Contextualised admissions: Examining the evidence

Research into the evidence base for the use of contextual information and data in admissions of UK students to undergraduate courses in the UK

Report to SPA, the Supporting Professionalism in Admissions Programme

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ARC Network Ltd
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Foreword

The Higher Education sector still has a way to go to ensure that all those with the talent to succeed are given fair access. Socio-economic disadvantage is still too much of a barrier to progression to higher education. More must be done to change this. This report highlights the considerable challenges still facing the Higher Education sector when it comes to widening access, and provides a series of recommendations for encouraging the use of contextualised admissions.

The report represents, in itself, a significant step forward, providing detailed analysis of the evidence base for the use of contextual data and information use in undergraduate admission to higher education in the UK. In writing this report, Supporting Professionalism in Admissions (SPA) has been in a position to draw on a wider evidence base than has ever been used before in this field. This includes research and in-house analysis at universities and colleges as well as national research and academic studies.

SPA promotes fair admissions and access to Higher Education in the UK by developing and leading on good practice in the recruitment and selection of students. SPA is an independent Programme currently funded by a number of the UK HE funding councils, UCAS and Universities UK. SPA’s services are fully funded and generally free at the point of delivery.

The principles of fair admissions are the basis for all SPA’s work and this report examines the rationale for contextualised admissions, the research methods used, the content and quality of the evidence. The findings will help universities and colleges to use contextualised admissions as part of fair admissions in their own context by assessing and evaluating:

- the purpose of using contextual data
- why it is used in the way it is used
- how far the research can support the development of admissions policies and practices
- what works for different institutions and for different subjects
- further opportunities to build on existing evidence.

SPA will work with Higher Education providers across the UK to take the recommendations and findings forward. This will involve promoting good practice as well as supporting HE providers to understand how contextualised admissions can be beneficial for institutions and applicants alike.

Contextualised admissions have attracted a great deal of interest not only in the Higher Education sector but also in schools and colleges, with parents and the public as well as the government and the media. We hope the findings of this report will therefore be useful for a wide range of stakeholders and organisations, by providing the evidence base to support widening access while maintaining excellence.

Janet Beer, Chair of the SPA Steering Group and Vice-Chancellor of Oxford Brookes University and Janet Graham, Director of SPA.
# Contextualised admissions: Examining the evidence

## Contents

**EXECUTIVE SUMMARY**

1. **INTRODUCTION**
   - 1.1 Aims of the research
   - 1.2 Method of approach
   - 1.3 Scope of the research
   - 1.4 Structure of this report
   - 1.5 Audience for the report

2. **OVERVIEW OF CONTEXTUALISED ADMISSIONS**
   - 2.1 Introduction
   - 2.2 Promotion of fair admissions
   - 2.3 Overview of contextualised admissions
   - 2.4 Application of contextual data to higher education admissions
   - 2.5 Use of contextual data in admissions

3. **POLICY CONTEXT**
   - 3.1 Introduction
   - 3.2 Context
   - 3.3 Constraints and issues in the UK context

4. **EVIDENCE BASE FOR USE OF CONTEXTUAL INFORMATION AND DATA IN UNDERGRADUATE ADMISSIONS**
   - 4.1 Introduction
   - 4.2 Higher education participation trends and issues
   - 4.3 Relationship between ‘higher education potential’ and ‘educational disadvantage’
   - 4.4 Tracking of students for whom contextualised admissions is applied
   - 4.5 Other evidence: application of additional testing

