
Publisher's PDF, also known as Version of record

Link to publication record in Explore Bristol Research

PDF-document

This is the final published version of the article (version of record). It first appeared online via Nuffield Foundation at http://www.nuffieldfoundation.org/educational-progress-looked-after-children. Please refer to any applicable terms of use of the publisher.

University of Bristol - Explore Bristol Research

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: http://www bristol.ac.uk/pure/about/ebr-terms
The Educational Progress of Looked After Children in England: Linking Care and Educational Data

Judy Sebba¹, David Berridge², Nikki Luke¹, John Fletcher¹, Karen Bell², Steve Strand¹, Sally Thomas², Ian Sinclair¹, Aoife O’Higgins¹.

¹ University of Oxford
² University of Bristol
Acknowledgements

We are very grateful to DfE for allowing access to relevant parts of the two major education and care databases. We also want to thank the local authorities, schools, teachers, social workers, foster carers and Virtual School headteachers who participated. Most of all, we are particularly grateful to the young people who were interviewed and who contributed their views on how we can improve the educational experiences of young people in care in the future.

Comments on a draft of this report were received from Michael Allured, Professor Nina Biehal, Katy Block, Jim Cockburn, Professor Harry Daniels, Professor Bob Flynn, John Freeman, Professor Robbie Gilligan, Angus Hebenton, Emma Ing, Cheryl Lloyd, Jane Pickthall, Ruth Maisey, Dr Sara McLean and Dr Karen Winter. We are very grateful for their assistance.

The Nuffield Foundation is an endowed charitable trust that aims to improve social well-being in the widest sense. It funds research and innovation in education and social policy and also works to build capacity in education, science and social science research. The Nuffield Foundation has funded this project, but the views expressed are those of the authors and not necessarily those of the Foundation. More information is available at www.nuffieldfoundation.org.

November 2015
© Rees Centre/University of Bristol
ISBN: 978-0-9934738-0-7
eISBN: 978-0-9934738-1-4

*Three technical reports are available with a much more detailed description of the methodology, findings and analysis on the websites of the Rees Centre http://reescentre.education.ox.ac.uk/ University of Bristol School for Policy Studies www.bris.ac.uk/sps/research/projects/completed/ and the Nuffield Foundation www.nuffieldfoundation.org/
Contents

• Executive summary
  • Key Findings and Conclusions
  • Implications and Recommendations for Policy and Practice

• Main Report
  • Aims and Objectives
  • Methodology
  • Data Analysis
  • Key Findings
  • Conclusions
  • Limitations of the Study
  • Implications and Recommendations for Policy and Practice
  • Future Research
  • References

Page 4
Page 5
Page 7
Page 8
Page 9
Page 11
Page 12
Page 30
Page 32
Page 33
Page 34
Page 35
Executive Summary

There were 69,540 looked after children in England at 31st March 2015, an increase of 1% compared with 31st March 2014, and of 6% compared with 31st March 2011 (DfE, 2015). Seventy-five per cent of these children and young people were living in foster placements. Children who are, or have been, in care are one of the lowest performing groups in terms of educational outcomes internationally (Flynn, Tessier, & Coulombe, 2013). In England in 2014, data from the Department for Education (2014) showed that at the end of Key Stage 1 (age 7 years), 71% of children in care achieved the expected level in reading; in writing the figure was 61% and in maths, 72%. This compares with 90%, 86% and 92% of all children in those subjects respectively. At the end of Key Stage 2 (age 11 years), the gap widens: 48% of children in care reached the expected academic level in English and mathematics, compared with 79% of all children.

The attainment gap continues to increase as children get older, so that 6% of care-experienced people attend university, compared with just over 50% of young people in the general population (DfE, 2015). Young people transitioning from care also have poorer employment prospects and health outcomes than the general population and are over-represented in the homeless and prison populations. Less is known about the factors that are associated with the progress of children in care from the end of KS2 to the end of KS4 and attainment at KS4. The main research questions were:

**What are the key factors contributing to the low educational outcomes of children in care in secondary schools in England?**

**How does linking care and educational data contribute to our understanding of how to improve their attainment and progress?**

These questions were expected to cast light on the extent of, and reasons for, variations between local authorities in the outcomes achieved by children in care and to help in:

- identifying where to invest resources (e.g. on supporting carers to increase placement stability or on providing support on a geographical basis to reduce school changes) in order to maximise improved outcomes
- identifying the kind of practices that seem most likely to enhance educational outcomes
- preparing for further research linking and analysing data from national and local datasets
- developing complementary social work and educational research perspectives and methods for future use in addressing complex issues

To this end, the study explored the relationship between educational outcomes, young people’s care histories and individual characteristics by linking the National Pupil Database (NPD) and the Children Looked After Database (CLAD, also known as SSDA003) in England, for the cohort who were eligible for GCSEs (examinations at age 16 years) in 2013. In addition, these data were compared with those relating to Children in Need (CiN) and to those not in need and not in care.

Thus, data on five different groups were subjected to analyses, though some parts of this study apply only to some of these groups:

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLA-LT early entry</strong></td>
<td>A longer-stay group of Children Looked After (those in care for 12 months or more continuously at the end of KS4) who were also in care at the end of KS2</td>
</tr>
<tr>
<td><strong>CLA-LT late entry</strong></td>
<td>A longer-stay group of Children Looked After (those in care for 12 months or more continuously at the end of KS4) who were not in care at the end of KS2</td>
</tr>
<tr>
<td><strong>CLA-ST</strong></td>
<td>A shorter-stay group of Children Looked After (those in care for less than 12 months at the end of KS4)</td>
</tr>
<tr>
<td><strong>CiN</strong></td>
<td>Children in Need at the end of KS4 but not in care</td>
</tr>
<tr>
<td><strong>Comparison group</strong></td>
<td>Children not in care and not in need at the end of KS4</td>
</tr>
</tbody>
</table>

Full details of the methodology used are provided in the three technical reports that accompany this overview report, and are available on the websites of the Rees Centre1, University of Bristol School for Policy Studies2 and the Nuffield Foundation3.

These analyses were complemented by interviews with 26 young people, eligible to take their GCSEs in 2013, who had been in care for 12 months or more in six local authorities. The young people also identified for interview the significant adults in their educational careers, including 18 carers, 20 designated teachers, 17 social workers and six Virtual School headteachers4. The aim was to understand what might have contributed to better or worse than expected GCSE outcomes for the 26 young people and how better coordination of services might contribute to this.

---

1 http://reescentre.education.ox.ac.uk/
2 http://www.bris.ac.uk/sps/research/projects/completed/
3 http://www.nuffieldfoundation.org/
4 The Children and Families Act 2014 requires local authorities in England to appoint at least one person for the purpose of promoting the educational attainment of its looked after children. That person – the Virtual School head – should be the lead responsible officer for ensuring that arrangements are in place to improve the educational experiences and outcomes of the authority’s looked after children, including those placed outside the caring authority’s boundaries.
Key Findings and Conclusions

1 Educational outcomes and progress for different groups

1.1 The main comparison group (children neither in care nor in need) performs best; the longer-stay CLA (early and late entry) groups come next and are followed by children in need; and the shorter-stay CLA group do least well. This relative performance of the different groups of children tends to be constant across age groups. Some young people in care with lower prior attainment made very good progress. These findings are consistent with the explanation that care provides an environment that is more conducive to education than that experienced by children in need and thereby challenges the suggestion sometimes made that it is the care itself which contributes to poor outcomes.

1.2 Children not in need or in care provide the benchmark for expected educational performance over time. Relative to these children, CIN were deprived according to measures of family and neighbourhood poverty, were more likely to have special educational needs, had poor attendance and more exclusions from school, and had progressively poorer relative attainment as they went through school.

1.3 The CLA-LT early entry group (those who were already in care by the end of KS2) made greater progress over time than the other groups of children in care or in need. The educational performance of the CLA-LT late entry (those who entered after the end of KS2) group, worsened relative to both the early entry group and the comparator but not as much as the CIN, and noticeably less so than the CLA-ST group.

1.4 The overall attainment gap between CLA and those not in care or in need widens gradually over time and not specifically following transfer from primary to secondary school. Our analyses suggest that one reason for this may relate to those entering care in adolescence with more challenging difficulties being less likely to do well educationally. In addition, it is possible (but would need further analysis to confirm) that some ‘better performing’ children who entered at a younger age have left the system (adoption, special guardianship, reunification).

2 Individual characteristics, educational outcomes and progress

2.1 Measures of deprivation (free school meals – FSM and Income Deprivation Affecting Children Index - IDACI) change more over time for the CLA group than for other children, presumably because their living arrangements change. This may explain why deprivation measures are weaker predictors of GCSE outcomes for CLA than for other children.

2.2 Special educational needs (SEN) are far more common among CLA and associated with large differences in outcome. The ‘gap’ in attainment between those in need or looked after and others is considerably reduced if allowance is made for special educational need. Those SEN most strongly associated with poorer outcomes in CLA are severe/profound learning difficulties, autism spectrum disorders and moderate learning difficulties. In addition, having a disability was also associated with poorer outcomes.

2.3 Other variables that are strongly predictive of poor GCSE outcomes for CLA are being male and having a high Strengths and Difficulties Questionnaire (SDQ) score.

3 Care placement, educational outcomes and progress

3.1 The findings suggest that care generally provides a protective factor, with early admission to care being associated with consistently better outcomes than those found in the other need groups in the study. Care may benefit later admissions but it does not fully reverse the damage that may have been done. There was an overwhelming view from the interviews that entry to care had been beneficial educationally.

3.2 The earlier the young person enters foster or kinship care the better their progress, provided that they do not experience many short care periods interspersed with reunifications with their birth families or many placement and/or school changes.

3.3 Overall, most young people who entered care after the age of 10 did better by being in care for longer. The same could not be said for youngest (0-5 year old) first-time entrants who were still in care or had re-entered care by their GCSE years.

3.4 Both school changes and placement changes are risk factors for looked after children's educational outcomes. There is some evidence that placement changes may produce school changes and hence poor educational outcomes; however, the extent of this effect is relatively small. Both kinds of change may be markers of a child in difficulty.

3.5 Children whose final placement was in foster or kinship care did better at GCSEs than those in residential care or other types of placement. To some extent this reflected the length of the final placement - the longer the placement, the better the outcomes.

---

3 The proportion of children under the age of 16 that live in low-income households in a local area.
2 The SDQ is a self-care report inventory behavioural screening questionnaire for children and adolescents (Goodman, 2001).
Key Findings and Conclusions

4 Schooling, educational outcomes and progress

4.1 Type of school is one of the strongest predictors of outcomes. Almost 40% of the looked after children went to non-mainstream schools (such as special schools, pupil referral units and alternative provision) at KS4 and controlling for other factors, their educational attainments are far lower than the 60% who went to mainstream ones.

4.2 Absences, exclusions and changes of school explain substantive variations in GCSE outcomes and a significant part of the disadvantage CIN and CLA suffer. Educational instability has a stronger association with GCSE results for CIN who are not looked after and CLA in short-term care than for CLA who had longer-term care. Unauthorised absences were a major predictor of poorer scores.

4.3 There was little evidence from the value added analyses of effects at the local authority (LA) level. However, there are a number of factors at school- and pupil-level which reflect LA policy and practice, including care and school placement.

4.4 The evidence of differential school effects for CLA, CIN and other children is limited and overall schools tend to perform similarly better or worse for children in all three groups. This is supportive of reforms to school admissions that give priority to CLA pupils. Nevertheless, we found a small minority of schools that appear to have better contextual value added (CVA)1 outcomes with CIN pupils in particular.

4.5 Teachers and school staff were identified by young people as the main determinants of educational progress. For many young people, carers, teachers, and school pastoral support services played an important part on a daily basis in their educational progress. Foster carers’ educational support was not the main determinant of educational progress.

4.6 Most young people in the study both enjoyed and benefited from one-to-one tuition, recommended through the Personal Education Plan and funded through the Pupil Premium (now Pupil Premium Plus).

5 Other factors, educational outcomes and progress

5.1 Successful children had often been supported educationally from a very young age by birth families, notwithstanding other family problems. For many, birth family problems continued throughout their teenage years, affecting their learning, and did not cease on entering care.

5.2 Having someone whom they felt genuinely cared about them was very important to the young people in this study. This occurred across both high- and lower-progress young people. Young people needed to feel that they would not be let down – which had been their past experience – and that their life mattered. It needed to matter to others before it could matter to them. Most of our high-progress group identified relationships with people to whom they felt gratitude and did not want to let down.

5.3 Resources (e.g. computers, broadband, books) in foster placements do not emerge as a key issue in the lower progress of looked after pupils, with the important exception of some kinship carers.

5.4 Young people often remarked that, ultimately, their educational progress was down to them, although adults and professionals could help influence how it occurred. In this, our evidence suggested that young people needed to be open to support, otherwise termed ‘emotional readiness’.

Inevitably our study had its limitations, including some missing data and challenges in undertaking qualitative interviews, which resulted in a smaller sample than planned.

1 Contextual value added is a measure that takes account of pupil characteristics, school context and type and gives an indication of whether a given school is doing better or worse than expected, given the profile of the school and its pupils.
Children in need provide an additional, and in many respects more suitable, comparison group for children in official statistics and public debate. An important implication of our research concerns the nature of the public debate surrounding the care system and its outcomes. Educational attainment, particularly GCSEs, or lack of them, often serves as a proxy for this wider debate. The fact that there is a wide attainment gap between looked after pupils and their peers is often used as a condemnation of social work services for children and families. Our evidence shows that compared with children in need who live at home, children in care make greater educational progress although their problems are likely to be more acute (see also O’Higgins, Sebba, & Luke, 2015).

A focus on progress gives a more realistic depiction of the achievements of the care system, given how many young people enter care late and have major challenges including, in some cases, special educational needs. Clearly, attainment is not unimportant and young people cannot expect to secure jobs on the basis of making progress rather than achieving qualifications. We should also not overlook how much educational progress it is realistic to expect local authorities to make with their care populations and over what duration.

Some CLA will take longer to fulfil their educational potential than those not in care or in need and given many come into the care system late, we should take a longer-term perspective. Taking major public examinations aged 16 for many looked after pupils is too soon and their opportunities are sometimes restricted by having been allocated to a particular curricular route in order to access behavioural support. Professionals interviewed commented how some lower-progress pupils had begun to stabilise, develop confidence and interpersonal skills, which would later benefit their learning and career prospects. Better appreciation of the achievements of individuals and contribution of the care system may occur at age 18, 21 and beyond, as US researchers have demonstrated (Hook & Courtney, 2011).

The Ofsted educational and care inspection frameworks and the Government’s publication of performance tables comparing local authorities need to take into account that there is little variation between local authorities in the educational performance of looked after pupils, beyond that which is accounted for by individual pupil and school differences. Inspections should therefore take sufficient account of the characteristics of the looked after children cohort in each authority: authorities that meet legal obligations in admitting older, challenging young people into care may jeopardise their care performance data by doing so. Most variation in progress and attainment was explained by pupil characteristics as well as experiences in care and school. Clearly local authorities can influence these factors by their choice of, and support for, individual placements and schools, even in a system in which schools have greater autonomy.

