Assessment of compliance with the Code of Practice for Official Statistics

Statistics for England on Schools, Pupils and their Characteristics, and on Absence and Exclusions

(*produced by the Department for Education*)
Office for Statistics Regulation

We provide independent regulation of all official statistics produced in the UK. Statistics are an essential public asset. We aim to enhance public confidence in the trustworthiness, quality and value of statistics produced by government. We do this by setting the standards they must meet in the Code of Practice for Official Statistics. We aim to ensure that producers of government statistics uphold these standards by conducting assessments against the Code. Those which meet the standards are given National Statistics status, indicating that they meet the highest standards of trustworthiness, quality and value. We also report publicly on system wide issues and on the way statistics are being used, celebrating when the standards are upheld and challenging publicly when they are not.
Contents

Executive Summary
  Subject of the Assessment
  Public Value Statement
  Decision on National Statistics Status
  Strategic Perspective
  Key findings

Chapter 1: Public value

Chapter 2: Quality

Chapter 3: Trustworthiness

Annex 1: About the statistics

Annex 2: The source data

Annex 3: The Assessment Process

Annex 4: Responding to the Assessment report: what the Office for Statistics Regulation and the producer body should expect from each other
Executive summary

Subject of the Assessment

ES.1 The Department for Education (DfE) presents aggregate statistics for England on schools, pupils and their characteristics and on absence and exclusions (statistics on school and pupil characteristics) across a number of published reports, through an online web-based tool and through access to underlying data. The published reports include:

- *Schools, Pupils and their Characteristics*¹
- *Special educational needs in England*²
- *Statements of special educational needs (SEN) and education, health and care (EHC) plans*³
- *Pupil absence in schools in England (Autumn term, Combined Spring and Autumn term and Full year releases)*⁴
- *Permanent and fixed-period exclusions in England*⁵

ES.2 In this Assessment we carried out a detailed review – including feedback from users – of the published aggregate reports and accompanying information and considered the quality of the source data. We also drew on our recent experience of the presentation of the statistics in the Performance Tables and the accessibility and confidentiality of underlying data in the National Pupil Database (NPD).

ES.3 The Office for Statistics Regulation previously assessed these statistics and the majority have National Statistics status. In March 2015, DfE identified that the quality of the data underlying the statistics on unlawfully large class sizes – published in *Schools, Pupils and their Characteristics* – did not meet the standards required by *the Code of Practice for Official Statistics*⁶ (the Code). We agreed that National Statistics status should be removed until the quality of data could be improved⁷. DfE considers that these statistics now meet the required standards and statistics on unlawfully large class sizes are included in this Assessment.

ES.4 *Statements of SEN and EHC plans 2016* includes two sets of statistics that DfE has published as experimental statistics. They are:

- the number and percentage of Learning Difficulty Assessments (LDAs)
- the number of personal budgets outlined in education, health and care plans

This report does not include a final judgement about the National Statistics status of the experimental statistics (paragraph ES.9).

⁵ https://www.gov.uk/government/collections/statistics-exclusions
⁷ https://www.statisticsauthority.gov.uk/correspondence-list/?keyword=unlawful&date
Public value statement

ES.5 The statistics on school and pupil characteristics are linked to funding decisions including: the Dedicated Schools Grant funding\(^8\); funding for academies\(^9\); pupil premium funding\(^10\) and capital-funding allocations\(^11\). DfE also uses various statistics in these publications to develop and evaluate policy. For example it uses pupil exclusions and absence statistics as key indicators in behaviour and attendance policy.

ES.6 DfE achieves wider public value by publishing the statistics in the Performance Tables. This enables, for example, local authorities, academy chains, schools and parents to understand school and pupil characteristics and circumstances, and performance at local authority and school level on measures such as absence and exclusions.

ES.7 Public value also arises through DfE making available use of the data by academics and researchers. Uses include combining the data with attainment data to examine the effects of disadvantage such as variation in attainment by those receiving and those not receiving free school meals (FSM), with FSM used as a proxy for lower income households. Others use the statistics to advance society’s understanding of the effects of education and the outcomes of education policy across different groups of pupils.

Decision on National Statistics status

ES.8 National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value and comply with all aspects of the Code. National Statistics status is awarded by the UK Statistics Authority (the Authority) on the advice of the Office for Statistics Regulation. The Office for Statistics Regulation undertakes an assessment in which it considers whether the statistics meet the required standards.

ES.9 The Office for Statistics Regulation judges that the existing National Statistics status of statistics on school and pupil characteristics included in this report may continue subject to DfE demonstrating that it has enhanced their value, quality and trustworthiness in the ways that we describe in chapters one to three. We also judge that statistics on unlawfully large class sizes may be re-designated as National Statistics once the Authority agrees that DfE has fully demonstrated that the quality of the statistics has improved sufficiently to meet the standards of the Code. We will make our final judgement on the experimental statistics when DfE informs us that, in its view, the quality of the data that underlie the statistics has improved sufficiently to meet the standards required of the Code.

ES.10 We expect DfE to report to the Office for Statistics Regulation the actions that it has taken to improve the value, quality and trustworthiness of statistics on school and pupil characteristics by 28 April 2017, whereupon the Authority will decide whether to confer National Statistics designation based on our advice.

---


\(^9\) [https://www.gov.uk/guidance/academies-funding-allocations](https://www.gov.uk/guidance/academies-funding-allocations)


ES.11 Reflecting the importance of achieving the National Statistics designation, and to provide users with confidence in the direction of travel, the Office for Statistics Regulation expects DfE to publish its plan of proposed actions to increase public value, quality and trustworthiness as a result of this Assessment.