5. **APPLICATION OF CONTEXTUALISED ADMISSIONS IN PRACTICE**
   - 5.1 Introduction
   - 5.2 Rationale for using contextualised admissions
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3 How evidence has been transferred into practice in admissions</td>
<td>45</td>
</tr>
<tr>
<td>5.4 Internal training and communication</td>
<td>50</td>
</tr>
<tr>
<td>5.5 Constraints and opportunities to contextualised admissions</td>
<td>51</td>
</tr>
<tr>
<td>6. CONCLUSIONS AND RECOMMENDATIONS</td>
<td>53</td>
</tr>
<tr>
<td>6.1 Introduction</td>
<td>53</td>
</tr>
<tr>
<td>6.2 Key conclusions</td>
<td>53</td>
</tr>
<tr>
<td>6.3 Recommendations</td>
<td>55</td>
</tr>
<tr>
<td>Annex A: Stakeholders included in the research</td>
<td>58</td>
</tr>
<tr>
<td>Annex B: SPA Principles of the use of contextual data in admissions</td>
<td>59</td>
</tr>
<tr>
<td>Annex C: Comments on indicators and data sources</td>
<td>60</td>
</tr>
<tr>
<td>Annex D: Widening participation performance indicators for higher education</td>
<td>66</td>
</tr>
<tr>
<td>Annex E: Published research into higher education potential – critical case studies</td>
<td>67</td>
</tr>
<tr>
<td>Annex F: Approaches used to provide information on students’ attainment on entry to the higher education provider</td>
<td>72</td>
</tr>
<tr>
<td>Annex G: Approaches used to defining outcome measures</td>
<td>74</td>
</tr>
<tr>
<td>Annex H: Points of use for contextual data</td>
<td>75</td>
</tr>
<tr>
<td>Annex I: Useful practices to support data reliability</td>
<td>76</td>
</tr>
<tr>
<td>References</td>
<td>77</td>
</tr>
<tr>
<td>Glossary</td>
<td>85</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

INTRODUCTION
This study was commissioned by Supporting Professionalism in Admissions (SPA) to investigate the evidence base for contextualised admissions decisions to undergraduate courses at UK higher education providers. The research was undertaken to scope and critically evaluate the methodologies used to apply contextual information and data in undergraduate admissions, and the analyses and research used to support the use of contextual information and data in undergraduate admissions for UK applicants across the higher education sector in the UK.

Contextualised admissions is defined as the use of contextual information (meaning information provided through the application) and contextual data (meaning data matched to applicants, including through outreach) to assess an applicant’s prior attainment and potential to succeed in higher education in the context of the circumstances in which their attainment has been obtained.

The research is part of SPA’s work on the development of good practice in fair admission and to support higher education providers to add value in admissions decision-making. The findings of the research are of interest to higher education providers that are looking to implement contextualised admissions processes, as well as sector bodies and stakeholders with an interest in fair admissions, widening participation and access in undergraduate admissions. The report presents evidence from the sector that can be used by higher education providers to shape their future strategies and inform policy discussions.

METHOD
The study involved a literature review, interviews with national stakeholders, in-depth research at a sample of higher education providers, and critical analysis of the research evidence on contextual information and data use in undergraduate admissions.

The report describes the research and analysis uncovered by the study and strengths and weaknesses related to quality and robustness of data. The body of research available was quite small, demonstrating that research in the area of contextualised admissions is still relatively limited.

CONTEXT FOR THE RESEARCH
Using contextual information and data in higher education admissions contributes to the holistic assessment of applicant potential for achievement in higher education and also supports strategies for fair access and widening participation. Data and information to contextualise applicants as part of the admissions process could relate to the individual applicant, their school or college, or the characteristics of their socio-geographic context.

Higher education providers have been taking account of contextual information and data of various kinds when considering the qualifications and experience of applicants for many years. In a survey in 2012, a third of the sample of higher education providers said they used contextual data in undergraduate admissions (SPA, 2013). Currently the formal use of contextual information and data mainly applies to young UK domiciled applicants on full-time courses at higher education providers with high entry grades.

Within the literature a range of ways of measuring disadvantage and identifying individuals and groups who are experiencing educational disadvantage are used. In addition to the information supplied on the application form, higher education providers may consider educational, neighbourhood, and socio-economic background data, as declared in students’ applications, in institutions’ own data, supplied by UCAS or taken from publicly available data sets or commercial sources. Taking part in and achievement in targeted widening participation outreach activities is also an important source of contextual information about applicants for some higher education providers. Using several indicators and datasets enables higher education providers to
maximise the coverage across applicants. Issues arise in the application of data: data collected from applicants (such as the socio-economic status of the household) can be hard to verify; data relating to the circumstances of an individual’s school/college experience can be hard to match to applications in a consistent way; and postcode data relating to an applicants’ neighbourhood/community may not reflect individual circumstances.