Local authorities should be supported to identify and place pupils in higher performing schools, ensure that school staff provide appropriate support (partly through the Virtual School), and limit placement and school changes, in particular in KS4.

Birth parents continue to exert significant influence on young people in care, including those who have lived separately from them for many years. Where birth parents have continuing problems, these could threaten to overwhelm young people’s concentration and application. The interviews showed that social work support for birth families could be important for young people’s education even in stable, long-term, successful foster placements.

Initiatives to support pupils with social, emotional and mental health difficulties need to become more widely known and studied to address the educational problems we have highlighted including school exclusions (both external and ‘internal’ in which young people may not be accessing high quality teaching) and school transfer. These initiatives include nurture groups (Cooper & Whitebread, 2007), ‘attachment aware’ schools (Rose, 2014) and ‘emotion coaching’ for pupils (Rose, McGuire-Snieckus, & Gilbera, 2015). Young people attributed their educational progress to the characteristics, skills and commitment of individual teachers and carers. Interviewees named individual teachers who knew what they were doing, persisted, engendered respect and genuinely cared. Pupils identified others who were ineffective and insensitive.

Foster carers should be appropriately supported to withstand the pressures of caring for vulnerable young people with challenging behaviour so that placement stability increases, which should benefit young people’s educational progress. Our evidence suggested that pupils could commit to learning once certain preconditions were met, including feeling safe, secure and individually valued. Placement disruption was often associated with the risk of school transfer and pupils responded consistently that they preferred to remain at the original school even if this entailed long taxi journeys. However, taxi arrangements need to be more flexible and responsive to individual young people’s needs.

Involve young people more fully in what happens in their lives. Given how pupils often were trying to manage the stresses in their lives, it is sensible to make genuine efforts to work alongside them and engage them in decisions. Many young people interviewed demonstrated considerable insight into the factors that had helped or hindered their education, such as being removed from classes to attend PEP and other meetings.

Strategies for educational improvement need to be addressed across the workforce in residential settings. A surprising finding from our results was the proportion (18.5%) of looked after pupils taking their GCSEs who lived in residential settings. This was a much broader group than the small, residential children’s homes and included residential schools and secure units. These can be among the most challenging pupils. The residential sector in England has shrunk considerably but it is an important experience for a larger group of older, looked after adolescents.

Kinship carers need support in particular to address the financial pressures that can affect many of them, and which might adversely affect schooling. It was interesting to have confirmed that pupils living with kinship carers, once other factors were taken into account, were not educationally disadvantaged compared with those in unrelated placements.

Our study identifies further areas for research, including: theoretical and conceptual issues; care services for adolescents; social, emotional and mental health initiatives in schools; evaluation of Pupil Premium Plus effectiveness; and additional methodological work linking national datasets.

In undertaking the most comprehensive study of its type in the UK, we now know more about how we can approach schools and services for looked after children to benefit their schooling and educational outcomes. We hope this information is used to good effect.

Judy Sebba, David Berridge, Nikki Luke, John Fletcher, Karen Bell, Steve Strand, Sally Thomas, Ian Sinclair and Aoife O’Higgins

November 2015
Main Report
Background

Children who are, or have been, in care are one of the lowest performing groups in terms of educational outcomes internationally (e.g. Flynn, Tessier & Coulombe, 2015; Trout, Hagaman, Casey, Reid, & Epstein, 2008). They also have poorer employment prospects (Hook & Courtneyn, 2011) and health outcomes (Dixon, 2008) than the general population and are over-represented in the homeless (Davison & Burris, 2014) and prison populations (Centre for Social Justice, 2015). Poor educational progress and low attainment are known to be associated with these longer-term outcomes (Feinstein, Hammond, Woods, Preston, & Byrner, 2006) and Okpych and Courtneyn (2015) have demonstrated the converse, that better educational outcomes predict higher earnings and greater likelihood of employment in youth transitioning from care. What is less clear are the factors which facilitate or limit educational progress for these young people. The Department for Education in England to support children's services in identifying these factors, but the relationship between care experiences and educational progress remains relatively unexplored. A better understanding of this relationship should enable schools and services for children and young people to better support their education and improve its outcomes.

In this context, the Rees Centre for Research in Fostering and Education at the University of Oxford collaborated with the School for Policy Studies and Graduate School of Education at the University of Bristol to carry out mixed methods research in order to address these issues. The research was funded by the Nuffield Foundation but responsibility for the views expressed in this report remains with the authors.

Children Looked After (CLA) and Children in Need (CIN)

Under Section 20 of the Children Act 1989, local authorities must provide accommodation for a child in need of it, and under Section 31 of the Act, they must prepare a care plan for the future of a child who is the subject of an application for a Care Order. Such children are deemed to be looked after.

Comparisons with the wider population of schoolchildren enable quantification of the net disadvantage CLA experience in their GCSE results and progress from the end of Key Stage 2 (KS2, aged 11 years) to the end of Key Stage 4 (KS4, aged 16 years) as this is the period during which the gap widens. However, there is no simple way of disentangling the disadvantage which CLA experience as a result of their mitigating benefit of local authority support. In addition to their responsibilities for CLA, local authorities have a more general duty under Section 17 of the 1989 Act to ‘safeguard and promote the welfare of children within their area who are in need. These children in need (CIN) are a much larger population than those in care. While this research project set out to focus on the educational progress of CLA, it became apparent that comparisons with the wider group of CIN of which they are a subset would be helpful to those seeking an evidence base for policy and practice. Hence some of the statistical analyses compare CLA with CIN who are not in care.

Aims and Objectives

The overall aim of the research was to identify key care and educational factors that are associated with the progress of children in care from the end of KS2 to the end of KS4 and attainment at KS4, in order to bring about improvements. The overarching research questions formulated at the outset were:

- What are the key factors contributing to the low educational outcomes of children in care in secondary schools in England?
- How does linking care and educational data contribute to our understanding of how to improve their attainment and progress?
- Preparing for further research linking and analysing data from national and local datasets
- Developing complementary social work and educational research perspectives and methods for future use in addressing complex issues

A number of sub-questions were identified. Each of these is addressed in this report of the findings and the implications for policy, practice and future research are drawn out.
Methodology

The study explored the relationship between educational outcomes, young people's care histories and individual characteristics by linking the National Pupil Database (NPD) and the database for Children Looked After in England (SSDA903, hereafter referred to as CLAD) for the cohort who were eligible for GCSEs in 2013. Full details of the methodology are provided in the three technical reports that accompany this summary, and are available on the websites of the Rees Centre5, University of Bristol School for Policy Studies6 and the Nuffield Foundation7. The first two reports cover the quantitative analyses employed. Technical Report 1 covers the analysis of the whole GCSE cohort included in the NPD (see 'sample selection' below), and includes a comparison of the characteristics and outcomes of looked after children, children in need, and their peers, as well as a detailed analysis of the way that differences between local authorities and schools are related to the progress of these different groups.

Technical Report 2 focuses on the subset of GCSE pupils who had been in care continuously for 12 months or more at 31st March 2013, this being the criterion for sample selection in the DfE’s data packs (DfE, 2011; 2013) and allowing care services a period of time to work with these pupils. It explores the educational outcomes and progress of these children and the way they vary according to their different characteristics, care histories, and schools attended.

These analyses were complemented by interviews with 26 young people who were, or had been, in care for 12 months or more in 2013 in six local authorities. The young people also identified for interview the significant adults in their educational careers, including 18 carers, 20 designated teachers, 17 social workers and six Virtual School headteachers. The analyses of these data are reported in Technical Report 3. The aim was to understand what might have contributed to better or worse than expected GCSE outcomes for the 26 young people and how better coordination of services might contribute to this. To this end they covered the relevant policies and practices in the six local authorities8, complemented the statistical analysis of such issues as the effect on education of removal from home, and also looked at factors not recorded in the databases (e.g. the foster carers’ qualifications and attitudes to education).

Sample - Quantitative

For the quantitative analysis two distinct samples and associated variables are used. First, the full national cohort of around 640,000 English school children who were aged 15 on 1st September 2012 were examined using only those variables available in the NPD (i.e., for all groups of children) (see Technical Report 1).

Second, a much smaller CLA-only subsample of this national cohort comprised 7,852 children, of whom 6,236 were still in care on 31st March 2013. The main focus of the statistical analysis was the smaller subset (4,849) who were looked after for 12 months from 1st April 2012 or earlier to 31st March 2013, and the analyses included variables from both NPD and CLAD. Data on five different groups were subjected to analyses, though some parts of this study apply only to some of these groups:

- CLA-LT early entry: A longer-stay group of Children Looked After (those in care for 12 months or more continuously at the end of KS4) who were also in care at the end of KS2
- CLA-LT late entry: A longer-stay group of Children Looked After (those in care for 12 months or more continuously at the end of KS4) who were not in care at the end of KS2
- CLA-ST: A shorter-stay group of Children Looked After (those in care for less than 12 months at the end of KS4)
- CIN: Children in Need at the end of KS4 but not in care
- Comparison group: Children not in Care and not in Need at the end of KS4

Table 1: Children in Need (CIN) and Looked After (CLA) eligible to take their GCSEs in 2013

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>662,970</td>
<td>96.9%</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>13,599</td>
<td>2.1%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>1,387</td>
<td>0.2%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>4,849</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Note: the above are mutually exclusive categories totalling 642,805 pupils in the entire cohort.

A child who is looked after should always qualify as in need because, in the words of the Act, they need local authority services either ‘to achieve or maintain a reasonable standard of health or development,’ or ‘to prevent harm to their health or development’. There was a seeming misalignment of the registration and de-registration processes, with small numbers of children on the CLAD but not the CIN database on 31st March 2013 including some well over 15 years of age and likely to be unaccompanied asylum seekers. The numbers involved were too few to influence the findings.

Data on both databases are linked to individual pupils using a unique pupil number (UPN), which enables the linking of personal characteristics collected in the English schools’ censuses; examination results collected from awarding bodies; and episodes of care collected from local authorities on the SSDA903 return. The quantitative analyses focus on the children who had been in care for 12 months or more on 31st March 2013. Some comparisons are made with children who had been in care for shorter durations, with those who were in need but not in care in 2013, and with the larger cohort of young people who were neither in care nor in need at that time. Those who were only in care when they were younger but not at the end of Key Stage 4 are not identifiable in this dataset and would represent a very small proportion of the ‘not in need or looked after’ group.

5 http://reescentre.education.ox.ac.uk/
6 http://www.bristol.ac.uk/sps/research/projects/completed
7 http://www.nuffieldfoundation.org/
8 All interview schedules are available from the authors.
The NPD provides data on attainment at National Curriculum Key Stages, attendance at school and exclusions from school. The CLAD return provides data on episodes of care and placements, such as dates, legal basis, locations, and providers involved in the children’s different placements, categories of placement (e.g. whether fostered with unrelated carers or with family or friends, known as ‘kinship care’) and their destination on leaving the system (e.g. whether they were adopted or returned to their birth family). Both sources provide basic demographic data. To simplify the analysis, pupil-level data on absences and exclusions from school were aggregated into the five school years of the secondary phase of education; data on episodes of care were aggregated to the child level.

In making comparisons between CLA and others, the research dealt with NPD variables only (i.e. data from the NPD – Technical Report 1). The variables examined were those known to be substantive predictors of GCSE outcomes in contextual value added (CVA) models. The pupil-level variables were:

- demographic characteristics: gender, ethnicity and language spoken at home
- eligibility for free school meals (FSM), a proxy for family poverty or socio-economic status
- neighbourhood deprivation, as measured by the Income Deprivation Affecting Children Index (IDACI) for the postcode of residence of the child
- special educational needs (SEN), broken down by primary type of need
- changes of school, between and within school years
- absences from school, broken down into authorised and unauthorised
- exclusions from school (number and duration for fixed-term exclusions and whether permanently excluded)

The school-level variables we used were school type and aggregates of pupil-level measures of KS2 attainment, eligibility for FSM and SEN status (whether the child was subject to any of the increasing levels of support offered by school action, school action plus and statements of SEN). We tested as predictors similar aggregates at the local authority level. Definitions and census date of variables employed are shown in Technical Report 2.

The gap in educational performance between looked after children and others was measured in average KS4 points (across eight best grades) as used in the NPD analysis. Each 6 points corresponds to a GCSE grade so that pupils who get a D in a subject score 6 points less than they would have done with a C. In addition, for the subsample of children who were in care at the end of KS4, the CLAD provided information on their age at, and reasons for entry to care; their movements between placements in the care system; and the types and location of each placement. This was utilised in the CLA-focused analyses presented in Technical Report 2.

Each young person was asked to give us permission to interview the adults who had supported their education. We completed interviews with these people, who included 17 social workers, 17 foster carers, one residential worker and 20 designated teachers. Some carers were no longer fostering and a few social workers had moved on. None of the young people interviewed had been living in residential homes at the time of their GCSEs, although one had spent time at a residential school previously. All six Virtual School headteachers for the participating local authorities were interviewed. The young people were interviewed by trained peer interviewers, who were themselves care-experienced, and foster carers trained in interviewing undertook the interviews of (mainly) foster carers. In total, this generated over 1,000 pages of transcribed qualitative data. In reporting the findings we have anonymised the young people and local authorities.

### Table 2: Characteristics of the Local Authorities selected for the Qualitative Data

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Administrative type</th>
<th>Region</th>
<th>Size (population)</th>
<th>Overall high or low CLA performance</th>
<th>No. of young people</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unitary</td>
<td>NW</td>
<td>Medium</td>
<td>Low</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Unitary</td>
<td>SW</td>
<td>Small</td>
<td>Low</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>County</td>
<td>Midlands</td>
<td>Large</td>
<td>Low</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Met Borough</td>
<td>NW</td>
<td>Medium</td>
<td>High</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Met Borough</td>
<td>London</td>
<td>Medium</td>
<td>High</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>County</td>
<td>NE</td>
<td>Large</td>
<td>High</td>
<td>4</td>
</tr>
</tbody>
</table>

Sample - Qualitative

For the qualitative strand of the project, six local authorities were identified through the initial NPD analyses of CLA outcomes. Three local authorities from the top 25 on CLA attainment given their pupil characteristics and three from the bottom 25 were selected. Selection criteria also included the need to provide some diversity in size (though with not fewer than 20 CLA in the targeted cohort in order to maximise confidentiality), administrative types (e.g. unitary, county councils) and region. Of the first six selected, five agreed to participate and one declined but two of the five were unable to identify the young people who met the criteria so three further local authorities with similar characteristics were selected as shown in Table 2. Each of these six authorities was asked to identify six young people from the 2013 GCSE cohort, three who had achieved better than expected and three who had achieved less than expected between KS2-4. The Virtual School headteacher or social worker approached the young people to seek their agreement to participate. Some declined and substitutes could not always be found, resulting in a total of 26 participants. This included 14 who had achieved higher than expected and 12 who had achieved lower than expected at GCSE. In line with the dataset as a whole, 11 of the 15 young women and 3 of the 11 young men interviewed were in the high-progress group.
Quantitative Analysis

The methods used in linking the NPD and CLAD are fully explained in Technical Reports 1 and 2 available on the web. In reporting the findings below, the models used for the analysis are briefly referred to but no further details are given in this report. Two main sets of analyses were undertaken.

