



National Audit Office

INFORMATION ASSURANCE SUMMARY REPORTS

Department for Education

The purpose and scope of this review

1 During the period November 2011 to January 2012, the National Audit Office (NAO) carried out an examination of a sample of the Department for Education's (the Department's) indicators and operational data systems. This involved a detailed review of:

- the match between the indicators the Department publishes, the operational data they use to run themselves and the priorities and key business areas of the Department;
- the process and controls governing the selection, collection, processing and analysis of data; and
- the reporting of results.

2 Our conclusions are summarised as numerical scores. The ratings are based on the extent to which departments have put in place and operated internal controls over the data systems that are effective and proportionate to the risks involved.

3 This report provides an overview of the results of our assessment. It does not provide a conclusion on the accuracy of the out-turn figures included in the Department's public performance statements. This is because the existence of sound data systems reduces but does not eliminate the possibility of error in reported data.

Our findings on performance measurement

4 The Department's Business Plan indicators do not cover all of the Department's priorities. The Department is yet to present input or impact indicators in its Business Plan to measure three of its structural reform priorities:

- reduce bureaucracy and improve accountability;
- train and develop the professionals who work with children; and
- reform the school curriculum and qualifications.

The Department believes that these priorities are better captured by actions and milestones, and not by performance indicators. The Department has included a number of such milestones and actions in their Business Plan. We consider that the public's ability to understand progress against the priorities to "Reduce bureaucracy and improve accountability" and "Train and develop the professionals who work with children" could both benefit from quantitative impact indicators. For example, the Department could produce a measure of the cost savings resulting from the reduction in bureaucracy.

5 The Department is yet to present input indicators in its business plan for the structural reform priority "Improve support for children, young people and families, focusing on the most disadvantaged", nor impact indicators for the structural reform priority "Introduce new support for the Early Years". We understand that the Department intends to set two impact indicators for the Early Years Priority in the Quarterly Data Summary but these have not yet been defined.

6 The Department's chosen indicators are generally quantitative. The indicators in the Quarterly Data Summary give a clear picture of spending or other outputs, but the Department should consider using additional qualitative measures (for example Ofsted reports or data on the quality of capital projects).

7 The Business Plan indicators are well defined. The Business Plan indicators tested are generally based on robust and well established control procedures. The business indicators tested are all national statistics and have been assessed by the UK Statistics Authority. The definition of indicators such as 'Attainment of 'the Basics' at 16' could be more clearly explained in the Quarterly Data Summary, enhancing transparency.

8 The Department is still developing a number of indicators. In addition to the two impact indicators for 'Introducing new support for the Early Years', the Department's Quarterly Data Summary includes one other indicator which has yet to be defined (attainment beyond the basics at age 19). Additionally one input indicator and three impact indicators are only available annually and data has not yet been published on these indicators. The input indicator relates to Schools' Aggregate Spending (Pupil Premium) and the three impact indicators relate to the Outcomes of Education.

9 The results of independent schools are included in the Attainment National Statistics to reflect the total population's attainment. The Department tell us that the inclusion of Key Stage 4 results of independent schools provides a more complete picture of national attainment, and allows international comparison.

10 The performance information reported to the Department's leadership and board is comprehensive. Performance information contains narrative information on spending, performance indicators and key risks for each operational objective. Performance against all 18 of the Department's operational objectives is reported to the board. Multiple data streams are used to produce this information, utilising a wider range of data sources than the Quarterly Data Summary. Eleven of the Quarterly Data Summary impact indicators are included within this information (on attainment and school performance). The systems for preparing performance information are robust. The Department continues to look at ways to improve the usability and quality of performance information. Further improvement could be made in areas by adding more qualitative measures, for example under the objective 'To free professionals to do their jobs more effectively, with less regulation or interference from central Government', to provide the board with the best information possible with which to make key business decisions.

11 The process for reviewing the performance information reported to the Department's leadership and board is robust. This includes review and clearance at seven stages. We have not assessed the validation procedures for all of the individual indicators in the Report.

12 The Department is currently considering how to rationalise the collection of school performance data. We have assessed a number of different systems to collect and validate school performance data and found them individually cost effective. However, the Department have performed an overarching review of the different systems in place and are currently considering whether a single data warehouse would provide a more cost-efficient solution to collecting and validating school performance data. We welcome the department's intention to rationalise its data handling.

Our assessment of data systems

13 In this first tranche we examined five Business Plan indicators. We also examined the Common Areas of Spend indicators on Staff and Estates, also published in the Quarterly Data Summary.

14 We examined Business Plan indicators which relate to the educational attainment of 'the basics' at ages 11, 16 and 19, the proportion of teaching hours of English, Maths and Science that were taught by teachers with a relevant post-A-level qualification and the number of academies opened nationally.

15 The table in **Figure 1** overleaf summarises our assessment of the data systems underlying the first tranche of indicators.