Ensuring fair access to higher education for all social groups remains a key priority throughout the UK. Guidance to HE providers in England from OFFA with regards to Access Agreements endorses the use of contextual data in admissions and the HEFCE Student Number Control policy guidance for institutions provides universities and colleges with the flexibility to make ‘contextual offers’ to students that are under-represented in higher education. In 2013/14, the Scottish Funding Council made provision for ring-fenced places for students that live in Scotland’s most deprived areas. In Wales, a key priority is to increase participation of residents in Communities First Areas. Policy makers in Northern Ireland are exploring new application routes for disadvantaged students.

The differences between the school and college curricula, and ways of measuring educational disadvantage, in the four administrations of the UK mean that higher education providers need to consider a complex range of contextual information in order to ensure fair treatment for all UK applicants.

Stakeholder interviews for this research indicated that the increasing complexity of information, including how higher education providers apply contextual data, demands high levels of understanding of staff in schools and colleges who advise individual applicants on their choice of institution and support them through the admissions process. The transparency of institutional policy and practice is an essential element of fair and professional admissions.

THE EVIDENCE BASE FOR CONTEXTUAL DATA USE

Higher education participation is relatively low amongst lower socio-economic groups compared to more advantaged groups, and the differences are greatest for higher education providers with high entry grades, raising concerns for social mobility and social justice. Research shows that lower general levels of attainment, and difference in the type and range of qualifications held, provide the clearest explanation for the differences in higher education participation rates for different social groups.

Higher education providers are concerned to evidence whether educationally disadvantaged groups are likely to do well in higher education. There is a body of research, some of it unpublished, that compares outcomes from higher education (retention and degree attainment, and in some cases employment outcomes) by contextual factors on entry. In general studies show those who do well at school/college also tend to do well in higher education, but gender and ethnicity have an impact and private schooling is linked to higher earnings after graduation. Some early national level analyses and several studies by higher education providers with high entry grades show that students from state schools and colleges out performed those from independent schools with the same level of entry qualifications, in terms of degree performance. State school students at some higher education providers visited as part of this study exceeded the expectations of their final grades when compared with students from independent sector schools, although it should be noted that there was one exception to the findings in this research.

In general, coming from a widening participation background (area of low higher education participation or lower socio-economic group) has not been found to influence degree performance, but these factors can be associated with lower levels of attainment on entry to higher education. The evidence from providers with high entry grades suggests that students admitted from disadvantaged backgrounds do as well as those from more advantaged backgrounds. In some cases the evidence raises questions about how students entering with lower average qualifications can be supported to achieve their full potential.
There is some indication of differences in outcomes for different groups of students by subject areas, although sample sizes make the data problematic when disaggregated and in general variations by subject have not been a key focus in the research to date.

The research suggests that the application of contextual data in admissions has made some difference, albeit small, to the profile of admitted applicants at some higher education providers with high entry grades. It is hard to identify the scale of impact overall due to the range of factors that are taken into account in admissions decision making and because not all providers evaluate the extent to which the use of contextual data changes the profile of the student cohort admitted. It is frequently a methodological challenge to consider the counterfactual scenario of what would have happened if contextual data had not been applied.

Those providers that have used contextualised admissions over several years are starting to build up evidence about how individuals admitted using contextual information and data (including those contextualised through participation in targeted outreach) succeed when in higher education. Overall, these groups of individuals appear to be on a par relative to other students.

Higher education providers are continuing to refine their analyses and use of indicators of disadvantage in undergraduate admissions. The analysis of outcomes data also informs student support strategies.

**THE APPLICATION OF CONTEXTUALISED ADMISSIONS IN PRACTICE**

Higher education providers have a dual purpose in considering contextual information in admissions: to ensure fair access for applicants and to sustain academic excellence by admitting those who can demonstrate best potential for higher education. Higher education providers with high entry grades have strong drivers for contextualising admissions, as a way of discerning potential in a competitive applicant pool and ensuring the diversity of the student intake. For higher education providers which already recruit from a diverse applicant pool, particularly the newer universities, contextual information on applicants informs their strategies for transition, retention and success.