The first focused on the whole cohort of children in the NPD who were aged 15 on 1st September 2012. It compared children who were neither CIN nor CLA with: those who were CIN on 31st March 2013; those in care for less than a year on that date (CLA-ST, which includes those who move in and out of care and those who were ‘new entrants’); and those who had been in care for more than a year on that date (CLA-LT). These analyses included descriptive statistics and multilevel modelling in order to estimate the individual contribution of various student characteristics and school/local authority contextual factors, as well as the extent of school and local authority effects, on the relative progress of CLA, CIN students and their peers KS2 - KS4 (Technical Report 1).

The second set of analyses (Technical Report 2) focused mainly on the 4,849 who had been in care continuously for a year or more on 31st March 2013 (CLA-LT), as this is how children in care are defined for administrative purposes. The analyses involved descriptive statistics then progressively more sophisticated analyses in order to address the research questions in our aims and objectives in a way that best recognises the complexity of individual characteristics and experiences among children in care. There were four steps in these analyses:

1. Describe the sample of CLA-LT with particular reference to those characteristics that might explain the gap between their educational outcomes and those of other children in the general population.
2. Use regression modelling to predict educational outcomes amongst the CLA-LT.
3. Use path modelling to examine the inter-relationships between care and education variables and suggest predictors for different outcomes.
4. Use multi-level modelling to examine the way in which differences between schools and local authorities may relate to these outcomes.

Some of the main findings are reported here with more extensive coverage and full technical explanations of the models used in Technical Reports 1 and 2. This report summarises the main findings, the individual characteristics and care factors that relate to the ‘educational attainment gap’, the reasons for differing outcomes, and the possible role of schools and local authorities.

Qualitative Analysis

The interviews were analysed, sequentially by two researchers, using a thematic approach which takes into account both pre-formulated theory and ideas and concepts arising from the data. This involved incorporating the inductive approach (Boyatzis, 1998) and deductive technique (Crabtree & Miller, 1999). A preliminary coding process was undertaken to organise the data and themes that were then developed from these codes. Some codes were identified in advance, based on the literature review, the research questions and theoretical frameworks, as well as a preliminary scanning of the text.

NVivo software was used to initially organise and code the data. We then compared across the experiences of participant groups (young people that had been, or still were in care; their social workers; their carers; and their teachers or other school support staff); across the six local authorities; socio-economic groups; varieties of placement (residential, unrelated foster family, kinship fostering); and educational progress (achieving better exam results than expected or worse than expected). The initial themes identified included:

- High Aspirations (foster carers; teachers; the young people; social workers; birth family)
- Positive Expectations (foster carers; teachers; the YP; social workers; birth family)
- Characteristics of YP (‘capability’: confidence; determination; motivation)
- Consistent Relationships (foster carers; social workers; teachers; friends; birth family)
- Caring Relationships (foster carers; social workers; teachers; friends; birth family)
- Competent Relationships (foster carers; social workers; teachers; friends; birth family)
- Historical Traumatic Events (abuse; neglect; loss)

- Recent Traumatic Events (difficult contact with birth family; lack of contact with birth family; ill health and bereavements of close ones; placement breakdown)
- Educational Support (Personal Education Plans; individual tuition; small groups; mentoring; equipment; resources)
- Emotional Support (Child and Adolescent Mental Health Services; school pastoral support; relationships; extra-curricular activities)
- Quality of Services – School, Children’s Services, Care (integrated; reliable; well-resourced; responsive to needs; well-organised)
- Stress (bullying; stigmatisation; frequent change; travel; conflicts; rejections)

A number of themes were added, removed or changed during the analysis including, for example, adding ‘Violence’ and ‘Sexual Exploitation’ under the category ‘Stress’; and adding ‘Behavioural Difficulties’; ‘Transitions’; and ‘Virtual School Strategies’ as additional categories. The interview data were examined, compared, categorised and conceptualised to enable understandings to emerge.
Key Findings

Table 3 gives the mean GCSE point scores for each of the groups, in this case separating those who were in care at KS2 and also at KS4 (though not necessarily continuously) from those who were in care on 31st March 2013 but had first entered after the end of KS2.

### Table 3: KS4 Average Points Score by Need Group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean KS4 points</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison Group (Not on the 2012-13 CIN or CLA databases)</td>
<td>622,970</td>
<td>340.59</td>
<td>87.10</td>
</tr>
<tr>
<td>CIN Group (Children in the CIN database but not CLA)</td>
<td>13,599</td>
<td>185.14</td>
<td>141.67</td>
</tr>
<tr>
<td>Shorter-Term CLA (Looked after at 31st March 2013 but not 12 months continuously)</td>
<td>1,387</td>
<td>149.52</td>
<td>128.01</td>
</tr>
<tr>
<td>Longer-Term Early-entry CLA (Looked after at 31st March 2013 and for 12 months or more continuously including at KS2)</td>
<td>2,584</td>
<td>213.89</td>
<td>134.52</td>
</tr>
<tr>
<td>Longer-Term Late-entry CLA (Looked after at 31st March 2013 and for 12 months or more continuously but not at KS2)</td>
<td>2,265</td>
<td>185.55</td>
<td>130.93</td>
</tr>
</tbody>
</table>

Those who were in need but not in care scored 155.5 points lower than those not in need or in care, equivalent to averaging more than three grades lower in all eight best subjects. Those who were in care for less than 12 months performed slightly worse than CIN (by 36 points or roughly six GCSE grades spread over their eight best results), but early-entry CLA-LT performed rather better than CIN (by 28 points or nearly five GCSE grades).

**Differences between English and Maths Outcomes**

There were no significant differences between the GCSE scores in Maths and English and the overall GCSE scores. Predictability was lower because each is a single test and there were fewer significant coefficients. Unsurprisingly, the KS2 English score was by far the best predictor of GCSE English performance and KS2 Maths score was by far the best predictor of GCSE Maths performance but this had no repercussions for estimating the impact of being CIN or CLA. Otherwise, the coefficients in these models were broadly consistent with those in the model for overall GCSE score.

### Addressing the research questions

Each research question is addressed in turn below. For each question some contextual description of the population from the NPD dataset is given with analyses from both the NPD and the linking of NPD to CLAD, as appropriate.

Research Questions 1-3 focus on specific characteristics of young people and their experiences, drawn from a review of existing literature, and so the responses given below present analyses which used only those variables that were directly relevant to that research question.

Research Questions 4-7 examine the issue of educational attainment and progress more broadly, and so in answering these questions full use was made of the range of variables in the data, as well as data from the qualitative interviews in the study.
RESEARCH QUESTION 1: What are the associations between individual characteristics (gender, ethnicity, SEN, socioeconomic status) and educational outcomes for children in care (Flynn et al., 2013)?

We examined the characteristics of the individual and their early environment that either cannot be (e.g. gender) or are less likely to be (e.g. socio-economic status) influenced by experiences in care. Our analyses for this research question focused on variables relating to gender, ethnicity, first language, deprivation, and special educational needs. Full details are given in Technical Reports 1 and 2.

Gender

Girls were slightly over-represented in the CIN population and CLA-ST. Conversely, boys were slightly over-represented among CLA-LT (55.8%, compared with 51.2% of the whole cohort). This is not surprising as far more boys than girls are assessed as having behavioural, emotional and social difficulties, and are more commonly identified among those who are looked after. The gap in KS4 performance between girls and boys was particularly large (81 points) in the shorter-stay CLA group and much smaller (25 points) in the comparison group (neither CIN nor CLA). These associations were highly significant but the ranking of the groups on performance was the same for both girls and boys. The comparison group had the least gap between boys and girls, the CLA-LT the next least, the CIN next and the CLA-ST group the largest gap of all.

Ethnicity

From the NPD analysis (Technical Report 1) the Asian and Black African groups were under-represented amongst those who were CLA or CIN but there were disproportionately high numbers of Black Caribbean and Mixed White and Black Caribbean (MWBC) children in these groups, especially in the looked after groups. Once other variables were taken into account in the CLAD analysis (Technical Report 2), ethnicity was not a significant predictor of KS4 scores among CLA students.

Family poverty

Children in need were far more often eligible for free school meals than those who were neither in care nor in need, indicating that children from poorer families are at greater risk of needing such services.

Table 4: Eligibility for Free School Meals (Ever 6th)

<table>
<thead>
<tr>
<th>Group</th>
<th>Not eligible for free school meals</th>
<th>Eligible for free school meals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>478,027</td>
<td>76.7%</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>5,717</td>
<td>42.0%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>655</td>
<td>47.2%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>3,073</td>
<td>63.4%</td>
</tr>
</tbody>
</table>

In the cohort as a whole, less than a quarter of children were eligible for FSM, but over half of children in need and CLA-ST were eligible for FSM. The proportion eligible for FSM was a little over a third for CLA-LT but under-reporting by certain school types, rather than the greater influence of their families, may account for this (see Table 4 footnote).

Early conversations with practitioners led to some doubt over whether FSM is a valid measure for looked after children. The belief is that it is variably based on the child’s current placement or their family of origin. The data suggest that these doubts are overplayed for two reasons: partly because children who are being looked after are very much less likely to be FSM (given that foster carer approval includes financial assessment), and partly because FSM is significantly related to outcome in ways that would be unlikely if it was simply ‘noise’.

As well as the FSM6 variable (defined in Table 4 above), FSM status at both KS1 (age 7) and KS4 were looked at in order to examine the role of early and concurrent deprivation. As shown in Table 5, there was a significant effect of FSM eligibility at KS4 across all four need status groups, and an interaction between this variable and group status. FSM status at KS4 made little difference to the KS4 score for CIN, whereas for the other three groups, children and young people eligible for FSM did worse. There was also a significant effect of FSM eligibility at KS1, and an interaction between this variable and group status. For CLA-LT, FSM status at KS1 made little difference to their KS4 results, unlike for those not in need or looked after.

14 Each research question is linked to a reference from previous research which informed the research focus.
15 Eligibility for free school meals in any of the 6 years preceding GCSEs. The percentages may underestimate CIN and CLA levels of entitlement for FSMs, because when schools in which CIN and CLA were over-represented did not supply the data, a child was recorded in the NPD as not eligible.
Table 5 shows the attainment for each group distinguishing between those eligible and those not eligible for FSM at KS4 (where status was known). Overall, the CLA-ST had the lowest scores followed by CIN and then CLA-LT. For those not eligible for FSM, the difference between CIN and CLA-ST was small but the difference between these two groups and the CLA-LT group was significant.

Table 5: Mean KS4 points (and SD), by Need Group and FSM Eligibility at KS4

<table>
<thead>
<tr>
<th></th>
<th>Not CIN or looked after</th>
<th>CIN</th>
<th>CLA / less than 12 months</th>
<th>CLA / 12 months or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM</td>
<td>300.70 (100.32)</td>
<td>195.01 (137.04)</td>
<td>168.71 (129.82)</td>
<td>206.62 (133.78)</td>
</tr>
<tr>
<td></td>
<td>N = 81,340</td>
<td>N = 5,801</td>
<td>N = 469</td>
<td>N = 483</td>
</tr>
<tr>
<td>Not FSM</td>
<td>352.18 (72.07)</td>
<td>197.18 (146.30)</td>
<td>191.64 (130.29)</td>
<td>243.90 (123.15)</td>
</tr>
<tr>
<td></td>
<td>N = 476,538</td>
<td>N = 6,384</td>
<td>N = 539</td>
<td>N = 3,191</td>
</tr>
</tbody>
</table>

Another proxy for family poverty is the Indicators of Deprivation Affecting Children Index (IDACI), a measure of deprivation that relates to the postcode in which the child lives. Table 6 shows the IDACI scores of the neighbourhoods that children lived in at the four Key Stages: KS1 (2004), KS2 (2008), KS3 (2011), and KS4 (2013). By comparing IDACI scores over time, we get an indication of any changes in the levels of neighbourhood deprivation in which a child lives at various times in their educational career. The table shows that in 2013, CLA-LT lived in areas approximately as affluent as children who were not in need. However, the trajectories of IDACI scores over time tell another story:

Table 6: Income Deprivation Affecting Children Index (IDACI) 2004-2013

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>0.221</td>
<td>0.229</td>
<td>0.219</td>
<td>0.217</td>
<td>0.217</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>0.306</td>
<td>0.311</td>
<td>0.291</td>
<td>0.288</td>
<td>0.293</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>0.326</td>
<td>0.326</td>
<td>0.301</td>
<td>0.254</td>
<td>0.271</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>0.327</td>
<td>0.287</td>
<td>0.238</td>
<td>0.219</td>
<td>0.234</td>
</tr>
</tbody>
</table>

The mean IDACI scores of CIN and CLA (both groups) improved (i.e. reduced score) significantly between 2004 and 2013, the initial (average) deprivation being greatest for those who were looked after and the convergence towards the overall cohort mean greatest for CLA-LT. A reasonable inference is that children who were looked after came from deprived families (on average) but that CLA-LT ended up in placements that were located in areas of nearly average deprivation. It seems reasonable to assume that IDACI is a better indicator in 2004 than in 2013 of the poverty of birth families of CLA-LT. Further correlations between the measures of neighbourhood deprivation at different school censuses are consistent with children changing their place of residence when they move into care and with the nature of the placement being largely unrelated to birth family poverty.

In relation to KS4 results, we focused on two measures of neighbourhood deprivation: child’s IDACI score at KS1 and KS4. We looked at correlation coefficients between IDACI at KS1 and KS4, and KS4 results. As expected, for children and young people not in need or looked after, greater deprivation was linked with poorer results. For children in need, greater deprivation was associated with better results which seems counter-intuitive. It is possible that they are eligible for more support but we have no evidence either way for this. For children looked after in both groups, the relationship between both early and concurrent IDACI with KS4 scores was either non-significant or very small.

Special educational needs

One of the common characteristics of children who are in need or looked after is the high proportion that have special educational needs (SEN). Table 7 shows that for children who are not CIN or CLA, the proportion who have SEN at school action plus\(^1\) or a Statement of Special Educational Need was nearly 16%, but for those who were CLA-LT the proportion was over 70%, and for those who were deemed to be in need on 31st March 2013 or CLA-ST it was close to 60%.