**Strategic perspective**

ES.12 The various formats in which DfE present the statistics and data on schools, pupils and their characteristics meet the needs of a wide range of users. Ongoing development and user testing the Performance Tables – that open up the statistics to parents, teachers and others with an interest in finding out about individual schools – should increase their value further to this audience. The Head of Profession for statistics (HoP) is considering bringing together aggregate statistics into one publication for primary schools and one for secondary schools – we think this would be a welcome development.

ES.13 Initiatives taken by DfE that make data available in innovative formats and support data sharing and open access will meet the needs of a wider range of users and extend the public value of the statistics. As a prominent department in data sharing and access, it can find itself having to continually balance the differing needs of those whose interests lie in civil liberties and privacy, and of others whose focus is on transparency and opening up secure access to data. We encourage and support DfE’s efforts to put appropriate safeguards in place as it works towards delivering wider access to underlying data, checking constantly that it is adequately balancing the competing requirements of privacy and open data.

**Key findings**

PUBLIC VALUE

ES.14 DfE has a high volume of contact with users and engages effectively with them on changes to methods and to its individual publications. Existing users told us that they appreciate the improvements that result from this engagement. DfE’s engagement means it has a good understanding of the existing value of the statistics and underlying data about schools and pupils, although it does not always explain their value consistently in its publications.

ES.15 DfE has the advantage of a very engaged user community. It uses the feedback that it receives effectively to prioritise issues to address, but there is a danger that DfE may not hear some voices and may not recognise some needs. Putting a wider range of users even more firmly at the centre of its statistical planning by creating more opportunity to engage directly, rather than reacting to issues raised, would achieve additional – as yet unrealised – public value.

QUALITY

*Data quality assurance*

ES.16 DfE told us that the links to funding and performance lead to the potential for distortive effects in the data on pupil numbers and characteristics such as
recipients of free school meals. The incentive would be to increase the numbers of pupils for funding purposes and to decrease pupil numbers for the purposes of performance measurement. In practice each incentive acts as a check and balance on the other.

ES.17 DfE provided evidence that it has robust quality assurance processes in place for its statistics on school and pupil characteristics. As assurance against distortive effects and other errors, various validation checks are built into school management information systems and replicated when the data are submitted to DfE. DfE also uses the outcomes and recommendations of third party auditors, including the Education Funding Agency (EFA) and National Audit Office (NAO), to inform its processing of these data.

ES.18 DfE publishes useful information on quality assurance, although not consistently for all of the publications and the published information does not cover all aspects of quality assurance. It does not explain the risks of bias, including from possible distortive effects, to the quality of the statistics, how these are minimised, and how these might affect particular uses.

Data collection errors

ES.19 DfE has identified errors in data collection for three sets of statistics on schools and pupils characteristics through user feedback and its own quality assurance. One of these is unlawfully large infant class size statistics, which as a result had National Statistics status removed (paragraph ES.3). DfE has investigated the causes of the errors in unlawfully large infant class size statistics and has introduced changes to data collection guidance.

ES.20 We have reviewed the changes to the guidance and spoken to a small number of representatives of Local Authority data suppliers and we consider that the quality of the statistics is likely to have improved as a result of DfE’s remedial actions. DfE told us that assurance checks give it confidence that the changes to guidance have resulted in improved data quality. Testing suppliers’ understanding of the updated guidance on data collection would give DfE and us additional assurance that the quality improvements are embedded and fully achieved.

ES.21 More recently, DfE identified errors in two sets of statistics in Statements of SEN and EHC plans and published these as experimental statistics. It has clearly described the errors and their effects on the statistics in the accompanying technical documentation and put in place measures to address the errors. Testing the effectiveness of the new measures with suppliers will help DfE to assure the data quality and to check that the errors are not repeated. A systematic review of procedures, including guidance for data suppliers, would avoid similar data quality issues arising in the future.

TRUSTWORTHINESS

ES.22 DfE has discovered errors in its data collection and we commend DfE’s open and transparent approach to informing users – and the Office for Statistics Regulation – about those errors.

ES.23 It makes the statistics available in as much detail as possible through different formats while aiming to balance the competing requirements of privacy, confidentiality and open data. Some statistics are not available at school level
because of the possibility of identifying individual pupils. Those seeking access to pupil-level data that DfE holds in the NPD must meet data security requirements and demonstrate the benefits of their use of the data to the education or well-being of children, and be fully compliant with data sharing permissions within legislation. DfE is working towards extending access to the data that it holds in the NPD through secure data lab services. DfE also continues to engage with users with the aim of ensuring that it maintains an appropriate balance between privacy and data access.

ES.24 DfE demonstrates trustworthiness by publishing a transparent framework of statistical policies and standards, including those on data confidentiality and on revisions and corrections. It is transparent in its stewardship of statistics for example by documenting detailed process information, data access controls and guidance and the work of its independent decision making body – the Star Chamber Scrutiny Board (annex 2). Documenting its corrections policy in more detail would demonstrate DfE’s trustworthiness further.
Chapter 1: Public value

Context

1.1 All children aged between 5 and 16 have the legal right to receive a full-time education that meets their particular needs. That education can be school or home-based\textsuperscript{12}. In January 2016 there were 24,288 schools in England, of which 16,778 were state funded primary schools (which include academies), 3,401 were state-funded secondary schools (which include academies), and 2,311 were independent schools (figure 1)\textsuperscript{13}. Approximately 8,559,540 pupils attended schools in England in January 2016 (figure 2)\textsuperscript{14}.

Figure 1: Number of schools in England 1947-2016

Note: the total number of schools includes nurseries, state-funded primary schools, state-funded secondary schools, independent schools, pupil referral units and special schools. This chart does not include nurseries or pupil referral units. There are 406 nurseries and 353 pupil referral units. The detailed data are available from Schools, pupils and their characteristics, January 2016, National tables: SFR20/2016 – Table 2a.

