bandwidth and storage. Free. For example, used by a geography teacher to watch 10 - 15 minute podcasts that relate to the syllabus. Set for homework or use in lessons. Also used to refresh teacher knowledge.	1
Power Maths (Pearson)	Power Maths is a whole-class mastery approach. It is aligned to the White Rose Maths progressions and schemes of learning. An enriched approach that combines interactive teaching tools, textbooks and on-going professional development.	1
Power of 2, a book from 1 2 3 Learning	This is a 15-minute intervention programme focused on lower ability maths pupils in year 7.	1

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Power of Reading - A CLPE Resource	Subscription service and training can be bought into. CLPE's Power of Reading training programme is designed to support schools in raising engagement and attainment in reading and writing for all pupils. This website has teaching sequences for nearly 200 children's books for all year groups in the primary phase as well as more than 1000 practice examples.	1
PowerPoint	Teaching resources - to disseminate.	15
Primary Comprehension - Prim-Ed Publishing.	A photocopiable comprehension resource for primary pupils.	1
Professor Stephen Heppell at Heppell.net	Specialising in online education and learning spaces. Advice and research about all aspects of better learning in schools.	1
Publishers	Source of resources and guidance re: new resources.	4
Quizlet	Produces flash cards, games and learning tools	1
Read Write Inc.	Read Write Inc. was developed by Ruth Miskin. It provides a structured and systematic approach to teaching literacy.	1
Real PE	Real PE is a child-centred approach which uses primary PE schemes of work, training, lesson plans, assessment framework and supporting resources.	2
Rhinegold Publishing	Textbooks for music and the performing arts.	1
Rising Stars	Differentiated books, teaching resources, assessment, software and schemes across subjects in the primary setting.	5
Rising Stars - PiRA and PUMA testing	PiRA tests (Progress in Reading Assessment). PUMA Tests (Progress in Understanding Mathematics Assessment). Allows for assessment, tracking and predicting.	2
Rising Stars Champions	A whole school PE, health and fitness programme for Years 1 to 6	1
Road shows and fairs	For resources, information and reviews.	1

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RSA Opening Minds	Teachers design and develop a curriculum for their own schools based round the development of five key competences. A competence-based approach enables pupils to acquire subject knowledge and to understand, use and apply it in the within the context of their wider learning and life. RSA Opening Minds provides guidance, support and training from an RSA Opening Minds Training School. An implementation Guide and access to a library of resources such as examples of schemes of work, lesson plans, and assessment tools.	1
SAM Learning	SAM Learning is an online education service for schools. It supports personalised learning through a Self-Assessment Method of interactive revision and examination practice. Across KS1 to 4. Covers 27 subjects. Planning, delivery, revision and assessment.	1
SCARF (Corum Life Education)	Centred on the 'Growth Mindset' approach, SCARF has online resources intended to support primary schools in promoting positive behaviour, mental health, wellbeing, resilience and achievement.	1
Schofield and Sims	An educational publisher for primary stage. Books, resources, blog, downloads for school and home across the curriculum.	1
Scholastic Resource Bank	Scholastic Resource Bank contains over 10,000 educational resources for early years and primary. Resources include lesson plans, teaching ideas, planning and assessment tools, activity sheets, interactives, video, etc.	1
School Improvement Liverpool	Service providers offering annual service agreements to schools in the North West. Offer includes training, consultancy, quality marks, qualifications and conferences. Allows for networking opportunities.	1
School Library	Range of books, e.g. sports books to encourage boys to engage in reading. Books linked to topic themes. Novels to teach English. Other resources from the School Library Service.	10

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schoolhistory	History lessons, resources and online History revision courses for KS3, GCSE, IGCSE, IB and A-Level curriculums. Organised by topic and by exam board.	2
SchoolScience (ASE - Association for Science Education)	SchoolScience provides free learning resources, information and news for science education worldwide. From The Association for Science Education (ASE). SchoolScience is sponsored by industrial and research partners who provide free on-line science resources for teachers and pupils. Promotes both resources created for this site and external resources from around the world with the aim of enriching teaching and learning in science.	1
Scratch	Aa visual programming language and online community targeted primarily at children. Using Scratch, users create their own interactive stories, games and animations, then share and discuss their creations with one another.	1
SEN Magazine	Distributed to all SEN schools and available by subscription. Published every two months, containing features, news and articles covering all issues to do with SEN and disability.	1
Sheffield Cultural Educational Partnership	Cultural Education Partnership - Sheffield (CEP). This is part of an initiative by Arts Council England to develop partnerships that can have an impact on the quality of cultural education. Called 'Create Sheffield,' it uses the City of Sheffield as a learning resource, allowing all children to engage with arts, culture and heritage, to support their educational outcomes. A source of coordinated information and guidance, networking, CPD and resources.	1
Sheffield Music Hub	An organisation whose aim is to promote the best in music education. Music ambassadors, partnerships with arts organisations, networking opportunities, conferences. A source of information, guidance, opportunities, CPD, services and resources.	1