---

\(^1\) This research preceded the new Education, Health and Care Plans and the term Social, Emotional and Mental Health Difficulties which has replaced the previous term – BESD.
Table 7: Looked after status by level of Special Educational Need

<table>
<thead>
<tr>
<th>Group</th>
<th>No special need</th>
<th>School action</th>
<th>School action plus</th>
<th>Statemented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>64.8%</td>
<td>19.5%</td>
<td>12.3%</td>
<td>3.4%</td>
<td>100%</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>23.3%</td>
<td>17.7%</td>
<td>27.4%</td>
<td>31.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>21.0%</td>
<td>17.8%</td>
<td>40.3%</td>
<td>20.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>13.5%</td>
<td>14.9%</td>
<td>41.3%</td>
<td>30.3%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 7 gives a breakdown by primary type of SEN for those who had a special educational need. The largest absolute difference in proportions is for behavioural and emotional difficulties but the relative propensities are more starkly different for specific learning disability and having a speech, language or communication need. In these cases, the proportions of those children with SEN who have these needs are much higher for children who are not in need or looked after. Conversely, whereas a little over a quarter of those not in need or looked after had a behavioural, emotional or social difficulty over a half of those who were looked after did so.

Analyses of the whole cohort showed that the four types of primary SEN with the worst KS4 scores were BESD, moderate learning disability, autism spectrum disorder, and severe or multiple learning difficulties. Table 8 suggests that of all children with an identified SEN the children with those four particular types of need were more often also in need or in care. It is consistent too with local authorities categorising children as in need if they have a significant educational need because of their duty to ‘maintain a reasonable standard of health or development’ but taking into care those who have significant behavioural difficulties. What we do not know from these data is whether, within these types of need (and especially BESD), the needs of CIN and CLA tend to be greater than those of other children.

Table 8: Looked after status by type of SEN for those with SEN* in each group

(Shading highlights the highest percentages in columns where the proportions are relatively quite different)

<table>
<thead>
<tr>
<th>Group</th>
<th>Behavioural emotional and social</th>
<th>Moderate learning disability</th>
<th>Specific learning disability</th>
<th>Speech, language and communication</th>
<th>Autism spectrum disorder</th>
<th>Sensory impairment</th>
<th>Severe or multiple learning difficulties</th>
<th>Physical and other disabilities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>28.2%</td>
<td>26.4%</td>
<td>15.8%</td>
<td>9.9%</td>
<td>6.6%</td>
<td>3.1%</td>
<td>1.8%</td>
<td>8.1%</td>
<td>100%</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>32.0%</td>
<td>18.0%</td>
<td>5.7%</td>
<td>3.9%</td>
<td>12.3%</td>
<td>2.3%</td>
<td>16.7%</td>
<td>9.0%</td>
<td>100%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>58.7%</td>
<td>17.0%</td>
<td>4.8%</td>
<td>2.5%</td>
<td>5.4%</td>
<td>1.7%</td>
<td>4.8%</td>
<td>5.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>50.4%</td>
<td>19.8%</td>
<td>5.2%</td>
<td>3.8%</td>
<td>5.4%</td>
<td>1.0%</td>
<td>6.5%</td>
<td>7.9%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*This table includes only children identified as having SEN

The NPD analysis shows that CLA were over-represented in most categories of special educational need, and we would expect this to relate to poorer KS4 outcomes. Table 9 shows the mean KS4 points for children in each of the groups compared with those for children who had not been identified as having a SEN. Due to their low proportions across all groups, the categories of ‘sensory impairment’ and ‘physical and other disabilities’ have been combined in this table.
Table 9: Mean KS4 points (and SD) by group and primary SEN type (time of greatest provision)

<table>
<thead>
<tr>
<th>SEN Type</th>
<th>Not CIN or looked after</th>
<th>CIN</th>
<th>CLA / less than 12 months</th>
<th>CLA / 12 months or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>No SEN</td>
<td>356.27 (70.60)</td>
<td>269.44 (117.83)</td>
<td>207.17 (129.26)</td>
<td>271.08 (118.88)</td>
</tr>
<tr>
<td></td>
<td>N = 497,132</td>
<td>N = 5,270</td>
<td>N = 462</td>
<td>N = 1,272</td>
</tr>
<tr>
<td>Behavioural, emotional and social</td>
<td>233.39 (123.17)</td>
<td>156.01 (124.68)</td>
<td>119.06 (115.8)</td>
<td>185.40 (126.18)</td>
</tr>
<tr>
<td></td>
<td>N = 28,195</td>
<td>N = 2,878</td>
<td>N = 575</td>
<td>N = 1,859</td>
</tr>
<tr>
<td>Moderate learning disability</td>
<td>254.00 (105.95)</td>
<td>151.37 (118.68)</td>
<td>139.06 (112.26)</td>
<td>187.73 (116.58)</td>
</tr>
<tr>
<td></td>
<td>N = 24,430</td>
<td>N = 1,406</td>
<td>N = 140</td>
<td>N = 668</td>
</tr>
<tr>
<td>Specific learning disability</td>
<td>290.49 (88.45)</td>
<td>202.92 (120.78)</td>
<td>153.55 (108.93)</td>
<td>228.97 (114.79)</td>
</tr>
<tr>
<td></td>
<td>N = 14,676</td>
<td>N = 452</td>
<td>N = 35</td>
<td>N = 176</td>
</tr>
<tr>
<td>Speech, language and communication</td>
<td>289.72 (97.51)</td>
<td>172.68 (125.56)</td>
<td>154.85 (136.33)</td>
<td>204.87 (118.10)</td>
</tr>
<tr>
<td></td>
<td>N = 9,243</td>
<td>N = 310</td>
<td>N = 18</td>
<td>N = 128</td>
</tr>
<tr>
<td>Autism spectrum disorder (ASD)</td>
<td>260.71 (125.20)</td>
<td>98.79 (122.04)</td>
<td>80.92 (114.39)</td>
<td>82.90 (112.07)</td>
</tr>
<tr>
<td></td>
<td>N = 6,195</td>
<td>N = 992</td>
<td>N = 45</td>
<td>N = 186</td>
</tr>
<tr>
<td>Severe or multiple learning difficulties</td>
<td>101.74 (124.60)*</td>
<td>13.12 (38.76)</td>
<td>20.59 (39.03)</td>
<td>24.71 (58.27)</td>
</tr>
<tr>
<td></td>
<td>N = 1,698</td>
<td>N = 1,336</td>
<td>N = 40</td>
<td>N = 224</td>
</tr>
<tr>
<td>Physical, sensory and other disabilities</td>
<td>298.54 (102.41)</td>
<td>187.68 (138.21)</td>
<td>182.37 (127.40)</td>
<td>254.83 (119.02)</td>
</tr>
<tr>
<td></td>
<td>N = 10,510</td>
<td>N = 911</td>
<td>N = 59</td>
<td>N = 302</td>
</tr>
</tbody>
</table>

* As suggested by the standard deviation, a small number of these pupils are recorded as having very high GCSE scores, suggesting that they might have been incorrectly identified.

There was a significant effect of primary SEN type\(^{22}\), and an interaction between this variable and CIN and CLA group status\(^{23}\). For most types of SEN, children and young people who were not in need or looked after performed better than the other three groups. CLA-LT did slightly better than children in need who in turn did better than children looked after for less than 12 months at 31\(^{st}\) March 2013. However, children with ASD or severe or multiple learning difficulties did equally poorly regardless of whether they were in need or looked after in comparison to children not in need or in care. Children with ASD in longer term care scored on average 178 GCSE points lower than those children identified as ASD but not in care or in need.

Summary of findings on Research Question 1

Overall, the data suggest that gender (being male) and some forms of SEN (ASD, BESD, severe/multiple learning difficulties) are associated with poor KS4 scores for looked after children. Socio-economic disadvantage at KS1 is associated with being looked after, but in this sample it is not associated with educational outcome. From the CLAD analysis (Technical Report 2) for CLA-LT neither FSM nor IDACI measures of disadvantage at KS1 were significant predictors of attainment scores at KS4. Neither having a first language other than English nor ethnicity was associated with KS4 scores in children in need or in care.

\(^{22}\) F(7, 611791) = 1128.06, p < .001, \eta^2_p = .013

\(^{23}\) F(2, 611791) = 67.48, p < .001, \eta^2_p = .002
RESEARCH QUESTION 2: Is the finding suggesting that the longer the duration of care the higher the attainment (DfE, 2013) robust, or is this explained by the reasons for entry into care or age of admission (e.g. those entering the care system later bringing with them a different set of behavioural and related issues)?

For this research question we focused on the variables in the CLAD that related to young people’s total length of time in care (excluding short-break respite placements, in accordance with the DfE’s criteria), and their age and reason for first entry into care.

Length of time in care was related to KS4 results but not significantly so for all children. We divided length of time in care into thirds for ease of illustration, but all correlations reported here use the continuous variable of time in care (excluding respite). Roughly speaking, the three groups represent means of 2 years (743 days) in care, 5 years (1933 days) in care and 11 years (3954 days) in care. There was a correlation between length of time in care (excluding respite) and KS4 points\(^*\). Although significant, the relationship was not substantial. Further examination of the data suggested that the relationship was instead curvilinear: splitting the continuous variable into thirds showed that there was no difference in KS4 scores for those who had been in care in the medium- and long-term, but that both did better than those in care only in the short-term, even after controlling for KS2 results.

We also created a measure of ‘career type’ which took into account the age at first entry into care and the recorded primary reason for entry, and looked at how young people in these categories compared in their KS4 scores. We looked at how the groups compared in their KS4 points, using estimated means that controlled for KS2 points (i.e. previous attainment) and, for those in care, their total length of time spent in care. Table 10 allows us both to compare the groups in their progress, and to examine the relative importance to each group of taking account of length of time in care. A smaller shift in scores from the second to the third column (as seen for the UASC group) indicates that taking account of the total length of time in care for young people in this group makes little difference to our ability to predict their GCSE grades on top of just using their KS2 scores. In contrast, the ‘downward’ shift in scores for the first two age groups and the ‘upward’ shift in scores for the two adolescent groups suggests that length of time spent in care helps to explain some of the relatively better and worse performance of these two groups, over and above any differences in prior attainment.

### Table 10: Estimated means (and standard errors) for KS4 points by care career type

<table>
<thead>
<tr>
<th>Controlling for KS2</th>
<th>Controlling for KS2 and Time in Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean KS4 Points</td>
<td>Mean KS4 Points</td>
</tr>
<tr>
<td>1. Entry Aged 0-4</td>
<td>225.452 (4.414)</td>
</tr>
<tr>
<td>2. Entry Aged 5-9</td>
<td>230.604 (3.044)</td>
</tr>
<tr>
<td>3. Adolescent Entrant (Abuse/Neglect)</td>
<td>213.961 (3.500)</td>
</tr>
<tr>
<td>4. Adolescent Entrant (Other Reasons)</td>
<td>181.725 (3.754)</td>
</tr>
<tr>
<td>5. Entered Care as Unaccompanied Seeker (UASC; Any Age)</td>
<td>338.418 (24.581)</td>
</tr>
<tr>
<td>6. Entered Care due to Disability (Any Age)</td>
<td>128.565 (7.593)</td>
</tr>
<tr>
<td>7. Children in Need</td>
<td>249.768 (0.627)</td>
</tr>
<tr>
<td>8. Not in Care or in Need</td>
<td>341.660 (0.092)</td>
</tr>
</tbody>
</table>

The ‘disabled\(^*\)' group achieved by far the worst outcomes, possibly due to the fact that 40% of them had a classification of severe or multiple learning difficulties which would limit their capacity for learning. The UASC, whose scores are almost as high as those for children not in need or care, are likely to start with the initial disadvantage that they are being taught in a foreign language and in a system with which they are unfamiliar. Many of them are, however, motivated to do well and, although they may well have suffered trauma and have the ongoing worries associated with their

status, they have often not experienced the same family situations that so badly affect the other groups. One young man interviewed, who had entered the country as an asylum seeker, considered being in care as a privilege, rather than something that was stigmatised, having been given a chance for a better life and the opportunity for self-improvement.

The two groups who entered care under the age of ten achieve the next best results until the effects of time in care are controlled. With the exception of the disabled group, the lowest average scores are found among those who enter after the age of 10 and for reasons other than abuse. Very often the care system has insufficient time available in which to turn their problems round.

Controlling only for KS2 scores suggests that children who have predominantly entered care from abusive environments (categories 1, 2 and 3) tend to do better than others such as adolescent entrants – other reasons (category 4) who may have been referred because they were proving difficult to manage in the community; or the small group who entered for reasons of disability (category 6). Effect sizes showed that career type had greater explanatory power\(^{26}\) than time in care\(^{25}\) but both were significant. Controlling for prior attainment (KS2 scores), individual characteristics (behaviour, disability) can be risk factors for poorer KS4 results, but it also depends how long a child has been in care. The major reason why adolescent entrants do badly seems to be to do with their personal characteristics. However, they might also have achieved better had they been in care for longer and been given more time to address any emotional or behavioural difficulties.

There was a relationship between age at entry and KS4 results that might explain the small correlation between time in care and KS4 results. This is accounted for by those entering care over the age of 9, who did better the earlier they came in. Those who entered under the age of 10 did worst if they first entered young, left care and then came back and had only around 2 years in care in total\(^{29}\) but better if they had been in care for the medium length of time (mean of 5 years).

---

\(^*\) \(r(1484) = .109, p < .001\)

\(^*\) Disability is a category separate from SEN (including ASD, learning difficulties etc.) and not assumed always to be associated with SEN.

\(^{26}\) \(R^2 = .042\)

\(^{27}\) \(R^2 = .004\)

\(^{29}\) Further analyses would be needed to fully test this finding.
The very long-stay group (mean of 11 years in total), however, did not fare well. It could be that children made better progress over the first five years and then the effect dropped off. This explanation fits with the fact that among those who were in care for up to 5 years, the longer children had been in care, the better their KS4 scores. Alternatively, this apparent relationship with length of stay could be explained by differences between those who leave the system and those who stay. For example, in the long-stay group the children who are ‘better performing’ could have returned home or been adopted or placed under a special guardianship order.

The 26 young people interviewed entered care at different stages of their lives – the earliest aged 3 years and the oldest at 16. Four of the 14 young people in the lower-progress group entered care in Years 10/11 (aged 14-16). None of the high-progress group did so. They, and the adults involved in their care and education, emphasised how early experiences had a profound effect on their later development and schooling. For example, one young person who had achieved worse than expected commented:

…my dad was abusive and that, and he used to..., and you’re going to school, not doing the same things as him, but looking back now, it kind of influenced...you’re kind of not there, really, or you’re not having proper night-time sleep, sharing a bed with my brother top to toe, so I was always tired, no breakfast. (YP25)

There was an overwhelming view from those interviewed that becoming looked after had a positive effect on their education. One interviewee felt that it had remained unchanged but none perceived that their schooling and attainment had deteriorated after admission. Carers and professionals shared these views. Young people attributed these changes to several factors, including being shielded from harmful parenting (‘Not being shouted at’ [YP20]); leading a more settled lifestyle; receiving encouragement and support; and improved resources, such as computing equipment.

Technical Report 2 shows that when the variables used for Research Question 2 were added to those from Research Question 1 in a regression model for CLA-LS, most of the significant relationships between predictors and KS4 results still held.