Source: DfE; Schools, Pupils and their Characteristics: January 2016, Figure A

\textsuperscript{12}https://www.gov.uk/school-attendance-absence/overview
\textsuperscript{14}https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2016
1.2 Since 1999, responsibility for education policy in the United Kingdom has been devolved. DfE is responsible for education policy in England and the Scottish Government, Welsh Government and Northern Ireland Assembly are responsible for education policy in their respective nations. The statistics included in this Assessment are those produced by DfE and cover schools and pupils in England.

Users’ perspective

1.3 As part of this Assessment, we asked for views about the statistics from a range of representatives from central government, local government, research organisations, and data suppliers who are also data users (annex 3). We have presented their views in the report and they have influenced our judgements. In this section we present the information that users gave us about the value of statistics on school and pupil characteristics.

1.4 In summary, users told us that statistics on school and pupil characteristics achieve public value by enabling them to:

- determine the amount of funding schools receive
- inform analysis and the evaluation of educational outcomes to help improve the performance of schools, academy chains and national and local policy
provide transparent data on policy outcomes, such as exclusion and absence rates, for different groups of pupils

1.5 For DfE policy-makers, statistics on school and pupil characteristics are linked to a number of decisions about funding including: the Dedicated Schools Grant funding\(^{15}\); Funding Academies\(^{16}\); Pupil Premium Funding\(^{17}\) and Capital Funding Allocations\(^{18}\). DfE policy-makers also use various statistics in these publications to develop and evaluate policy, for example it uses pupil exclusions and absence statistics as key indicators in behaviour and attendance policy.

1.6 Local authorities use statistics on school and pupil characteristics to benchmark the performance of schools in their areas against other similar local authorities and against the national levels. They also use these statistics to understand how their authority is performing against local targets and in terms of educational outcomes for particular pupil characteristics. The data on the cross-border movement of pupils in *Schools, Pupils & Characteristics* were noted as being particularly useful to show where resident pupils attend school. Local authorities and academy chains use these statistics when assessing the risk of their schools underperforming, for prioritising support for schools.

1.7 Researchers told us how they have used the data held in the NPD to help analyse attainment and educational achievement across different groups of pupils to understand if and how attainment is linked to socio-economic or ethnic differences. Researchers have also used statistics on school and pupil characteristics to evaluate and understand Government policy, for example to provide information on the proportion of children in receipt of FSM at the national level over time.

**Findings**

**Coverage**

1.8 Ideally the statistics and data would contain comprehensive information about all schools and all children of school age. In reality the statistics cover the majority of schools and pupils, and coverage varies by different statistics.

1.9 Sometimes the gaps in coverage are unavoidable as is the case with alternative provision, where pupil-level information would be disclosive. For independent schools, the gaps are outside of the statistical team’s control because the legislation confines DfE to collect data that is necessary for it to fulfil its statutory duties for those schools. Independent schools may provide additional data voluntarily. DfE is considering how it might address the gaps in coverage that it can affect – such as home schooled children – to increase the public value of this suite of statistics. We would welcome this development.

1.10 Where there are requests to collect additional information, DfE told us that it considers the need to optimise value and meet user demands with the burden

---


\(^{16}\) [https://www.gov.uk/guidance/academies-funding-allocations](https://www.gov.uk/guidance/academies-funding-allocations)


that additional data collection would place on suppliers through its Star Chamber Scrutiny Board (annex 2).

**User engagement**

1.11 DfE receives a large number of queries from an engaged community of users. It makes good use of this intelligence to understand how the statistics on schools and pupils are used and the value that they create. It also shares this information in some of its publications. DfE could enhance the public value of statistics on school and pupil characteristics further by communicating information consistently across its publications to help other users to understand the uses of these statistics.

1.12 During this Assessment users told us that DfE responds promptly and effectively to their queries. DfE also provided evidence that it engages users on specific issues such as changes to pupil absence in schools in England, including the method used to calculate persistent absence. It told us that it monitors correspondence and media coverage, and reviews what issues to take forward and how as part of its statistical planning. The changes to calculating persistent absence resulted from issues that users raised.

1.13 We consider that DfE could increase the public value of statistics on school and pupil characteristics by developing a way to engage actively with a wider range of users, to gain a broad view of user need across the suite of statistics. Taking a high-level view of public value across the suite of statistics through more proactive user engagement would help DfE assess demand more clearly.

**Accessibility and usability**

1.14 DfE pre-announces and publishes statistics on school and pupil characteristics via the GOV.UK portal. During this Assessment users were complimentary about the accessibility of the publications and found their organisation into collections helpful. They were generally positive about the accessibility and usability of the accompanying data tables and suggested incremental changes that DfE could make to improve accessibility further. As part of this Assessment, the Government Statistical Service (GSS) Quality Centre also provided suggestions to us about how DfE could improve data tables by adopting standard geographic codes. We expect the statistics teams to make the necessary changes in the next publications.

**Table 1: Value detailed findings and requirements**

<table>
<thead>
<tr>
<th>Finding</th>
<th>Examples</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>DfE does not actively engage users to develop a broader picture of demand</td>
<td>• While DfE is clear about user needs arising from the statistics that it publishes, it does not have a systematic way of recognising demand beyond the published</td>
<td>1 In order to improve the public value of these statistics, DfE should: a) Proactively engage its user communities,</td>
</tr>
</tbody>
</table>

---

19 [https://www.gov.uk/government/organisations/department-for-education/about/statistics](https://www.gov.uk/government/organisations/department-for-education/about/statistics)
beyond the published the suite of statistics and how it might achieve more public value from them. DfE also does not consistently communicate the potential uses of statistics on school and pupil characteristics to users.