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Show My Homework	For pupils to use at home. Provides a variety of homework assignments, a homework timetable, assessment, marking, tracking, and reporting tools.	2
Sibelius	Musical notation software for writing music.	1
Sing Up	Provides access to hundreds of specially arranged songs, teaching tools and supporting resources for singing.	1
Singapore Mastery Maths	Specific source unknown	1
Smart Notebook	Smart Notebook is an interactive software that compliments the use of a Smart Board.	4
SMOG Readability Formula	To assess suitability of resources and differentiate.	1
Socrative	Allows staff to assess pupils with prepared activities or on-the-fly questions to get immediate insight into pupil understanding. Auto-populated results then determine the best instructional approach to most effectively drive learning.	1
SPaG.com	Online SPaG tests for instant gap analysis. Covers spelling and grammar for KS1 and 2. This resource can also be used to set homework.	1
Sparklebox	Free printable teaching resources.	1
SSDD Problems (Same Surface, Different Deep) by Craig Burton	SSDD problems are a special type of problem based on the observation from Roher, Dedrick and Burgess (2014) that the correct solution to most mathematical problems involves two steps: identify the strategy needed to solve the problem, and then successfully carry out that strategy.	1
STEM.org	STEM.org are a credentialing organization, working to achieve a world-leading education for all young people in science, technology, engineering and mathematics (STEM) resources. They provide training, CPD, resources, experiences, outreach, STEM Ambassador scheme and much more.	2
T Drive	Back up storage area. E.g. for backing up physical CD resources.	1

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Talk For Writing (Pie Corbett)	A teaching approach based on research in primary schools. It enables children to imitate the language they need for a particular topic orally before reading and analysing it and then writing their own version.	4
Target maths (by Georgiwolf)	Sets of sub-levelled worksheets to download that meet specific objectives. Each Excel worksheet has the ability to change the numbers to create different worksheets for the same objective.	2
Tassomai	A daily 10 question 'Micro Quiz'. Both pupils and teachers get immediate feedback. Teaching and assessment resource.	1
Teachit	Collection of resources and activities. For planning and delivery e.g. for covering lessons by a non-specialist teacher.	3
TeachMeet	TeachMeet is an organised but informal meeting for teachers to share good practice, practical innovations and personal insights into teaching. These events are often organised to coincide with other educational events.	2
TeamEnglish (Twitter)	TeamEnglish, a community for sharing English teaching resources, blogs, and ideas.	1
Textbooks	Includes all subjects, stages, target audiences.	37
The Blackwell Spelling Test	The Blackwell spelling test provides sentences including the words and instructions on how to award marks. A free downloadable resource.	1
The Day	Articles and features every day covering global events and the biggest stories from around the world. An online, school subscription news service. Can be used in school or by pupils at home depending on the subscription.	1
The Historical Association	A charity who aims to advance the study and learning of history at all levels. Resources, events, four journals, awards, competitions etc.	3
The Holocaust Educational Trust	The Holocaust Educational Trust works with schools and colleges across the UK to educate about the Holocaust and its contemporary relevance.	1