Summary of findings on Research Question 2

The DfE’s (2013) Data Pack suggested that children in care do worse relative to their peers at Key Stage 4 as compared with Key Stage 2 (i.e. the gap between them and all children becomes wider as addressed in Research Question 6 below) but that the longer they are in care, the better they do. The analyses here suggest that this depends on age of entry and reasons for coming into care. Those entering care over the age of 9 did better the earlier they entered care. Those who entered under the age of 10 did worst if they first entered young, left care and then came back and had only around 2 years in care in total (more data would be needed to fully test this out), but better if they had been in care for the medium length of time (mean of 5 years). The very long-stay group (mean of 11 years in total), however, did not fare well. The interviews suggest that a contributory factor in this nuanced relationship between age at entry into care, time in care and educational outcomes is the lasting effects of early abuse and neglect for some young people that are barriers whatever the precise pattern of their care.

A number of other possible reasons for the statistical findings include:

- adolescents first entering care often come in for reasons other than abuse or neglect, and are less likely to do well educationally
- these adolescents have had less time for any benefits to take effect
- some ‘better performing’ children who entered at a younger age may have left the system, for example making successful returns to birth families, special guardianship or being adopted
- children entering care early and staying in care longer made better progress over the first five years and then the effects drop off
RESEARCH QUESTION 3: Are placement stability and school stability equally associated with higher attainment (Conger & Rebeck, 2001)?

Previous research (e.g. Conger & Rebeck, 2001) has suggested that placement changes and school changes are both associated with poorer educational outcomes. The NPD analysis (Technical Report 1) shows that an average of around 3% of children were in need or in care change secondary school. The rate is more than four times higher (16%) for CLA-ST, 12% for CLA-LT and around 9% for those in need but not in care. Correlation analyses showed that more school changes in the later years of schooling had a stronger relationship with KS4 scores than school changes in earlier years for CLA-LT – these relationships were strongest in Year 10 or 11 (ages 14-16) and then Year 9.

Table 11: Correlations between school changes and KS4 points for CLA-LT

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed School Year 9</td>
<td>4371</td>
<td>-1.02***</td>
</tr>
<tr>
<td>Changed School Year 10 or 11</td>
<td>4847</td>
<td>-1.54***</td>
</tr>
</tbody>
</table>

A similar effect of chronicity was true for non-respite placement changes (KS4 changes having the strongest correlation, followed by those that occurred between the end of KS2 and the start of KS4):

Table 12: Correlations between placement changes and KS4 points for CLA-LT

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement Changes KS2-Start of KS4</td>
<td>4847</td>
<td>-1.85***</td>
</tr>
<tr>
<td>Placement Changes During KS4</td>
<td>4847</td>
<td>-2.37***</td>
</tr>
</tbody>
</table>

We also found that these measures of school and placement instability were correlated with each other. This raises the question of how far placement changes lead to school changes and thence to poorer outcomes. The relationship between placement changes and KS4 points remained significant after accounting for school changes in Year 10 or 11, but a Sobel test showed that the reduction in the strength of this relationship was significant, that is, that there was a significant partial mediation effect. School changes in Years 10 and 11 were not very frequent, and were much less common than changes in placement. Thus, they are very unlikely to provide a full explanation for the association between placement instability and outcome. In addition, school changes are less common in mainstream schools (9%) than in other types of school (15%)\(^{30}\). Given the very poor outcomes in non-mainstream schools (such as pupil referral units and alternative provision), this association is likely to increase the apparent impact of changes on outcome.

Thirty nine per cent (1876) of the CLA-LT group were in non-mainstream schools at the end of KS4. Table 13 gives the association between placement changes, school changes and outcomes in mainstream schools, while Table 14 does the same for non-mainstream ones. We distinguish between these two groups partly because of the association noted above but also because the meaning of the changes may be different in the two cases. In mainstream schools a change may well be brought about by a change of placement. In non-mainstream ones it could reflect this, but it could also reflect changes prompted by a reassessment and a move, for example, to a pupil referral unit of a child who was already doing badly in terms of education.

Table 13: KS4 Points (and SD) by Post-KS2 Placement Changes and Year 10 or 11 School Change (Mainstream Schools) for CLA-LT

<table>
<thead>
<tr>
<th>Level of placement change after KS2</th>
<th>n</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed School in Year 10 or 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes: changed school</td>
<td>228.062 (114.354)</td>
<td>2.412***</td>
</tr>
<tr>
<td>No: did not change school</td>
<td>299.614 (83.910)</td>
<td>2.52***</td>
</tr>
<tr>
<td>Low (&lt; 3 changes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium (3–4 changes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (5 or more changes)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(r = -0.590, p < 0.001\)

\(\chi^2(1) = 12.49, p < 0.001\)

Table 13 shows that the relationship between stability and better outcomes is apparent for young people who are in mainstream schools at the end of KS4. There was a clear decrease in KS4 points according to increasing numbers of post-KS2 care placements for those who had not changed school during KS4. For those who had changed school in KS4, fewer changes were also associated with higher GCSE scores. Better attainment of those with 3–4 placement changes may be accounted for if those with the smallest number of placements were very recent entrants to the care system.

In the qualitative interviews, social workers reported that placement moves hindered educational progress. For example, one young man who had been living in his foster placement for eight years was informed at Easter in Year 11 that he would have to move after his exams as his carers were retiring. His social worker said that he had provided additional input to support him given the circumstances but both he and his subsequent carer confirmed that it affected his exam results: ‘Messy with my head a bit so I didn’t get the grades I was predicted’ (YP15). Taylor and McQuillan (2014) confirm that placement changes are more prevalent for adolescents and for placements of less than one-year duration and that support plays a major role in the effects of these changes.

School moves were also reported by young people to be very stressful. Just under half the sample interviewed travelled to school by taxi. The general view was that, although the taxi often entailed getting up early and a long journey, the inconvenience was worth it as it enabled young people to stay with their friends when faced with other disruptions in their lives. However, there were some problems with the organisation of taxi services; for example when taxis were shared, which inhibited some young people from staying on in school for extra-curricular activities or revision sessions.
As Table 14 shows, the relationship between placement change and GCSE results is less clear for those in non-mainstream schools at KS4. The relationship between outcome and changes of school is also not consistent. This may reflect the reasons for which changes take place in these different circumstances. It does not suggest that a change of school inevitably has a bad effect. For example, a child may change school because they are not doing well there, so that it is educational performance that brings about the change rather than vice-versa. Both change of placement and poor educational performance are associated with other factors such as a high SDQ score, discussed below.

Evidence from the interviews suggests the importance of consistency in the relationships between the young people and the adults around them, in particular the carers. Most of the high-progress group were living in stable, long-term foster placements. Several of the lower-progress group were also in stable arrangements: stability, therefore, is necessary but not sufficient. Social workers emphasised generally that placement stability conferred educational benefits: ‘...it’s just stability, and having a secure roof over your head...Makes a massive difference to children. As I say, [name] has only ever lived with these foster carers; she’s never lived anywhere else, so it helps’ (SW3).

A further feature of instability is that it is associated with the kinds of final placement in which the children find themselves. As can be seen in Table 15, foster care and kinship care are both associated with a low level of placement change. By contrast placement in any form of residential care is associated with much higher levels of placement change after KS2. This association is more likely to represent cause and effect. Very few of those who ended up in residential care had always been in it, and it is likely that their placements reflected the use of this highly expensive form of care as a consequence of failed fostering placements. Furthermore, residential workers are unlikely to be able to provide the long-term consistency that some of the young people benefitted from in foster care.

Table 15: Number of Post-KS2 Placement Changes Across Five Placement Types at KS4

<table>
<thead>
<tr>
<th>Placement Type at KS4</th>
<th>Level of placement change after KS2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (&lt; 3 changes)</td>
</tr>
<tr>
<td>Kinship care</td>
<td>321 (81.3%)</td>
</tr>
<tr>
<td>Foster care</td>
<td>2095 (72.6%)</td>
</tr>
<tr>
<td>Residential (children’s home)</td>
<td>305 (33.9%)</td>
</tr>
<tr>
<td>Other residential*</td>
<td>183 (46.0%)</td>
</tr>
<tr>
<td>Other placement**</td>
<td>98 (36.7%)</td>
</tr>
</tbody>
</table>

* e.g. residential schools, secure units, etc.
** e.g. in care but with both parent(s), independent living, etc.

Table 16 deals with final placements (i.e. at the end of KS4) and outcomes. Unsurprisingly, the combination of stability and placement type was strongly associated with outcome. As can be seen, there is a largely consistent relationship within kinship care, foster care and other types of placement between level of placement change after KS2 and educational outcome. As might be expected the lower the level of change, the better the outcome seems to be.

Table 16: KS4 Points (and SD) by Post-KS2 Placement Changes and KS4 Placement Type

<table>
<thead>
<tr>
<th>Placement Type at KS4</th>
<th>Level of placement change after KS2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (&lt; 3 changes)</td>
</tr>
<tr>
<td>Kinship care</td>
<td>266.993 (116.275)</td>
</tr>
<tr>
<td>Residential (children’s home)</td>
<td>94.485 (110.339)</td>
</tr>
<tr>
<td>Other residential</td>
<td>64.508 (93.745)</td>
</tr>
<tr>
<td>Other placement</td>
<td>213.319 (126.143)</td>
</tr>
</tbody>
</table>

The pattern within children’s homes and other residential placements is less clear, but may reflect young people experiencing greater difficulties in residential placements who are recent entries into care and who have therefore had less time to change placement. Table 16 shows that the major differences are between the kinds of placements. Those in residential care are doing very badly by any comparison, and a number may well have dropped out of education. Both groups need educational help but the nature of their educational problems may not be the same.

Attendance and Exclusion

Another dimension to the greater educational instability of children who are in need or looked after is the higher numbers of absences and fixed-term exclusions they experience during secondary school. Table 17 shows that on average CIN and CLA experience between 4 and 13 times as many exclusions as other children. CLA-ST experienced far more exclusions than CIN and CLA-LT, a fact perhaps related to potential benefits from care. Absences were also higher but the notable exception was authorised absences for CLA-LT, which were actually lower than for children who were not receiving local authority support.
Table 17: Average absences* and exclusions from school of looked after and other children

<table>
<thead>
<tr>
<th></th>
<th>Authorised absences (half days) in total</th>
<th>Unauthorised absences (half days) in total</th>
<th>Number of fixed-term exclusions in total</th>
<th>Sessions excluded (fixed-term) in total</th>
<th>Percentage of pupils ever permanently excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked after on 31st March 2013</td>
<td>73.8</td>
<td>17.1</td>
<td>0.4</td>
<td>1.8</td>
<td>0.6%</td>
</tr>
<tr>
<td>In need on 31st March 2013</td>
<td>117.2</td>
<td>70.9</td>
<td>1.7</td>
<td>8.7</td>
<td>3.9%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for less than a year</td>
<td>114.6</td>
<td>88.6</td>
<td>3.2</td>
<td>17.0</td>
<td>8.0%</td>
</tr>
<tr>
<td>Looked after on 31st March 2013 for over a year</td>
<td>69.1</td>
<td>35.6</td>
<td>2.3</td>
<td>11.8</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

*Absence data for PRUs and AP are not in these data, but the understatement of absences is quite small.

There is an association between exclusion and changes of school, though percentages permanently excluded are likely to account for a significant part of the differences in the percentages changing school during KS4.

Changing school except during the summer holiday was associated with a reduction in GCSE of 60 points. The net effect of changing school during term-time dropped when absence and exclusion were added to the model (Technical Report 1). The link between permanent exclusion and change of school must account in part for this reduction – change of school serves as a proxy for exclusion when exclusion is not controlled for. Weinberg, Oshiro, and Shea (2014) noted a significant relationship between the number of school moves and exclusions in youth in care. Absence and exclusion have a larger effect than school changes on scores for CIN and CLA-ST, mainly explained by unauthorised absence. However, the evidence from the interviews showed that there were significant exceptions to these findings. Most of the 26 young people across both high- and lower-progress categories were regular school attenders (though of course it is possible that those who refused to be interviewed were poorer attenders). Unauthorised absence was not necessarily linked with poor attainment:

I got around 7 As, 3 Bs and 1 C... She [mother] didn't let me go to school or anything, so I was always just like at home, so for pretty much... for the whole of Year 7, I could barely remember myself being in school, and during October when I was in Year 8, I got put into care, and from actually September I didn't go to secondary school in the start of Year 8. (YP9)

Even after controlling for young people's individual characteristics, KS2 results and early environments, changes of school and placement, as well as unauthorised school absences and exclusions, all predicted poorer GCSE scores. Once instability was accounted for, however, length of time in care was no longer related to GCSE scores.

Summary of findings on Research Question 3

These results suggest that both school changes and placement changes are risk factors for looked after children's educational outcomes; moreover, the length of the latest placement is also associated with educational outcomes. Placement changes may produce school changes and hence poor educational outcomes; however, the extent of this effect is relatively small. The lower the level of changes, the better the outcomes. The main associations might occur because both kinds of change are markers of a young person in difficulty.
RESEARCH QUESTION 4: What factors contribute to any association between placement stability and higher attainment (Conger & Rebeck, 2001)?

As stated previously, Research Questions 1-3 focused on particular characteristics or aspects of children's experiences. For Research Question 4, we took what we had learned about instability in care and in school and considered, in addition, all of the factors identified in our previous analyses. This resulted in a regression model using the CLAD only sample (Technical Report 2) that included four blocks of factors:

Block 1 – ‘difficult to change’ early factors (e.g. individual characteristics, early home environment)
Block 2 – other factors difficult for the care system to influence in adolescence (e.g. KS2 results and length of time in care)
Block 3 – factors that might be seen as a response to the care system (e.g. placement changes and school changes)
Block 4 – factors relating to concurrent environment (e.g. latest placement type and length)

The resultant model is depicted here graphically in Figure 1, which shows the variables that were entered and those that were significant predictors of KS4 results (the model is shown in tabular form in Technical Report 2, Part 2). In examining Figure 1, it is important to note that factors which might relate to GCSE attainment when considered by themselves, can often be more likely to co-occur with other factors in the model; the result of this can be that the two factors do not each predict a ‘unique’ part of the variance in the outcome. This can be seen, for example, when the addition of school types to the model meant that having ever received a permanent school exclusion was no longer a significant predictor of KS4 results. It is likely that this is due to the potential overlap in the characteristics of particular groups of children (e.g. young people end up in a pupil referral unit in some cases because they have received a permanent exclusion from a mainstream school).

Figure 1: Final Regression Model for KS4 scores of CLA-LT Showing (a) All Variables Entered in the Model, and (b) Significant Predictors Only

Regression model predicting KS4 scores ($R^2 = .66$)

Size of association - standardised beta values
Evidence from the interviews provides confirmation of this. It was common for problems from home to spill over into anger and aggression at school:

Like, I shocked myself a lot on my GCSE results because...oh, I just didn't revise, I had no motivation to be at a school or anywhere near that place at the time of my GCSEs... because of the home life I kind of got aggressive and impulsive at school as well, so then I'd... be very sort of rowdy in class and then the teachers would sort of pick me out more and more often, and drag me out of class and make me stay behind and things like that, and [I] just didn't like it. And they didn't understand if you told them, look, I just need space, and they... hadn't got a clue, they probably just didn't know. (YP5)

The lower-progress group in particular also reported rule-breaking and disciplinary problems in class. This included defiance leading to clashes with teachers; disruption to impress the class and disagreements over appearance.