<table>
<thead>
<tr>
<th>statistics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <em>Schools, pupils and their characteristics</em> and <em>Statements of special educational needs (SEN) and education, health and care (EHC) plans</em> are less clear about the existing public value of statistics on school and pupil characteristics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>reaching unheard voices, in order to uncover and prioritise unmet or unrecognised demand.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Document demand for statistics on schools and pupils and their existing and potential public value</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>reaching unheard voices, in order to uncover and prioritise unmet or unrecognised demand.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Document demand for statistics on schools and pupils and their existing and potential public value</td>
</tr>
</tbody>
</table>
Chapter 2: Quality

Context

2.1 Statistical quality is multi-faceted. The European Statistical System identifies five aspects of quality: relevance; 'accuracy and reliability', 'timeliness and punctuality', 'coherence and comparability' and 'accessibility and clarity'. The focus is often on 'accuracy and reliability'. The need for statistics to be relevant, accurate and reliable means, in essence, that we are confident that the patterns shown by the statistics reflect real-world phenomena, and are not artefacts of the way that the statistics have been assembled. But these factors also need to take into consideration that without being accessible or timely, statistics fail to add as much public value as they might otherwise.

Findings

2.2 DfE bases its statistics on school and pupil characteristics on data supplied by schools and local authorities. It publishes a useful process map that shows the data flows from the data sources through to publication, which we reproduce as figure 3 in this report. Annex 2 includes additional information about data sources and suppliers and about collection systems and processes.

Data quality assurance

2.3 In May 2015, the Authority published Official Statistics, performance measurement and targets that included guidance to identify and take mitigating actions to deal with distortive effects. DfE told us about the potential risks of distortive effects linked to pupil numbers. In particular schools funded by DfE, including academies and local authority maintained schools, receive funding per pupil. Another risk of distortion arises because DfE bases school performance measures on pupil numbers.

2.4 DfE told us that the changing emphasis between the spring and autumn school censuses means that any potential for misreporting pupil numbers would have opposite consequences at each census. The autumn school census mainly collects data for use in school funding and the potential incentive would be to maximise numbers to increase funding. However, it is only pupils that have examination or test results that can be validated against awarding bodies’ records. Additional pupils without results would reduce the school’s performance. The spring school census mainly collects data for use in performance measurement. This could give an incentive to reduce pupil numbers in order to increase performance, but this action would affect school funding.

---

Figure 3: Data flows

Source: National Pupil Database: data flows and data sharing (page 3)
2.5 Another potential area for distortive behaviour arises in recording pupils eligible for free school meals (FSM). DfE statisticians responsible for *Schools, pupils and their characteristics* told us that they carry out extra validation checks on FSM returns – and were alert to unusual changes following recent policy changes – as links to funding could lead to distortive effects.

2.6 The statistics team also told us that it is aware that suggestions for future changes to funding tied to some of the variables that feed into *Schools, pupils and their characteristics* increase the potential for distortive effects and that they will introduce more validation checks as necessary.

2.7 We consider that DfE has demonstrated that it is alert to the potential for distortive effects on the data collections that underlie the statistics and has built in appropriate checks and balances to mitigate these.

2.8 DfE provided evidence of strong quality assurance arrangements for the data and statistics on school and pupil characteristics. It told us about a number of additional levels of assurance that are built into the process with the aim of ensuring that pupil numbers and characteristics are accurate at both the school and class level.

- Once submitted to DfE, the data undergo checks against the previous school census return to highlight significant changes in pupil numbers to guard against distortive behaviour\(^{21}\).
- Head Teachers are responsible for confirming the data accuracy of their school’s data and the school management information system produces a summary table alongside the census return to help them to check its accuracy\(^{22}\).
- School management information systems have validation checks built in and DfE replicates these checks when the data are submitted\(^{23}\). The Education Funding Agency (EFA) provides third party assurance of total school pupil numbers for academies and local authorities provide the same for local authority maintained schools (annex 2).

2.9 DfE sets out the data collection process and quality assurance arrangements in the supporting documents published alongside most of the statistical publications. However, the level of detail it includes in those documents varies.

2.10 The technical document provided alongside *Statements of special educational needs (SEN) and education, health and care (EHC) plans* includes a helpful process map outlining the data collection process for the statistics in this publication (included in annex 2 of this report). The document also outlines potential sources of bias and issues that users should be aware of. In contrast, the supporting document provided alongside *Schools, pupils and their characteristics* is more limited.

---


2.11 We conclude that the risks of bias that could arise in the statistics, and how they are minimised by DfE – for example by the inbuilt balance between competing incentives in the school census; through validation checks and the assurance arrangements of third party organisations such as the EFA – are not consistently and clearly communicated to users.

Data collection errors

2.12 DfE’s HoP wrote to Director General for Regulation in March 2015, outlining his concerns that the methods used to collect data on unlawfully large infant class sizes did not support the production of statistics to a sufficient level of quality to meet users’ needs. This followed an investigation of the data arising from users’ concerns about the number of unlawful infant classes. The Director General for Regulation agreed to remove the National Statistics status of these statistics and said that we would re-assess them – along with the wider suite of statistics about schools and pupils – when DfE was sufficiently assured of the quality of the data collection.24

2.13 In 2015 and 2016 DfE published the statistics on unlawful class sizes as a separate technical annex to Schools, pupils and their characteristics, making it clear that National Statistics did not apply due to the concerns raised and pending their re-assessment. DfE also included a clear description of the errors and the implications for use in the publication.

2.14 On discovering the errors, DfE spoke initially to data suppliers to understand the problem. Since then it has strengthened guidance to local authorities and academies on returning excepted pupil counts and has put in place additional quality checks at various stages of the collection and production process.

2.15 We have reviewed the changes to the guidance and spoken to a small number of local authority representatives responsible for the data collection. As a result we consider that the quality of these statistics is likely to have improved due to DfE’s remedial actions. However, DfE has not spoken again to suppliers to check that the changes made have embedded improved quality and the issue is resolved. Testing suppliers’ understanding of the updated guidance on data collection would give DfE – and us – additional assurance that the quality improvements are embedded and fully achieved.