Research which shows strong outcomes for educationally disadvantaged entrants has helped to achieve consensus internally in some higher education providers. However, strategic considerations and a concern to compensate for perceived unfairness in educational and other opportunities have also been important drivers of contextualised admissions strategies.

Higher education providers take differing approaches to applying contextual data at different points in the application cycle, with some differences within as well as between institutions. All the higher education providers included in the research stressed those admissions decisions were made on the basis of professional judgment. The degree of discretion given to admissions decision makers varied: some were directed by the institutional policy for offer making, whilst others had more freedom to make decisions which were driven by specific priorities for the course/subject in question. This differentiation is partly related to the degree of centralisation of admissions policy.

Approaches identified in this research include using contextual information to support pragmatic and individualised decision making; to target attention on groups of educationally disadvantaged applicants and to prioritise consideration of those applicants meeting standard entry criteria; or to identify applicants who may be made a differentiated or lower offer in the grade range. Some higher education providers have used a system of ‘flagging’ applicants against a range of indicators, or have aimed to ‘triangulate’ the data (i.e. to identify applicants who meet more than one criterion). Some higher education providers have used evidence of past performance of students with different entry qualifications to make adjustments to applicants’ ‘raw’ grade scores on application by using an algorithm which reflects expectations about how applicants with different scores from different groups may perform at the institution. Only a minority of the providers covered by the research used contextual data to make differential offers. More frequently, higher education
providers reassess contextualised applicants who miss their target grades at confirmation stage and some individuals gain entry with grades below the standard entry level at this point.

Higher education providers with high entry grades face the challenge of differentiating higher education potential amongst applicants from a large pool with relatively homogenous prior attainment levels. However, these providers have developed policies for contextualised admissions and appear to be relatively well resourced in relation to applying data, undertaking research and monitoring processes and outcomes.

Research with a sample of higher education providers suggests that the use of contextual information and data in undergraduate admissions has been supported by gaining leadership ‘buy-in’ at a high level, by the strategic recruitment of admissions professionals who are knowledgeable about using and evidencing contextual data, and by the use of systems and structures capable of integrating data and of presenting it to decision makers as part of the admissions process. Other factors which support contextualised admissions included close links with widening participation practitioners that facilitate the sharing of data and expertise, and the allocation of staff time and resources to apply the data and research and keep it up to date. Barriers to contextual data use include inability to gain buy-in at senior level, the amount of time, resources, expertise and data systems required to effectively apply data as part of the admissions process, and difficulties in the availability and coverage of data. There are also issues with balancing the needs of competing admissions priorities, including student number control and league table rankings.

These drivers and information for contextual admissions may not remain stable over time. The pre-higher education curriculum, the higher education funding environment and patterns of take-up and demand for advanced levels of study continue to change. New rationales may come into play if higher education providers see their traditional markets shifting as a result.

CONCLUSIONS

- **Contextual information and data has a role to play throughout different stages of the admissions process.** It can be part of an integrated outreach, recruitment and admission strategy. The use of contextual information and data in admissions and beyond can support the student journey from pre-application, through to entry and a supported student experience.

- **There is the challenge of creating an evidence base when the policy context and entry qualifications change fairly frequently and when the evidence of higher education outcomes related to educational disadvantage is mixed and difficult to collate.** This is because of differences in the research methods and variables used in the key studies, and the need to take account of differences in results between higher education providers.

- **A more coordinated evidence based with research at a sector level and comparative research between institutions is needed.** Quantitative analysis of large student cohorts over several years created the most robust evidence but this research also indicates the need for more comparative research between higher education providers, and the need for additional qualitative analysis of the influence of student experience on final outcomes. There would-be value for both higher education providers and policymakers in the development of a coordinated evidence base that includes sector-level and provider-level studies.