Summary of findings on Research Question 4
Taking a range of variables into account, we have shown that the following factors are significant predictors of poorer KS4 scores for CLA-LT after controlling for performance at KS2:

**Individual characteristics**
- Being male
- Having a recognised SEN of an autism spectrum disorder
- Having a recognised SEN of a moderate learning disability
- Having a recognised SEN of severe or multiple learning difficulties
- Entering care primarily due to a disability
- Having a high mean score on the SDQ

**Instability**
- Having more changes of placement (compared with other children) after KS2
- Changing school in Year 10 or 11
- Having more unauthorised school absences
- Having missed more school days (compared with other children) due to fixed-term exclusions

**Concurrent environment**
- Having spent less time in the latest placement
- Living in residential or another form of care (compared with kinship or foster care) at KS4
- Having unknown FSM status at KS4
- Having a home language other than English at KS4
- Being in a non-mainstream school at KS4 (special schools, PRUs, alternative provision, and other types of school)

In O’Sullivan, Westerman, McNamara, and Mains’ (2013) analysis of similar data to the current study from two local authorities, five key factors were identified as contributing to lower GCSE scores than expected: being male; having a statement of SEN; school moves in years 10 or 11; more than 10 placements during their care career; or more than three placements in any one academic year. There is a strong synergy with the findings in the current study.

The path model showed that the relationship between SDQ scores (sometimes seen as a measure of a ‘difficult child’) and KS4 scores was shown to operate not just as a direct relationship; the relationship was also partially mediated by measures of difficulty in school and in care. This suggests that a key consideration in improving the educational attainment of ‘difficult’ young people lies in addressing not just their own behavioural difficulties, but also the way that educational and care systems respond to those difficulties, for example with disciplinary actions, school exclusions and placement continuity. The evidence from the interviews confirms the importance of the response experienced in school in helping a young person get back on track.

*In the NPD-only analysis, these results are different e.g. FSM is a significant predictor of GCSE scores – see Technical Report Table 22.*
No national data are collected in England on foster carers. However, the interviews undertaken provided a helpful insight into the role that foster carers seemed to play in the education of children in care. McDermid, Holmes, Kirton, and Signoretta (2012) noted that compared with the national population of adults, a slightly higher proportion of foster carers have no educational qualifications and fewer than in the national population are educated to degree level though a large proportion do have GCSEs. They noted that there were ‘no studies which explore the impact of educational attainment of foster carers on the quality of care offered’ (p.18). In the current sample interviewed (18), half reported that they had no formal qualifications. Most of those who continued with education after school were fostering young people from the high-progress group, but this was not exclusively so. Indeed, our qualitative evidence suggested that it was the educational encouragement and support that foster carers offered that were important, rather than their educational qualifications per se.

Existing research notes that kinship carers are generally less well educationally qualified. Nandy and Selwyn (2013, p.1657) reported that ‘...44 per cent of children in kinship care were living with grandparents, most of whom were elderly, in poor health, with few or no educational/professional qualifications’. Irrespective of their qualifications, in this study young people, teachers and social workers felt that most placements had been supportive educationally:

Yes, used to ask me about my days, help me with homework, see what help they could do at their work, like research, print some homework out for me and stuff, so yes, they were pretty good, yes. (YP1)

It was the norm for carers to attend Personal Education Plan (PEP) meetings and parents’ evenings. Two young people (lower-progress group) withheld details of parents’ evenings from carers to prevent their attendance: ‘I never liked them going to my parents’ evenings...I did have parents’ evening when I was young, in infant school, and it scared me, actually, because of the fact that my parents’ evenings were always bad. Soon as I got home, I got beaten’ (YP18).

One young person, who achieved top grades for looked after children in her local authority, had been living with her grandparents:

Although she’s in care she’s been brought up with family...extended family members, and they’ve been very, very supportive and rock solid for her, and, obviously, it’s given her a very strong foundation...In fact, so much so that even when the unfortunate death with regards to her grandparents that were her carers...her aunt then moved into the family home rather than move [her]. (SW10)

Carers who were forgiving and did not give up too easily were seen as demonstrating a sense of acceptance. Unsurprisingly, kinship carers were commented upon as more likely to do this: ‘...say in my other ones, I did wrong, that was it. But obviously, my nan, I’ve done so many things here, I could’ve been...should’ve been left here long ago.’ (YP25)

Young people could often sense if they were living somewhere where they were unwanted: ...and the thing was, when it came to my last carers, I was getting support, like, food, shelter and like, you know, warmth but yeah, I was getting those ones, but I wasn’t getting love, care, you know, compassion. Like, I just felt like it was just a placement... (YP9)

And in contrast:

I was treated like one of their own children, so you become part of the family, and when that happens, it’s easier for you to excel. (YP7)

In general, foster carers provided somewhere suitable at home for young people to study, access to a computer, books and study guides. Evidence from the interviews suggests that where foster carers’ aspirations and expectations are high, the young people in their care felt that carers had contributed to their educational progress, though, overall in this sample, the specific influence of individual teachers was greater.
RESEARCH QUESTION 6: To what extent is low attainment at KS4 and progress end of KS2 – end of KS4 specifically linked with transfer from primary to secondary school or does widening of the attainment gap occur gradually over time?

Table 18 shows that children who were in need or looked after had worse attainment scores on average at Key Stages 1 to 4 than those not in need or looked after. While the poorer performance of CIN and CLA is the most notable feature of this table, there are also significant differences between the sub-groups. In particular, children who were in care for the 12 months to 31st March 2013 had the lowest attainment at KS1 but steadily gained ground on CIN and those taken into care in the final year, and had overtaken them both by GCSE. Those who were looked after but not continuously for 12 months (i.e. who were taken into care - not necessarily for the first time - in the final year of their secondary education) were overtaken between the KS3 and KS4 tests by CIN.

CLA-LT made better progress than CIN and other CLA in most stages of their education. However, judgements about the impact on education of being looked after in the short- or long-term depend on taking simultaneous account of the many variables that relate to attainment. This was achieved to some extent by the use of the regression model under Research Question 4; in addition, our multi-level modelling took account of prior attainment (at KS2) to create a contextual value added model, with pupils nested within schools, which were nested within local authorities.

Figure 2: Changes in Standardised Test Scores by Need Group

Because the principal concern in this study was progress during the secondary phase of education, previous attainment was measured using scores in the three KS2 tests, taken at age 11. KS2 attainment is a powerful predictor of GCSE outcomes. Poorer KS2 attainment explains part of the poorer performance of CIN and CLA at GCSE. The most we can conclude is that the worse performance of those taken into care in the year preceding their GCSEs is consistent with the circumstances surrounding their entry into care having an adverse impact on their education and the better performance (than CIN) of those looked after for 12 months or longer is consistent with more stable care having a protective effect. After pupil characteristics (e.g. prior attainment and background) and school effects were taken into account, CLA-LT made less progress, by a little more than three grades (19.4 points, see Technical Report 1 Table 19) overall at GCSE than children who were not in need or looked after. Distinguishing between these groups helps to disentangle these issues.

Figure 2 shows the relative achievement at four Key Stages of those who were neither in care nor in need at KS4, children in need, and CLA-ST (CLA KS4 not 12 months), and breaks down the CLA-LT category into late-entry (CLA 12 months not at KS2) and early-entry (CLA 12 months and KS2). The graph makes it easier to compare pupils’ relative positions at different stages by using standardised scores: the height of the bars indicates the relative standing of the groups at each of the four time points, so that any increase in height within a group indicates an improvement over time relative to the other groups (i.e. a ‘narrowing of the gap’), whereas any decrease in height indicates a decline over time relative to the other groups. As can be seen on the graph, two groups, those not in need and those CLA-LT who were in care at KS2, improve relative to the others. The other three groups all experience a relative decline.

Table 18: Looked after status by attainment at Key Stages

<table>
<thead>
<tr>
<th>Not in need or looked after on 31st March 2013</th>
<th>In need on 31st March 2013</th>
<th>Looked after on 31st March 2013 for less than a year</th>
<th>Looked after on 31st March 2013 for over a year</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.7</td>
<td>11.5</td>
<td>12.4</td>
<td>11.2</td>
</tr>
<tr>
<td>4.65</td>
<td>3.84</td>
<td>4.01</td>
<td>3.88</td>
</tr>
<tr>
<td>5.56</td>
<td>3.90</td>
<td>4.29</td>
<td>4.21</td>
</tr>
<tr>
<td>341</td>
<td>185</td>
<td>150</td>
<td>202</td>
</tr>
</tbody>
</table>

KS1 points, 4 test average  | KS2 points, 3 test average  | KS3 points, 3 test average  | KS4 points, 8 best +equivalents |

It might seem that CIN and looked after children made very meagre progress during KS3. Further investigation of the test scores/assessments revealed that children who performed below the level of the test at KS2 were given a score of 2.5, whereas those who performed worst at KS3 were given a score of zero.

Full explanations of the methodological process can be found in Technical Reports 1 and 2 at http://rescentre.education.ontario.ca/.

Changes that result from some young people leaving the system after KS2 cannot be assessed with these data as this group cannot be identified.

Each score has a grand mean of 0 and a standard deviation of one, to which we added 1.5 in order to allow for easier comparisons. This addition does not affect the trends but does ensure that they do not have to be examined both above and below the x-axis.

See Research Question 7 for details of an anomaly in the KS1 scoring system, which means that group differences at this stage may be under-estimated.
The most dramatic decline was in those who were CLA-ST. Their initial scores at KS1 were the highest of all the groups other than those who were not in need or in care at all. By the time of KS4 they scored the worst. A rather similar but less dramatic pattern was found with those who were in care for at least 12 months by March 2013 but first entered after KS2 (late-entry CLA-LT group). Their initial scores were relatively high but their position steadily declined over time. Arguably both groups were experiencing a worsening situation at home, which in the end led to some of them entering the care system. It is likely that some of these children make greater progress after coming into care. In many cases, however, major educational time has been lost and there was too little time to make up the progress.

Evidence from the interviews was consistent with these findings and with the possible explanations suggested. Perhaps unexpectedly, the overwhelming view of both groups was that they had performed better educationally at secondary than at primary. A number of factors need to be taken into account. The most important was that, at primary stage, young people had often still been living with their birth families and primary education was very often an unhappy experience. One young man said that he had attended 7 or 8 primary schools (YP24). Another had been excluded from primary school and missed a year and a half’s schooling (YP16). One young woman spoke of her aggression but calmed down as her life became more settled:

Because when I used to get treated differently in primary school, I used to fight a lot, but as I grew older, I went into high school, I calmed down a lot and tried to focus on my schoolwork instead of fighting people. (YP12)

The factor most often identified as leading to improvements in educational experiences at secondary level was that by then, or around that time, they had left home and entered care. The relative educational performance of the CIN who remained living at home declined steadily over time. At KS1 they were slightly better positioned than the early-entry CLA-LT group, at KS2 they performed less well than the early-entry CLA-LT group, and their relative position worsened over KS3 and 4. At Key Stage 3 those who were already in care at Key Stage 2 improved steadily.

Summary of findings on Research Question 6

The gap in attainment between children in care and those not in care or in need appears to widen gradually over time rather than suddenly in response to transfer from primary to secondary school. There are a number of potential reasons for this including the reasons older entrants are admitted into care, the limitations on benefits if in care only a short time and the fact that children who have left the system are likely to be higher performing.

See Technical Report 1 for an explanation of the difficulties of comparing Key Stages 2 and 3.
RESEARCH QUESTION 7: What can local authorities, schools, Virtual Schools, social workers or foster carers do that appears to improve the attainment and progress of secondary school pupils in care and what difference can the relationship between these services make to outcomes (Pecora, 2012)?

The analysis examined the relative contribution to outcomes made by local authorities and schools to the attainment and progress of secondary school pupils in care. The qualitative data are then drawn on to identify some of the key facilitators and barriers to progress.

Local Authority-level effects

An important objective of this study was to understand the associations between schools or local authorities and the educational progress and outcomes of children who were looked after. Multi-level models were run both for the entire cohort (Technical Report 1) and for the CLA-LT group (Technical Report 2) separately. Residual variance at the LA level was very small in all models (and inconsistent in terms of statistical significance), and of an order of magnitude lower than those at the school-level, which were in turn several times lower than those at the pupil-level, suggesting that local authorities had little additional influence on GCSE outcomes overall, beyond that of schools and individual pupils. However, this statistical finding does not negate the role of the local authority. Local authorities influence the outcomes for children in care at the school and individual level through the role they play in key decisions concerning both care placement and school placement. These decisions are critical since what the individual placements have to offer contribute significantly to the educational outcomes of children in care.

School-level effects

As shown in Table 19, high percentages of CIN and CLA complete their secondary education in special schools, pupil referral units (PRUs) and alternative provision (AP). The relatively higher numbers of CLA in PRUs and AP tally with the higher incidence of behavioural needs identified for this group as well as suggesting that the needs are acute for a significant number.

Table 19: Looked after status by types of secondary school attended at GCSE

<table>
<thead>
<tr>
<th></th>
<th>Special school</th>
<th>Pupil referral unit / Alternative provision</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in need or looked</td>
<td>8,010</td>
<td>8,012</td>
<td>47,061</td>
</tr>
<tr>
<td>after on 31st March</td>
<td>1.3</td>
<td>1.3</td>
<td>7.6</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In need on 31st March</td>
<td>3,204</td>
<td>1,162</td>
<td>86</td>
</tr>
<tr>
<td>2013</td>
<td>23.6</td>
<td>8.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Looked after on</td>
<td>190</td>
<td>319</td>
<td>11</td>
</tr>
<tr>
<td>31st March 2013 for</td>
<td>13.7</td>
<td>23.0</td>
<td>0.8</td>
</tr>
<tr>
<td>less than a year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Looked after on</td>
<td>1,061</td>
<td>595</td>
<td>42</td>
</tr>
<tr>
<td>31st March 2013 for</td>
<td>21.9</td>
<td>12.3</td>
<td>0.9</td>
</tr>
<tr>
<td>an year</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Including independent special schools. A complete cross-tabulation is given in Technical Report 1.

A significant proportion of the apparent disadvantage in the attainment of children who were in need or looked after was associated with the schools they attended. Allowing for variability amongst schools accounted for more than half of the differences between the outcomes of CIN or CLA and other children. A pupil with BESD achieved 45 points fewer at GCSE than pupils without SEN but scored a further 126.7 points lower if they were in a school in which all pupils had a special educational need (albeit partly offset by the effects of FSM indicating that these two context measures are confounded).