2.16 In 2016, DfE’s quality assurance processes identified concerns about the quality of data used to produce two of the sets of statistics published in Statements of SEN and EHC plans26 – statistics on the number and percentage of Learning Difficulty Assessments (LDAs) and the number of personal budgets outlined in EHC plans. DfE published these two sets of statistics as experimental statistics in the 2016 publication and it makes the reasons for this clear in the technical document that accompanies the publication.
2.17 LDAs are being phased out and so DfE will not collect data or report on these following the 2017 publication. Regarding the personal budgets data collection for the 2017 publication, DfE will clarify the guidance and add in extra validation rules. We will complete our assessment of the compliance with the Code of personal budgets statistics when DfE tells us that it is sufficiently assured of the quality of the data collection. We are encouraged that DfE’s quality assurance processes identify errors in data collection such as these.

2.18 DfE collects nationality and country of birth data as part of the school census – the main source for statistics on schools and pupil characteristics – but the data are not published as part of those statistics. DfE has identified that some data suppliers have not followed guidance about how to record nationality and country of birth. In response DfE has begun a review of that guidance. As well as short-term aims to improve the guidance around nationality and country of birth, the review also includes a longer-term aim to review the governance of the school census.

2.19 We welcome the commitment to continuous improvement demonstrated by this guidance review. We consider that a system-level process review, including guidance for data suppliers, could be beneficial to avoid data collection issues – such as the ones discovered recently – in the future.

Table 2: Quality Detailed Findings and Requirements

<table>
<thead>
<tr>
<th>Finding</th>
<th>Examples</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>While DfE publishes a range of documentation about quality assurance, it does not consistently publish enough information about:</td>
<td>The supporting document published alongside <em>Schools, pupils and their characteristics</em> outlines data sources and includes links to documents that outline the process for data collection, though these are aimed at data suppliers. The documents do not include quality information such as completeness of the data, record issues, or validation checks</td>
<td>a) In order to enhance the quality of statistics on school and pupil characteristics, DfE should publish information that assures users about their quality that includes:</td>
</tr>
<tr>
<td>• the limitations and possible biases in relation to use of the various statistics</td>
<td>Data collected through other censuses – such as the school-level annual school census that collects data from independent and registered general hospital schools – come directly from schools and are not subject to a second layer of local authority assurance.</td>
<td>a) a detailed and accessible account of the quality assurance processes in place that includes the data checks carried out by data suppliers and details about any audits or third party assurance of the statistics</td>
</tr>
<tr>
<td>• quality assurance processes at data collection</td>
<td>• Risks to data quality and</td>
<td>b) information about the statistics team’s judgements in relation to any identified quality issues and their implications on the quality of the statistics and the team’s rationale</td>
</tr>
<tr>
<td>• data that do</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
not pass through local authorities – for example independent and hospital schools, to provide robust reassurance to users about the quality of the statistics.

possibilities for statistical bias arise through suppliers’ differing interpretation of requests for information and possible distortive effects associated with performance and funding. DfE is aware of a number of risks and has checks in place to detect if and when they arise, but these are not sufficiently documented.

- DfE’s Statement of Administrative Sources outlines data sources and gives a useful summary of what sources feed into which publication. It was last updated in 2014. DfE told us that data sources and collection methods change infrequently and committed to checking it was up to date.

DfE has not checked directly with suppliers whether changes introduced to address the problems identified with data collection have been successful and it has not reviewed procedures to identify system-level changes.

- DfE has strengthened guidance to local authorities and academies on returning excepted pupil counts and has put in place additional quality checks at various stages of the collection and production process to improve the data that feed into unlawful infant class size statistics. DfE has not spoken to suppliers to check that the changes made have embedded improved quality and the issue is resolved.

- DfE’s quality assurance processes and user feedback have identified other instances of data quality being adversely for reaching these judgements in terms of their known and potential uses

c) information on the limitations and possible biases of the statistics in relation to use
d) a link to an up-to-date statement of administrative data sources

As part of meeting this Requirement, DfE should refer to the Office for Statistics Regulation’s Administrative Data Quality Assurance Toolkit.

DfE has not checked directly with suppliers whether changes introduced to address the problems identified with data collection have been successful and it has not reviewed procedures to identify system-level changes.

To enhance the quality of these statistics, DfE should:

a) Test changes to guidance on data collection for the affected statistics among a sample of suppliers to check that it is now clear

b) Review its procedures, including guidance for data suppliers, and introduce and verify changes as appropriate to avoid similar data quality issues arising in the future.

---


affected by suppliers mis-interpreting requests for information, including for LDAs and personal budgets for EHCs.
Chapter 3: Trustworthiness

Findings

Increasing trustworthiness

3.1 The HoP wrote to the Director General for Regulation on 10 March 2015 outlining his concerns about the data on unlawfully large infant class sizes that led to an agreement to remove the National Statistics status of these statistics pending re-assessment (paragraph 2.12). DfE flagged up its concerns and the de-designation clearly in Schools, pupils and their characteristics. It has similarly drawn users’ attention to the quality issues it discovered in statistics published – and to their status as experimental statistics – in the recent publication Statements of SEN and EHC plans. We welcome that DfE continues to be open and transparent about the errors in data collection that it discovers.

3.2 DfE also encourages trust in its statistics by enhancing the independent statistician’s voice in government statements issued alongside, or based upon, the statistics. The HoP at DfE told us that he is exploring with the Department’s press team how the statisticians can interact more directly with the media to enhance the independent statistical voice to improve trustworthiness. One example of how DfE is starting to put this into practice is in DfE’s Press release on ‘A level’ results day which included a section called ‘Advice from Head of Profession on Comparability’. We welcome and encourage this development.