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The Literacy Shed	A website for teachers filled with ideas for literacy teaching using visual resources such as film, animation, photographs and picture books.	5
The Maths Hub	The Maths Hubs programme brings together mathematics education professionals in a collaborative national network of 35 hubs, each locally led by an outstanding school or college. The aim is to develop and spread excellent practice for the benefit of all pupils and pupils. A teaching and learning resource.	1
The Nrich Maths Project Cambridge	Free resources and curriculum mapping documents for primary through to post 16. Mathematics resources for children, parents and teachers to enrich learning. Problems, children's solutions, interactivities, investigations, professional development, events.	3
The PSHE Association	The national body for PSHE education. Resources, guidance, CPD training and support and exchange of ideas for schools.	1
The Royal Geographical Society (with the Institute of British Geographers)	Resources for schools, school events and CPD, geography ambassador outreach in the classroom, competitions, field work opportunities, curriculum and professional support, amongst other resources.	1
The Salford Reading Test	To determine reading age.	1
The Spelling Shed	Spelling Shed includes a whole-school spelling scheme, web & mobile games and a teacher hub with homework and data.	1
The Teacher's Toolkit: Raise Classroom Achievement with Strategies for Every Learner by Paul Ginnis	Teaching and learning ideas for teachers.	1
The Times 100 Business Studies Case Studies	A pupil and teacher business studies resource with up-to-the-minute information and resources.	1
The Tower Hamlets Education Partnership	A Schools company, established by school leaders to deliver school improvement to all Tower Hamlets schools. It is rooted in the collaboration. Includes subject leader network meetings to collaborate and share resources and ideas. Also via an online forum.	1

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Thinking History	Using Active Learning, kinaesthetic techniques, to help raise standards in History teaching. KS2 to 5.	1
tigtag	Science and geography resources linked to the primary curriculum. Each three minute tigtag film comes with a related lesson plan, fun practical activities, a worksheet, a quiz, visuals and whiteboard games. Uses clear narration and real-world examples.	1
Time2Resources	Provider of conferences, resources, CPD, pupil revision days and study materials for business and economic examinations.	1
Times Educational Resources website (TES)	For planning and delivery. To access resources and ideas.	30
Times Tables Rock Stars	Times Tables Rock Stars is a sequenced programme of daily times tables practice. Paper form or on line.	1
Toe by Toe	A step-by-step resource to help individual pupils with low reading abilities improve their reading ability and decoding skills.	1
Trailers for films in a foreign language	For teaching pronunciation and translation practice.	1
Twinkl	Instant access to lesson plans, schemes of work, assessment, interactive activities, resource packs, PowerPoints, teaching ideas, display material. E.g. Base 10, Place Value resources.	20
Twitter	Collaboration / discussion between teachers. Also exam board and association (e.g. ASE) forums which encourage collaboration of resources.	19
Ukelele Go!	An on-line scheme to teach ukulele. Provides lessons, resources, courses, tutorials, sign posts ebooks etc.	1
Understanding Christianity	The aim of this project is to help all teachers support pupils in developing their own thinking and understanding of Christianity, as a contribution to their understanding of the world and their own experience within it. Includes resources, advisors and training. Ages 4 to 14.	1
Union magazines and conferences	Resources, reviews, information, training and guidance.	2

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Universities	Where a school has links with a university they use them as a source of guidance and CR.	3
Various News Sources	E.g. for topical information related to the curriculum.	5
Video clips and film.	Visual imagery, especially for EAL. Live screenings of e.g. Macbeth as a teaching resource. For science practicals. For current affairs topics with links to humanities, PE, SEN.	17
Visualiser	Teaching resource - to disseminate and collaborate e.g. used for shared annotation.	2
vtech camera	Hard wearing, easy to use digital camera and video recorder.	2
White Rose Maths	Resources, transformational training and bespoke support used at primary stage.	14
Wiltshire and Swindon Learning Resources	WSLR provide high quality multi-media teaching and learning resources on loan. Resources on offer include books, artefacts, models, ICT equipment, role play, costumes, puppets, DVDs, CDs, CDROMS and interactive whiteboard activities. Advice, support and training etc.	1
Wordwall	Allows teachers to create a customized pack of interactive and printable activities quickly.	1
Yellis From CEM (Centre for Evaluation and Monitoring)	An adaptive baseline assessment for pupils aged 14-16. Yellis also gives value-added information to help understand the effect teaching is having and show the progress made.	1
You Tube	Either as a source for current, relevant clips to aid teaching. E.g. regarding plastics and recycling for geography, clips of practical work in real life contexts for science. You Tube channel to communicate with pupils out of school e.g. to populate with videos for the required practicals for GCSE science for the pupils to watch.	14
YPO Catalogue	Yorkshire Purchasing Organisation Catalogue for EYFS and KS1 resources for example.	1
ZigZag Education	Teaching resources for secondary schools and colleges with photocopiable/digital site licences. For KS3 to 5 across all subjects.	3



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