School type is perhaps the most powerful predictor of GCSE performance in the overall cohort. Different school types appear to explain nearly all of the differences in GCSE outcomes associated with SEN composition and a large proportion of the differences apparently related to school mean, KS2 prior attainment and proportion eligibility for FSM. Importantly, CIN and CLA pupils are disproportionately represented in school types which perform much worse (special schools, PRU, alternative provision, FE colleges), which has a strong association with GCSE attainment. It seems likely that the large differences in GCSE outcomes by school type reflects unmeasured characteristics of the intake to different school types. That is, there is powerful selection in the English secondary education system into school types related to perceived academic potential, which is not adequately accounted for by pupils’ prior attainments and special educational needs.

Differences between the intakes of secondary schools attended by CIN, CLA and other children are quite pronounced. Table 20 shows that CIN and CLA pupils attended schools in which mean KS2 points were up to 0.6 of a point lower and proportions eligible for FSM were 5-10% higher. The half point difference in mean KS2 points between CLA and children who were not in need or looked after represents a full year of learning on the national curriculum (in 2013). However, CIN and CLA pupils also, on average, attended schools at which their peers were less likely to be eligible for FSM than them and had higher average KS2 attainment than themselves\(^5\). Moreover, from the CLA only sample we know that around half the children in the CLA-LT group were not in the care system when they were assessed at KS2, and educational outcomes within this late-entry group were better the earlier they had entered care. It seems that these young people were more likely to face the challenge of attending schools in which other children have not attained high levels at KS2.

\(^5\) There is an extensive literature on peer effects but no conclusive evidence as to whether having higher attaining peers or peers from less impoverished backgrounds is beneficial or detrimental. The inclusion of contextual aggregates in value added models takes account of such effects whatever their direction. See Timmermans & Thomas (2014).
The use of a contextual value added measure that takes account of pupil characteristics, school context and types, gives an indication of whether a given school is doing better or worse than expected, given the profile of the school and its pupils. The variation in the apparent effectiveness of schools (that is, CIN and CLA pupils attending 'worse' rather than 'better' schools) was statistically significant but nevertheless did not contribute much to the poorer outcomes of CIN and CLA (see Technical Report 1, Table 23 and Figures 1 and 2). Indeed schools that do well for their non-CLA pupils also tend to do well for their CLA pupils; the correlation between schools’ contextual value added (CVA) for CLA pupils and their non-CLA pupils is 0.82. Moreover, correlations reported here are likely to be underestimates of the true strength of the relationships because of the very diverse nature of the 5,600’ schools being compared, including special schools, alternative provision, PRUs, FE colleges and secure units. This should be qualified by observing that the school effect here is after accounting for school context, type and student intake. In subsequent analyses in which all other measured variables (considered to be outside the control of schools) were controlled, CLA achieved around three grades lower across their eight best subjects at GCSE than other children (Technical Report 1, Appendix D).

CIN and CLA pupils with SEN tend to achieve lower GCSE scores than non-CIN and CLA pupils with the same SEN classification. The poorer performance might arise because the process of identification of CIN and CLA selects children with more acute educational needs, although these results could also be consistent with CIN and CLA being less likely to receive appropriate provision. Importantly, pupils with BESD who are looked after do relatively better (12.9 points, equating to two GCSE grades) than pupils with BESD who are not looked after or are in need. BESD is by far the largest group, accounting for 50% of the CLA-LT pupils with an identified SEN. The finding is consistent with LA care having a protective effect for such children.

Type of placement

Analysis of the CLA only sample (Technical Report 2) indicates that 60% of the final placements were in foster care, with a further 8% in kinship care. Just over one in four (26%) were in residential care; with 18% being in children’s homes and the remainder in residential schools and other establishments. Finally there was a small ‘other’ category (6%) which included placement with parents and a wide variety of miscellaneous placements. The average placement length varied widely between placements. The average duration in kinship care was 5 years and in foster care just over 3.5 years. The other categories averaged between 1.5 and 2 years.

There was a significant difference in mean KS4 scores between final placement types, as shown in Table 21. The best results were in kinship care and unrelated foster care. Children’s homes and other types of residential care were linked with significantly lower results. Other placements also scored poorly.

### Table 21: KS4 Points for CLA, by Final Placement Type

<table>
<thead>
<tr>
<th>Placement Type at KS4</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinship care</td>
<td>395</td>
<td>259.22</td>
<td>117.62</td>
</tr>
<tr>
<td>Foster care</td>
<td>2886</td>
<td>246.94</td>
<td>118.52</td>
</tr>
<tr>
<td>Residential children’s homes</td>
<td>901</td>
<td>106.31</td>
<td>107.59</td>
</tr>
<tr>
<td>Other residential care</td>
<td>267</td>
<td>146.56</td>
<td>127.94</td>
</tr>
<tr>
<td>Other</td>
<td>398</td>
<td>78.33</td>
<td>89.66</td>
</tr>
</tbody>
</table>

The category of placement that kept children the longest also seemed to do best with them. This, however does not seem to fully explain the findings in Table 22.

### Table 22: KS4 Points for CLA, by Final Placement Type and Length

<table>
<thead>
<tr>
<th></th>
<th>Less than 1 year</th>
<th>1-2 years</th>
<th>2-3 years</th>
<th>Over 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foster or Kinship Care</td>
<td>210.95 (121.67)</td>
<td>247.90 (115.40)</td>
<td>262.45 (108.91)</td>
<td>261.18 (117.47)</td>
</tr>
<tr>
<td>N = 654</td>
<td>N = 716</td>
<td>N = 384</td>
<td>N = 1527</td>
<td></td>
</tr>
<tr>
<td>Children’s Home or Other Residential</td>
<td>100.29 (99.48)</td>
<td>114.56 (114.02)</td>
<td>113.87 (114.16)</td>
<td>103.43 (126.43)</td>
</tr>
<tr>
<td>N = 751</td>
<td>N = 406</td>
<td>N = 188</td>
<td>N = 221</td>
<td></td>
</tr>
</tbody>
</table>

Indeed, as well as a significant effect of final placement length, there was an interaction between this variable and final placement type (foster and kinship vs. residential and other). As a longer final placement length up to 3 years was linked to increasingly better outcomes in the foster and kinship group, in the residential group, the scores increased for placement lengths of up to 3 years but then reverted to be similar to those who had been in their final residential placement for under 1 year.

The differences between KS4 placements in terms of outcome are clear. Foster and kinship placements have an average outcome 150 points or so greater than other types of final placements. This is a further reminder of the diversity within the care population. As with schools, however, it would be rash to attribute this difference entirely to differences in the effects of different kinds of placement. Part of the difference is likely to reflect specific differences between the children who are placed in them.

**Strategies adopted by local authorities and schools**

Many forms of additional educational support experienced by the young people were mentioned in the interviews. There were mixed views on whether resource constraints hindered the educational progress of these looked after children but the Virtual School headteachers in particular, who have more recently been given the responsibility for managing the allocation of the enhanced Pupil Premium for CLA, commented that they are now individually relatively well-resourced. Additional support reported upon included teaching assistants; learning mentors; small groups; student support centres for pupils with special educational needs and others; and additional revision and other classes. Local authorities operated different forms of looked after children education teams; Virtual Schools organised specific education events; and there were local authority contracts with private education companies to support looked after children. These were offered sometimes at school or, on other occasions, elsewhere.

An important theme to emerge from the interviews concerned the integration of services. It was less evident for those in the lower-progress group but those in the high progress group in particular reported effective co-working between school, placement and social worker. One designated teacher expressed this as follows:

---

42 *F(3, 4842) = 421.77, p < .001, η² = .238
43 *F(3, 4839) = 17.17, p < .001, η² = .051
44 *F(3, 4839) = 8.20, p < .001, η² = .055
A combination of everything, and generally, that is so often the case with young people in care... If you've got really good, education-focused foster carers, really good, aware, designated teacher at the school who cascades information to other staff and helps provide the training, if the school's 'attachment aware', if you're got good links with the social worker, and if you've got a good case-worker from the Virtual School, you put all those things together and that young person is going to progress and succeed in some way... (DT2)

Five young people interviewed had accessed Child and Adolescent Mental Health Services (CAMHS), the effects of which were reported to be very positive. These concerned a range of experiences including: bereavement counselling; anxiety and panic; anger management; depression; stealing; incontinence; self-harm and attempted suicide.

A recurring theme in the interviews was the effects of changes of social worker on the young person's education. One young person had experienced five social workers in 18 months and the foster carer commented that this meant they never got to know her. Another young person commented that her social worker never asked about school and others noted that they saw little of them. However, some were reported to be very helpful and supportive: they give me encouragement and just made it possible for me to carry on... they definitely put everything there to make it better for me. Definitely.' (YP14)

The evidence from the interviews suggested a number of ways in which school responses to young people in care may have contributed to their subsequent development. Recognition of the impact of their previous home life or lack of stability in care on their capacity to conform and readiness to learn was a recurrent theme in the interviews:

Well, he had a difficult home life. And so, throughout his school life, he struggled with self-esteem, bullying, and problems at home as well. So his concentration was never 100%. It had improved for a while but certainly, I think it was fairly embedded in his perception of how things worked for him. (DT17)

The vast majority of both high- and lower-progress pupils benefited from 'one-to-one' tuition, usually funded by the Pupil Premium. Of the few who did not have individual tuition, two were offered but declined it. There was an overwhelming view from young people and others that one-to-one tuition had helped with young people's educational progress:

Yes, it definitely helped, yes. I was able to get to grips more with certain things, and that helped me a lot. They said if I was to fail my maths, then they would give me more, but I ended up passing so I didn't need any more. But, no, that helped a lot, one-to-one. (YP1)

This is in keeping with previous research on tutoring, with two reviews of educational interventions for children in care (Dietrichson, Bøg, Filges & Klint Jørgensen, 2015; Forsman and Vinnerljung, 2012) concluding that it has the best empirical support of any educational interventions so far from evaluations with rigorous designs. A few young people complained that they would have liked the tuition earlier. Additional one-to-one tuition was sometimes provided in school by teachers outside of regular hours:

I mean if I'd been going home on the bell every day, [name] wouldn't have even got a D, because she did very little in lessons, she wasn't good in lesson times because it's more structured. But after school when you have the tea, radio on and stuff, then she did much better. And if I hadn't run those sessions then she wouldn't have got the grade she achieved. (DT16)

There were many comments in the interviews about PEP meetings, including their monitoring, co-ordinating, resource allocation and accountability functions. Three young people raised specifically how they disliked being singled-out and removed from class to attend their PEP meetings (although one other liked missing lessons). One young woman asked for these to be rearranged for after school and her designated teacher and social worker agreed. Young people usually attended these. One young woman, with admirable efficiency and who did not consider her education to be a problem, felt that she had more important things to do with her time: she did not attend but asked for a report afterwards, and followed-up on anything with which she was concerned or disagreed.

Another area in which school responses were important was bullying, acknowledging that this is variably defined. Four of the 14 in the high-progress group and half the lower-progress group reported having been bullied, in the case of the young asylum seeker, according to his designated teacher, with a racist dimension which affected his education. Schools' responses to this seem to have helped where they knew about it but bullying seems to have been a contributory factor in the educational engagement and progress of the lower-progress group in particular.

Given that many of the carers interviewed had themselves left school early and some had reported not enjoying school, it would seem important for schools to reach out to the carers. There was not always evidence of this, particularly from the lower-progress group, with foster carers sometimes suggesting they had not been in the school and were never invited:

I would've liked to have gone in and seen the school. Do you know what I mean?... No, because she seemed quite settled and I didn't want to upset anything, but for me, if you are getting a kid that's at school coming to live with you, I think it would've been nice to go in and just see the school, and... then we could've told them what concerns we had for [name]. (FC22)

However, there was evidence that schools and the individual teachers within them were seen by the young people to have provided the main sources of educational support. For example, a young woman in the high-progress group explained:

I think best, it would've been teachers, yes. Because teachers, I've always looked at them for schoolwork and everything, because they helped me; I've always, like, related to them more than carers or anything. Like, carers and social workers have helped me, but teachers have always been there for me, always. (YP1)

Foster carers were clearly very important but teachers and school staff were highlighted by young people in both the high- and lower-progress groups for influencing their education the most. There is strong evidence from previous research (Weinberg et al., 2014) of the potential impact of having an 'educational advocate' who builds a relationship with the young person in care, supporting them to navigate the education system and helping to maintain stable school placements. It is possible that the teachers identified by the young people in this study performed this role.

Young People's Agency

An interesting finding that emerged from the interviews which we have termed 'agency', concerned how young people themselves exercised control over their education. Those interviewed, in particular those in the high-progress group, chose to engage in their education. They described examples of strong self-advocacy and persistence and made direct recommendations to foster carers and professionals on how they could better support them:

Listen a lot, a hell of a lot. Listen, because not enough people do that. I mean, there are a lot of kids out there that do need help, and they won't ask because they're too scared to, or they're too scared to get shut down. So if a child is telling you they need help, you need to listen, and even if they're not telling you, ask questions. Ask them if they need help, because a lot of kids don't get asked that. They just, kind of, 'Well, do you need help?' 'No, not right now'. That doesn't mean I'm never going to need help; that means that I don't need help right now. (YP20)
Conclusions

This report summarises extensive quantitative and qualitative analysis about the attainment and progress of children in care. Some previously reported research has been confirmed by the findings but the analyses have developed these further in bringing together large-scale statistical associations and in-depth interview data for an understanding of the factors involved in the educational progress of looked after children. This section summarises the main conclusions from the findings.

1 Educational outcomes and progress for different groups

1.1 The main comparison group (children neither in care nor in need) performs best, the longer-stay CLA groups come next and are followed by children in need, and the shorter-stay CLA group do least well. Whereas there is evidence that some looked after children perform similarly to their non-looked after peers, the overall average is made lower by a sizeable minority of children who have very low scores or no score at all. The relative educational performance of the different groups of children tends to be constant from age 11 to age 16. However, even young people in care with lower prior attainment often made very good progress. These findings are consistent with the explanation that local authority care provides an environment that is more conducive to education than that experienced by children in need.

1.2 Children not in need or in care provide the benchmark for expected educational performance over time. Relative to these children, CIN were deprived according to measures of family and neighbourhood poverty, were more likely to have special educational needs, had poor attendance and more exclusions from school, and had progressively poorer relative attainment as they went through school.

1.3 The CLA-LT early entry group (those who were already in care by the end of KS2) made greater progress over time than the other groups of children in care or in need. The educational performance of the CLA-LT late entry (those who entered after the end of KS2) group, worsened relative to both the early entry group and the comparator but not as much as the CIN, and noticeably less so than the CLA-ST group.

1.4 The overall attainment gap between CLA and those not in care or not in need widens gradually over time and not specifically following transfer from primary to secondary school. Our analyses suggest that one reason for this may relate to those entering care in adolescence with more challenging difficulties being less likely to do well educationally. In addition it is possible (but would need further analysis to confirm) that some ‘better performing’ children who entered at a younger age have left the system (adoption, special guardianship, reunification).