Balancing data access with confidentiality and privacy

3.3 DfE makes statistics on school and pupil characteristics accessible through different formats to meet particular needs. To support this, DfE has a Policy Statement on confidentiality which it applies with the aim of maintaining confidentiality as it makes statistics on school and pupil characteristics available for use. School-level statistics and underlying data are available and accessible for most of the statistics on schools and pupils characteristics. The exception is Statements of SEN and EHC plans: England where the lowest published geographic level is the local authority geography because the information may be used in combination with other statistics to identify individual pupils. For Permanent and fixed-period exclusions in England, school-level statistics have been made available for the first time as part of the 2014/15 exclusions statistics that DfE published in July 2016.

3.4 The NPD holds the underlying data about the characteristics of pupils in the state sector and non-maintained special schools that feeds into statistics on school and pupil characteristics, alongside other data such as attainment data. DfE gives restricted access to pupil data through the NPD for purposes such as...

---

29 https://www.gov.uk/government/news/a-level-results-day
as research and analysis\textsuperscript{33}. Applicants must demonstrate that they will use the data to promote the education or well-being of children and that they can meet necessary data security requirements. This approach is in line with the \textit{Education (Individual Pupil Information) (Prescribed Persons) (England) Regulations 2009}\textsuperscript{34}. These regulations allow DfE to share pupil data from the NPD with named bodies and third parties including schools, local authorities, other government departments and agencies. They also allow DfE to disclose individual pupil information, subject to the Data Protection Act 1998, to named bodies and persons who, for the purpose of promoting the education or well-being of children in England are:

- Conducting research or analysis
- Producing statistics
- Providing information, advice or guidance

3.5 DfE has committed to developing a data lab service that would extend secure access to the NPD data under appropriate safeguards to extend accessibility to those unable to satisfy all of the necessary data security criteria through their own IT system.

3.6 In recent Authority investigations\textsuperscript{35} we have previously reviewed the accessibility of data through the NPD and whether DfE has balanced the requirements for open data and confidentiality appropriately. We have concluded that:

‘DfE gives access to NPD extracts for research and other specified purposes to successful applicants who satisfy data security requirements. We consider that its process seeks to strike the appropriate balance between data confidentiality and the practical utility of data that underlie the statistics.’\textsuperscript{36}

3.7 We are aware of, and the HoP has sent us correspondence\textsuperscript{37} relating to, concerns on both access and privacy, including around the sharing of data that it holds in the NPD with other parts of government. DfE is engaging with users around their concerns and the issue of the appropriate balance between privacy and access. We fully support this ongoing engagement. There is an increasing focus on reusing and sharing data across Government to help improve public services through greater data linkage and on increasing transparency of, and access to, Government data to help the public hold the Government to account. As a result, ongoing engagement with users is essential to maintain the appropriate balance between privacy and data access.

\textsuperscript{33} \url{https://www.gov.uk/guidance/national-pupil-database-apply-for-a-data-extract}  
\textsuperscript{34} \url{http://www.legislation.gov.uk/uksi/2009/213/made}  
\textsuperscript{35} \url{https://www.statisticsauthority.gov.uk/correspondence/national-pupil-database/} and \url{https://www.statisticsauthority.gov.uk/publication/access-to-education-attainment-data/}  
\textsuperscript{36} \url{https://www.statisticsauthority.gov.uk/publication/access-to-education-attainment-data/}  
\textsuperscript{37} \url{https://www.statisticsauthority.gov.uk/correspondence/access-to-education-attainment-data-3/}  

(reference added 17 February 2017 after first publication)
Policies and standards

3.8 DfE promotes trust in its statistics by publishing a transparent framework of statistical policies and standards[38]. DfE’s commitment to transparency in its stewardship of statistics is similarly demonstrated by its publication of:

- an annual report on the work of the Star Chamber Scrutiny Board[39] (annex 2)
- detailed process information for each of the main data sources used in statistics on school and pupil characteristics including the school census[40]
- guidance on accessing the data underpinning statistics on school and pupil characteristics which is included in the NPD[41]

3.9 When corrections are made to statistics, DfE is transparent in communicating that this has happened. DfE told us that these are highlighted on GOV.UK for minor corrections and on the main publication (the Statistical First Release) itself for major corrections. DfE includes a summary of how it handles corrections in its revisions policy however the policy does not make clear the different approaches it takes to major and minor corrections[42]. Documenting and publishing its corrections policy in more detail – particularly the different approaches to minor and major corrections – would improve users’ awareness of how DfE handles corrections, and further increase trust in its statistics.

<table>
<thead>
<tr>
<th>Finding</th>
<th>Examples</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>DfE does not make its approach fully clear to users when it makes corrections to publications.</td>
<td>• DfE highlights minor corrections on GOV.UK and major corrections on the aggregate report. DfE summarises its corrections policy in its revisions policy. However, the policy does not make clear the difference in the way it treats minor and major corrections[43].</td>
<td>4</td>
</tr>
</tbody>
</table>

---

[39] https://www.gov.uk/government/groups/star-chamber-scrutiny-board
Annex 1: About the statistics

The statistics

A1.1 The Department for Education (DfE) presents statistics on school and pupil characteristics across a number of published reports, through an online web-based tool and through access to data. The reports include:

- *Schools, pupils and their characteristics*[^44]
- *Special educational needs in England*[^45]
- *Statements of special educational needs (SEN) and education, health and care (EHC) plans*[^46]
- *Pupil absence in schools in England (Autumn term, Combined Spring and Autumn term and Full year releases)*[^47]
- *Permanent and fixed-period exclusions in England*[^48]

A1.2 *Schools, pupils and their characteristics* presents information about the numbers of schools and pupils in England. It also includes statistics on the characteristics and circumstances of these pupils, including the numbers eligible for free school meals, ethnicity breakdowns and the number of pupils in infant classes.