16 All the business plan indicators assessed had systems in place. The data systems underlying the attainment indicators are well-established. They have been in place since before the NAO's report on the Department's data systems in June 2010. This report found the data systems underlying attainment at 11 and 16 to be 'fit for purpose' and the data system underlying attainment at 19 to be 'broadly appropriate'. The only recommendation from this work was that the Department should document procedures more robustly. We have found documentation of validation of the assessed indicators to be reasonable and have no problem obtaining evidence. We have not however, assessed whether changes have been made in light of this previous recommendation.

Figure 1

A summary of the results of our validation exercise

Score	Meaning	Indicators we reviewed that received this score
4	The data system is fit for purpose and cost-effectively run	<p>Four Business Plan indicators and two workforce indicators</p> <p>Attainment of 'the basics' at 11.</p> <p>Attainment of 'the basics' at 16.</p> <p>Attainment of 'the basics' at 19.</p> <p>Number of academies opened nationally</p> <p>Payroll staff (full-time equivalents)</p> <p>Average staff costs</p>
3	The data system is adequate but some improvements could be made	<p>Four estates indicators</p> <p>Total cost of the office estate</p> <p>Total size of the office estate</p> <p>Estate cost per m²</p> <p>Estate cost per full-time equivalent</p>
2	The data system has some weaknesses which the Department is addressing	No indicators
1	The data system has some weaknesses which the Department must address	<p>One Business Plan indicator and one workforce indicator</p> <p>Teaching (of English, Maths and Science) by teachers with a relevant qualification.</p> <p>Contingent labour (full-time equivalents)</p>
0	No system has been established to measure performance against the indicator	No indicators

Source: National Audit Office analysis

17 The system underlying the workforce indicator is less well-established. The Department introduced the School Workforce Census in November 2010 and it is now the Department's preferred method of collecting data on teachers and support staff from local authorities, maintained schools and academies. The first figures for the workforce indicator 'teaching by teachers with a relevant qualification' were published in the October 2011 Quarterly Data Summary. At present about 40 per cent of the data (a combination of teacher qualifications and curriculum information) are missing for the workforce indicator. The Department and UK Statistics Authority have identified a potential for bias arising from the missing data.

18 The Department does not have adequate systems to identify the number of consultants working throughout the period. The contingent labour indicator includes agency workers, interim managers, and specialist contractors but should also include full-time equivalent consultants employed. While the Department has and uses data on consultants' costs, it does not readily collate data to calculate the full-time equivalent number of consultants. This understates the Contingent Labour force figures in the Quarterly Data Summary. The Department has stated that it will address this by including a note in the measurement annex to the Quarterly Data Summary, explaining the issue.

Recommendations

19 The Department should consider how it can enhance its performance reporting in line with its strategic priorities. The Department has not developed both input and impact indicators for five of its six strategic priorities. There are a number of performance indicators which are reported to the board and could be used as indicators in the Quarterly Data Summaries, enhancing accountability. These factors – if left alone – contribute to the risk the public are not given the information required to hold ministers to account. The Department is looking to enhance its indicators and reporting of structural reforms when its business plan is refreshed in May 2012.

20 The Department should consider whether adopting alternative impact indicators would add value to the Quarterly Data Summary. Impact indicators are largely quantitative; wider use of qualitative indicators would provide a more holistic picture of progress against the Department's strategic priorities. For example, Business Plan indicators on the quality of schools focus on attainment. One possibility could be to include a measure of Ofsted scores as an indicator of school quality.

21 Where possible, the Department should consider using some indicators reported to the board to fill the gaps in the Business Plan indicators. For example, indicators regarding teacher supply and quality listed under the operational objective 'To raise the standards of teaching by improving recruitment, training and development and performance management arrangements for teachers' could be considered for use as impact indicators under the strategic objective 'Train and develop the professionals who work with children'. Doing so would take minimal additional work and significantly enhance the ability of the public to hold the Department to account. We recognise that this might not be possible in all cases.

22 The Department should assess whether it is possible to calculate the number of consultants it hires. This is not explained in the Quarterly Data Summary, limiting transparency. The Department should identify the most efficient way to obtain this information on a consistent and meaningful basis. If the Department cannot obtain consultant numbers cost-effectively this limitation should be explained in the annexes to the Quarterly Data Summary.

23 The Department should consider whether the complete School Workforce Census returns it receives are representative of the entire population. The Department and UKSA have identified a potential for bias arising from some teacher qualifications and curriculum information not being returned. The Department should further investigate whether non-returns do create a bias in the School Workforce Census data it uses, and should work to reduce any bias through improving the completeness of returns. The Department should ensure that users of the data are aware of any uncertainty introduced by this potential bias.

24 The Department should consider whether the inclusion of KS4 results of independent schools is the most appropriate for the Quarterly Data Summary. The Quarterly Data Summary does not show trends or comparative data. The national and segregated data is published separately by the Department, which would still allow the complete picture of national attainment to be viewed, whilst international comparisons could still be made. Should the Department choose to include the Key Stage 4 results of independent schools within the attainment impact indicators, it should make this explicitly clear and outline the rationale for doing so. It should also explain that the methodology for Key Stage 4 attainment is different for Key Stage 2 attainment, as this may not be clear to users of the Quarterly Data Summary.