2 Individual characteristics, educational outcomes and progress

2.1 Measures of deprivation (FSM and IDACI) change more over time for the CLA group than for other children, presumably because their living arrangements change. This may explain why deprivation measures are weaker predictors of GCSE outcomes for CIN and CLA than for other children.

2.2 Special educational needs are far more common among children who are looked after and associated with large differences in outcome. The gap in attainment between those in need or looked after and others is considerably reduced if allowance is made for special educational need. Those SEN most strongly associated with poorer outcomes in CLA are SLD/ PMLD, ASD and MLD. In addition, having a disability was also associated with poorer outcomes.

2.3 Other variables that are strongly predictive of poor GCSE outcomes for CLA (from Technical Report 2) are being male and having a high SDQ score.

3 Care placement, educational outcomes and progress

3.1 The findings suggest that foster care generally provides a protective factor, with early admission to care being associated with consistently better outcomes than found in the other groups in this study. Foster care may benefit later admissions but it does not fully reverse the damage that may have been done. There was an overwhelming view from the interviews that entry to care had been beneficial educationally.

3.2 The earlier the young person enters foster or kinship care the better their progress, provided that they do not experience many short care periods interspersed with reunifications with their birth families or many placement and/or school changes.

3.3 Overall, most young people who entered care after the age of 10 did better by being in care for longer. The same could not be said for the youngest (0-5 years) first-time entrants who were still in care or had re-entered care by their GCSE years.

3.4 Both school changes and placement changes are risk factors for looked after children’s educational outcomes. There is some evidence that placement changes may produce school changes and hence poor educational outcomes; however, the extent of this effect is relatively small. The main associations might occur because both kinds of change are markers of a child in difficulty.

3.5 Children whose final placement was in foster or kinship care did better at GCSEs than those in residential care or other types of placement. To some extent this reflected the length of the final placement - the longer the placement, the better the outcomes.

4 Schooling, educational outcomes and progress

4.1 Type of school is one of the strongest predictors of outcomes. Almost 40% of the looked after children went to non-mainstream schools (such as pupil referral units and alternative provision) at KS4 and, controlling for other factors, their educational attainments were far lower than the 60% who go to mainstream schools.

4.2 Absences, exclusions and changes of school explain substantive variations in GCSE outcomes and a significant part of the disadvantage CIN and CLA experience. Educational instability has a stronger association with GCSE results for CIN who are not looked after and CLA in short-term care than for CLA-LT. Unauthorised absence was a major predictor of poorer scores.

45 Some of these young people may have been dually registered with both a mainstream and non-mainstream school but are more likely to have been attending the non-mainstream provision.
4.3 There was little evidence from the value added analyses (Technical Report 1) of effects at the LA level. However, there are a number of factors at school- and pupil-level which reflect LA policy and practice, including care and school placement.

4.4 The evidence of differential school effects for CLA, CIN and other children is limited and overall schools tend to perform similarly better or worse for children in all three groups. This is supportive of reforms to school admissions that give priority to CLA pupils. Nevertheless, we found a small minority of schools that appear to have better contextual value added outcomes with CIN pupils in particular.

4.5 Teachers and school staff were identified by young people as the main determinants of educational progress. For many young people, carers, teachers, and school pastoral support services played an important part on a daily basis in their educational progress, and to some extent general welfare, less often their social workers who were less engaged with their education. Foster carers' educational support was not the main determinant of educational progress.

4.6 Most young people in the study both enjoyed and benefitted from one-to-one tuition, recommended through the Personal Education Plan and funded through the Pupil Premium (now Pupil Premium Plus).

5 Other factors, educational outcomes and progress

5.1 Successful children had often been supported educationally from a very young age by birth families, notwithstanding other family problems. For many, birth family problems continued throughout their teenage years, affecting their learning, and did not cease on entering care.

5.2 Having someone whom they felt genuinely cared about them was very important to the young people in this study. This occurred across both high- and lower-progress young people. Young people needed to feel that they would not be let down – which had been their past experience – and that their life mattered. It needed to matter to others before it could matter to them. Most of our high-progress group identified relationships with people to whom they felt gratitude and did not want to let down.

5.3 Resources (e.g. computers, broadband, books) in foster placements do not emerge as a key issue in the lower progress of looked after pupils, with the important exception of some kinship carers.

5.4 Young people often remarked that, ultimately, their educational progress was down to them, although, adults and professionals could help influence how it occurred. In this, our evidence suggested that young people needed to be open to support, otherwise termed ‘emotional readiness’.
Limitations of the Study

This study addressed important limitations of earlier research. Linking care and education data enabled us to relate progress during secondary education with experiences of care. The synthesis of quantitative and qualitative findings has brought together the statistical power of a huge administrative database with the richness of individual interviews. As with all research there remained some important limitations.

Checking the content, preparing the data, combining and creating variables and undertaking analyses takes considerable time. Administrative databases have great strengths but do not contain all the relevant information, such as information on foster and residential carers and the details of school and placement practices and instability. There was also missing data from some schools and local authorities, most importantly on school absences and exclusions, as well as some SDQ data. In a recent report by Bazalgette, Rahilly and Trevelyen for the NSPCC (2015), despite being a statutory requirement for children in care in England, only 25% of local authorities had a SDQ completion rate of 90 per cent or above while 8 per cent of local authorities (12 areas) had a completion rate of 30 per cent or lower, with three local authorities apparently returning no data at all.

The quantitative analysis focused on young people eligible for GCSE in 2013 and compared outcomes for those who had been in care for 12 months on 31st March 2013 with the outcomes of their peers. This design did not allow exploration of the effects of earlier short-term care, as data on this was not collated for the pre-GCSE years. Furthermore, the quantitative data were organised so as to model GCSE outcomes and absences and exclusions in the aggregate. A more complex, time-centred data structure, facilitating the relation of care experiences with individual absences and exclusions or with intermediate attainment, might yield more powerful results.

Certain omissions from the databases were addressed in our qualitative interviews, which shed light on the dynamics involved as well as the perspectives and explanations of looked after young people and those responsible for their care and education. Gaining access to the six local authorities involved some substitutions. We did not achieve 36 interviews with young people as we had hoped; some changed their minds or were difficult to contact. By the time of our interviews, a number of young people had left care and/or moved, which complicated the task, leaving us with a smaller sample than planned though many of our findings are similar to those of Darmody, McMahon, Banks and Gilligan (2013) and Mannay, Staples, Hallett, Roberts, Rees, Evans & Andrews (2015) both of which interviewed much larger samples of young people. However, we were very pleased with the data from the 26 young people we spoke with and their associated adults, and believe it provides rich insights that complement the quantitative material. The use of trained, care-experienced interviewers was very effective, as the evidence reveals.
implications and recommendations for policy and practice

as well as an intended contribution to knowledge, our findings also have relevance to policy and practice in social work and education.

children in need provide an additional, and in many respects, more suitable comparison group for children in care in official statistics and public debate. An important implication of our research concerns the nature of the public debate surrounding the care system and its outcomes. Educational attainments, particularly GCSEs, or the lack of them, often serve as a proxy for this wider debate (Berридже, 2012). The fact that there is a wide attainment gap between looked after pupils and their peers is often used as a condemnation of social work services for children and families. Our evidence shows that compared with children in need who live at home, children in care make greater educational progress although their problems are likely to be more acute (see also O’Higgins, Sebba & Luke, 2015).

A focus on progress gives a more realistic depiction of the achievements of the care system, given how many young people enter care late and have major challenges including, in some cases, specific educational needs. Clearly, attainment is not unimportant and young people cannot expect to secure jobs on the basis of making progress rather than achieving qualifications. We should also not overlook how much educational progress it is realistic to expect local authorities to make with their care populations and over what duration.

Some CLA will take longer to fulfil their educational potential than those not in care or in need and given many come into the care system late, we should therefore take a longer-term perspective. Taking major public examinations aged 16 for many looked after pupils is too soon and their opportunities are sometimes restricted by having been allocated to a particular curricular route in order to access behavioural support. Professionals interviewed commented how some lower-progress pupils had begun to stabilise, develop confidence and interpersonal skills, which would later benefit their learning and career prospects. Better appreciation of the achievements of individuals and contribution of the care system may occur at age 18, 21 and beyond, as US researchers have demonstrated (Hook & Courtney 2011).

The Ofsted educational and care inspection frameworks and the Government’s publication of performance tables comparing local authorities need to take into account that there is little variation between local authorities in the educational performance of looked after pupils, beyond that which is accounted for by individual pupil and school differences. Inspections should therefore take sufficient account of the characteristics of the looked after children cohort in each authority: authorities that meet legal obligations in admitting older, challenging young people into care may jeopardise their care performance data by doing so. Most variation in progress and attainment was explained by pupil characteristics as well as experiences in care and school. Clearly local authorities can influence these factors by their choice of, and support for, individual placements and schools, even in a system in which schools have greater autonomy.

Local authorities should be supported to identify and place pupils in higher performing schools, ensure that school staff provide appropriate support (partly through the Virtual School) and limit placement and school changes in particular in KS4.

Birth parents continue to exert significant influence on young people in care, including those who have lived away from them for many years. It may have been that these GCSE students, as greater independence and leaving care approached, also initiated and encouraged these links. Where birth parents have continuing problems, these could threaten to overwhelm young people’s concentration and application. Long-term foster placements, especially those which appear stable, can be a low priority for social workers especially at times of resource constraints (Schofield & Beek 2009). Yet our interviews showed that social work support for birth families could be important for young people’s education even in stable, long-term, successful foster placements.

Initiatives to support pupils with social, emotional and mental health difficulties need to become more widely known and studied to address the educational problems we have highlighted including school exclusions (both internal and ‘internal’ in which young people may not be accessing high quality teaching) and school transfer. These initiatives include nurture groups (Cooper & Whitebread 2007), ‘attachment aware’ schools (Rosen 2014) and ‘emotion coaching’ for pupils (Rose, McGuire- Snieckus & Gilbert 2015). Young people attributed their educational progress to the characteristics, skills and commitment of individual teachers and carers. Interviewees named individual teachers who knew what they were doing, persisted, engaged respect and genuinely cared. Pupils could identify others who were ineffective and insensitive.

Foster carers should be appropriately supported to withstand the pressures of caring for vulnerable young people with challenging behaviour so that placement stability increases, which should benefit young people’s educational progress. Previous research shows that individual foster carers can make a difference to placement stability and children’s outcomes (Sinclair, Baker, Lee, & Gibbs, 2007).

Our evidence suggested that pupils could commit to learning once certain preconditions were met, including feeling safe, secure and individually valued. Placement disruption was often associated with the risk of school transfer and pupils responded consistently that they preferred to remain at the original school even if this entailed long taxi journeys. However, taxi arrangements need to be more flexible and responsive to individual young people’s needs.

Involving young people more fully in what happens in their lives. Given how pupils often were trying to manage the stresses in their lives, it is sensible to make genuine efforts to work alongside them and engage them in decisions. Many young people interviewed demonstrated considerable insight into the factors that had helped or hindered their education, including being removed from classes to attend PEP and other meetings.

Strategies for educational improvement need to be addressed across the workforce in residential settings. A surprising finding from our results was the proportion (18.5%) of looked after pupils taking their GCSEs who lived in residential settings. This was a much broader group than the small, residential children’s homes and included residential schools and secure units. These can be among the most challenging pupils. The residential sector in England (and elsewhere) has shrunk considerably but it is an important experience for a larger group of older, looked after adolescents.

Kinship carers need support in particular to address the financial pressures that can affect many of them (Nandy and Selwyn 2013) and which might adversely affect schooling. It was interesting to have confirmed that pupils living with kinship carers, once other factors were taken into account, were not educationally disadvantaged compared with those in unrelated placements (Technical Report 2).
Future Research

We are aware that much other research has preceded ours, for example European comparisons of policy and practice (Jackson & Cameron, 2012) and factors pinpointing care leavers who do well and go on to university (Jackson & Ajayi, 2007). These, and others, have contributed to useful reforms to date and provide important pointers to future research. The specific questions that emerged from this study that might be worthy of further research include:

Theoretical Questions
To date we have not located our findings within any particular theoretical framework and that task lies ahead. The interdisciplinary research team lend themselves to varying approaches and interpretations. For example, the findings on stable care placements, young people's adjustments and mental health initiatives in schools could be located within an attachment framework (Schofield & Beek, 2009). Young people's coping mechanisms and services offered can also be approached from a resilience perspective (Rutter, 2012; Ungar, Ghazinour, & Richter, 2013) and our interviewees gave insights into how they managed family breakdown and stress. Indeed, young people's sense of 'agency' in managing their circumstances, and suggesting preconditions for learning, could also be set within a sociology of childhood framework (Mayall, 2000; Prout & James, 1997).

Conceptual Questions
Quantitative analysis of SDQ data was given a minor role in the design of the current study because of its known limitations, but it was a surprisingly good predictor of outcomes. A strategy to address the widespread missing SDQ data (Bazalgette et al., 2015) might enable analysis that yielded more powerful findings relating experiences of care, behaviour and learning. Goodman (2001) reported on the importance of having data from teachers and young people in addition to carers (as was the single source in this study), whereas Bazalgette et al. have noted widespread inconsistencies in the way data are collected. The Prosocial sub-scale of the SDQ is not currently routinely reported, whereas our findings suggest that analysis of this might provide important further insights of the role of behaviour in the education of children in care.

A further question that emerged concerns how we conceptualise stability – O'Higgins et al.'s (2015) review shows that researchers conceptualise it in different ways but there is further research to be done to establish a common definition. Many children in care also return home but re-enter care and their experiences are very relevant to educational outcomes.

Factors influencing the education of adolescents in care
What constitutes good care for the adolescent population remains a major priority for research. In Luke, Sinclair, Woolgar, and Sebba (2014) we concluded that the quality of basic care, prior to any specific interventions being implemented, is a factor associated with the mental health of children in care. Specific approaches for late entrants to care, with a particular multi-professional focus, also need to be developed and tested (ADCS, 2013).

Specific approaches adopted by schools, teachers and/or carers
The possible reasons why a small minority of schools appear to do better with CIN pupils should be explored. In addition, as pupil progress hinges on teachers' and carers' skills, further initiatives and evaluations involving them in providing educational support would be useful (Flynn, Marquis, Paquet, Peeke, & Aubry, 2012; Osborne, Alfano, & Winn, 2010). It might also be valuable to assess the wide range of social, emotional and mental health supports in schools and their effectiveness. Virtual School heads also raised with us the need for research into how Pupil Premium Plus can be spent to greatest effect.

Methodological work linking datasets
This study is just the beginning in the capability of linked datasets to be used to investigate complex issues in this field. Both Technical Reports 1 and 2 provide significant progress in the methodological techniques for doing this but also raise methodological challenges that were beyond the scope of this project. Further discussions with those developing these datasets are planned to identify future priorities.

In undertaking the most comprehensive study of its type in the UK, we now know more about how we can approach schools and services for looked after children to benefit their schooling and educational outcomes. We hope this information is used to good effect.
References