A1.3 *Special educational needs in England* includes statistics about pupils with SEN, and SEN provision in schools. DfE published *Statements of special educational needs (SEN) and education, health and care (EHC) plans* separately for the first time in 2015 to provide more-timely information about the transition from issuing statements of special educational needs to education and health care plans following changes in legislation.

A1.4 *Pupil absence in schools in England* includes statistics on overall authorised and unauthorised pupil absences by school type, including persistent absentees and pupil characteristics. *Permanent and fixed-period exclusions in England* includes statistics on the levels of permanent and fixed-period exclusions by school type, including information on reasons for exclusions and exclusion review panels.

A1.5 DfE presents some of the statistics on school and pupil characteristics by individual school in the *Performance Tables*[^49] alongside performance measures for school-level attainment. The *NPD*[^50] holds data about the characteristics of pupils in the state sector and non-maintained special schools. Subject to approval, DfE makes these data available for activities such as research that promote the education or well-being of children in England (paragraph 3.4).

A1.6 We include more information on the uses and users of statistics on school and pupil characteristics in *chapter 1* (paragraphs 1.3 to 1.7) and the *executive summary* (paragraphs ES.5 to ES.7) of this report.

[^50]: https://www.gov.uk/government/collections/national-pupil-database
Annex 2: The source data

Data sources and flows

A2.1 DfE takes data from the school census\(^5\) for:

- most of the statistics in *Schools, pupils and their characteristics* and *Permanent and fixed-period exclusions in England*
- all of the statistics in *Pupil absence in schools in England* (autumn term, combined spring and autumn term and full year releases) and *Special educational needs in England*

The school census takes place three times a year, during the autumn, spring and summer terms and compiles pupil and school-level data about state-funded schools, including academies and other schools that are not maintained by a local authority.

A2.2 In addition DfE collects:

- school-level data for statistics in *Schools, pupils and their characteristics*:
  - directly from independent schools through the school-level annual school census\(^5\)\(^2\)
  - directly from registered general hospital schools through the school-level annual school census\(^5\)\(^3\)
- organisation-level data on alternative provision from local authorities through the alternative provision census\(^5\)\(^4\)
- data on reviews of permanent exclusions – for statistics in *Permanent and fixed-period exclusions in England* – directly from Local Authorities

We re-present DfE’s summary of the data flows for all of these sources in chapter 2 (figure 3).

A2.3 DfE collects local authority-level data directly from local authorities for statistics in *Statements of special educational needs (SEN) and education, health and care (EHC) plans*. We reproduce this data flow in figure 4.

---


\(^5\)\(^4\) The Alternative provision census covers pupils attending a school not maintained by a local authority for whom the authority is paying full tuition fees, or educated otherwise than in schools and pupil referral units, under arrangements made (and funded) by the authority. [https://www.gov.uk/government/publications/alternative-provision-census-2016-guide-for-las-and-ap-providers](https://www.gov.uk/government/publications/alternative-provision-census-2016-guide-for-las-and-ap-providers)
Figure 4: Overview of end-to-end process of SEN collection and publication

![Diagram of SEN collection process]

Note: User = local authority

**Source:** Statements of special educational needs (SEN) and education, health and care (EHC) plans, 2016, Technical document: SFR17/2016  

### Third party data quality assurance

A2.4 The Education Funding Agency (EFA) performs a series of funding audit visits each year to confirm that funds have been correctly claimed and they have been spent as parliament intended. Visits are performed based on the most recent data and in assurance plan cycles which run from 1 July to the following June. Visits are selected on a sample basis in agreement with the National Audit Office and follow both a random and risk basis.

A2.5 A local authority must approve all returns from local authority maintained schools in its area before DfE will accept and use them. As well as the scrutiny built into the census process, local authorities are also provided with funding reports during the live data collection which translate the census data into funded pupil numbers for all funding streams; local authorities must check these reports in conjunction with finance officers before they approve census data for their schools.

A2.6 Data collected through other censuses – such as the school-level annual school census that is used to collect information from independent schools and from registered general hospital schools – come directly from schools and are not subject to this additional layer of assurance.

---

55 [https://www.gov.uk/government/organisations/education-funding-agency](https://www.gov.uk/government/organisations/education-funding-agency)
DfE’s COLLECT database

A2.7 Schools use management information systems that store information about the school and its pupils, including those that DfE collects through the various schools censuses. Schools supply data to DfE via its COLLECT database either directly or – in the case of local authority maintained schools – through the local authority. Local authorities also submit data on alternative provision, reviews of permanent exclusions and special educational needs via COLLECT. The COLLECT system acts as a communication tool through which those submitting data are able to receive answers to queries about their submission.

DfE’s Star Chamber Scrutiny Board

A2.8 DfE’s Star Chamber Scrutiny Board is an external scrutiny group that includes representatives from schools, local authorities and regulators. The Star Chamber Scrutiny Board helps DfE to review and assess the data collection requirements made of schools and children’s services, including the addition of new requirements. In reviewing and controlling new data collection proposals that emerge from the department it seeks to balance the need for new data against the burden on data suppliers. The Star Chamber Scrutiny Board has published an annual report of its work since 2008.56

56 https://www.gov.uk/government/groups/star-chamber-scrutiny-board
Annex 3: The assessment process

A3.1 This Assessment was conducted from January 2016 to February 2017.

A3.2 Statistics on school and pupil characteristics were previously assessed as part of Assessment Report 41: Statistics on School and Pupils Characteristics, and Absence and Exclusions in England in May 2010 and designated as National Statistics in November 2010. Assessment report 41 made three Requirements, which have all been addressed by DfE:

- investigate and document responses from users which inform the decision on whether to reduce the number of publications about pupil absence
- review the way in which these statistics are presented on the website, so that users can easily identify and access the information relevant to their needs
- ensure that the name and contact details for the responsible statistician or statistical Head of Profession are included on all statistical releases and bulletins

A3.3 The DfE HoP wrote to the Director General for Regulation on 10 March 2015 outlining his concerns that the methods used to collect data on unlawfully large class sizes did not support the production of statistics to a sufficient level of quality to meet user needs. We agreed to remove the National Statistics status of these statistics and said we would re-assess them – alongside the wider suite of school and pupil characteristics – when DfE was sufficiently assured of the quality of the data collection. This assessment considers the re-designation of these statistics alongside other statistics on school and pupil characteristics.

A3.4 This report was prepared by the Office for Statistics Regulation and approved by the Regulation Committee on behalf of the Board of the UK Statistics Authority, based on the advice of the Director General for Regulation.

A3.5 The regulatory team – Pat MacLeod and Siobhan Tuohy-Smith – agreed the scope of and timetable for this Assessment with representatives of DfE in January 2016. The documentary evidence was provided in February 2016. The regulatory team subsequently met the statistics team at DfE during May 2016 to review compliance with the Code of Practice, taking account of the evidence provided and researched.

A3.6 Part of the assessment process involves our consideration of the views of users. We approach some known and potential users of the set of statistics, and we invite comments via an open note on our website. This process is not a statistical survey, but it enables us to gain some insights about the extent to which the statistics meet users’ needs and the extent to which users feel that the producers of those statistics engage with them. We are aware that responses from users may not be representative of wider views, and we take account of this in the way that we prepare assessment reports.

59 https://www.statisticsauthority.gov.uk/correspondence/unlawfully-large-infant-class-size-statistics/
We spoke directly with 9 sets of users and received 11 email responses from the user engagement. The respondents were grouped as follows:

**Table 3: Summary of respondents to the assessment consultation**

<table>
<thead>
<tr>
<th>Suppliers</th>
<th>Local Authority</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Producer (as supplier)</td>
<td>2</td>
</tr>
<tr>
<td>Users</td>
<td>Academic</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Local Government</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Regulator</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Researcher/ Analyst</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Special interest group</td>
<td>1</td>
</tr>
</tbody>
</table>

**Key documents**

Statistics on school and pupil characteristics and supporting information

Department for Education statistics: Standards and policies

Other documents provided by DfE included the following: Organisation charts, job descriptions, Quality assurance procedures, notes and reports, Internal Audit report, data collection instruments, minutes of recent user meetings.

**Contact us**

For any queries about this assessment, or the work of the Office for Statistics Regulation in general, please email assessment@statistics.gov.uk.
Annex 4: Responding to the Assessment report: what the Authority and the producer body should expect from each other

A4.1 The publication of the Assessment report represents a key milestone in the assessment process, but should not be viewed as the end point. The next phase, to meet the Requirements set out in this report, is critical to delivering the value, quality and trustworthiness to achieve and maintain National Statistics status. The next steps are as follows:

- immediately following the publication of the report, the Office for Statistics Regulation will arrange a meeting with the statistics team to talk through the detail of the Requirements and to achieve a common understanding

- the HoP can follow up with the Assessments Programme Manager about the Director General for Regulation’s letter that accompanies this Assessment report. The letter: draws out the key findings; provides advice about where the statistics team is likely to need senior management support and direction; and conveys any findings that have wider implications for the producer body and statistical system

- the HoP is encouraged to:
  i) develop an action plan to meet the Requirements to the timetable set out in paragraph ES.10 of this report
  ii) agree the action plan with its senior management and confirm that it is appropriately resourced
  iii) share the action plan with the Office for Statistics Regulation, publish it alongside the statistics, and explain to users and suppliers how it will engage with them in delivering the plan
  iv) seek out peers and support services that can help in delivering the plan – for example, the National Statistician’s Good Practice Team
  v) agree with the regulatory team, how often, and in what form, the statistics team would like to engage about progress against the action plan – for example, some teams choose to meet with us once a month

- the statistics team should provide full formal written evidence to the Office for Statistics Regulation by the deadline of 28 April 2017 as set out in paragraph ES.10 of this report. There is no set format for reporting, except that the statistics team should report against each Requirement given in tables 1 to 3 and provide links to any published or internal documents as support

- we will review the evidence within 10 working days and arrange to provide feedback to the statistics team. As part of this process, we will talk to data suppliers and users to inform our judgements about whether the requirements have been met. When we are satisfied that the
Requirements have been fully met, their conclusions will be quality assured by the Office for Statistics Regulation’s senior management and then presented to the Authority’s Regulation Committee to decide on designation. The Director General will then write publicly to the HoP to confirm the decision

- in the event that Requirements are not fully met within the agreed timetable, the Authority will implement escalation procedures

A4.2 Based on experience, the Office for Statistics Regulation strongly encourages statistics teams to:

- engage with the detailed thinking of the Assessment report, and revisit it regularly. We will be seeking evidence that the statisticians are demonstrating curiosity and are challenging their own thinking around delivering value, quality and trustworthiness. The Requirements in this report should not be viewed as a simple checklist

- view the responsibility for meeting the Requirements as falling to the organisation as a whole, not just the team that produces the statistics

- engage users early, not just to keep them updated, users can often offer valuable insight and expertise

- contact the regulatory team at any time if there are any questions or concerns

A4.3 Responsibility for complying with the Code of Practice does not end with the award of the National Statistics designation. It is the statistics producers' responsibility to maintain compliance and also to improve the statistics on a continuous basis. The Office for Statistics Regulation encourages statistics producers to discuss promptly any concerns about whether its statistics are meeting the appropriate standards. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated only when standards are restored.