- **It is important for providers to be clear and transparent about their rationale for using contextual information and data in different ways.** As contextualised admissions practices become embedded and extended across the sector it is essential that applicants, and those who advise them, understand what is meant by contextualised admissions, and specifically how information and data will be used in relation to offers of a place.
## RECOMMENDATIONS

### 1. Supporting Professionalism in Admissions (SPA)
- SPA working with the sector and umbrella bodies, should further develop examples of good practice for contextualised admissions, continue to support the sharing of expertise, and to promote external and internal communication about the use of contextual information and data in fair admissions.

### 2. UCAS and government departments
To achieve sector efficiencies in relation to contextual data, UCAS and government departments:
- Should ensure the provision of timely, high quality data in a form which higher education providers can use in admissions.
- Technical solutions may be needed to ensure accurate matching of data to applicants and the best possible coverage.
- A pilot project would be useful to explore the potential for new school and individual level indicators which could be applied as part of higher education admissions.
- Data-matching to enable providers to access the school or college records of individual applicants may only be achieved through the development of the Unique Learner Number (ULN) System.

### 3. HE providers
- Ensure transparency and be clear about what constitutes good practice both for the benefit of internal departments and for the benefit of applicants.
- In order to ensure equitable treatment of all applicants, consideration needs to be given to how applicants with non-traditional qualifications fit within an institution’s approach to contextualised admissions.
- Higher education providers should be open to sharing of expertise, data and results, and comparative studies would help to identify conclusions about the relationship between prior attainment, degree performance and the practices that ‘add value’ for educationally disadvantaged students.
- There is scope for more active understanding and positive promotion of contextualised admissions to stakeholders (potential applicants, their advisers, school and colleges, parents/carers).

### 4. HE Funding Councils/ Research Councils
#### HE Funding Councils
- Should make sure that student number controls do not constrain some higher education providers from making offers to widening participation students.
- Those reviewing the performance indicators should be minded to consider that higher education providers may well be using contextual data as part of admissions decision making.

#### Research councils/HE funding councils
- Should undertake a long term comparative study of the performance of disadvantaged students compared to those with no disadvantage using higher education and/or administrative datasets.
- A programme of research should be instigated including investigation of overlapping disadvantages to support educational transition.
- Further research on the implications of contextualised admissions for courses for which require auditions and portfolios is necessary.
- More research is desirable to inform contextualised admissions across the sector as whole, in addition to providers with high entry requirements.
1. INTRODUCTION

This is a report of research commissioned by Supporting Professionalism in Admissions (SPA) to investigate the evidence base for the use of contextual information and data to give context to the admissions of UK students applying to undergraduate higher education courses at universities and colleges in the UK.

Contextual information (meaning information collected via the application process) and contextual data (meaning data matched to applicants, including through outreach) is used as part of the undergraduate admission process, in order to assess an applicant’s prior attainment (academic or otherwise) and potential to succeed in higher education in the context of the circumstances in which their attainment has been obtained. For simplicity this will be referred to in this report as ‘contextualised admissions’, part of the holistic assessment of applications carried out by higher education providers. Higher education providers take account of educational, geo-demographic and socio-economic background data, as declared in students’ applications, derived from institutions’ own data, supplied by UCAS or from publicly available datasets or commercial sources. This data and other contextual information could be individual-level, relating to an applicant’s school/college or relating to the characteristics of their socio-geographic context. Such data enables higher education providers to review applicants’ potential in the light of evidence about whether their achievements may have been affected by relative disadvantage in their educational or community context or their individual life situation.

Contextualising a student’s application for admission to higher education is not a new concept. However, the move from an ad hoc approach to the contextual information supplied as part of the application, to the systematic assessment of information and application of additional data, using agreed criteria, as part of the admissions process is a relatively recent development.

The use of contextual information and data in undergraduate admissions was affirmed in the 2004 Schwartz Report, Fair admissions to higher education: recommendations for good practice, and is referenced in recent policy documents including the Quality Assurance Agency for Higher Education (QAA) Quality Code on Recruitment, Selection and Admission1; OFFA Guidance on How to Produce an Access Agreement2; and Scottish Funding Council Guidance on University Outcome Agreements3 and elsewhere in documents addressing the principles of fair admissions and promoting fair access and widening participation to higher education. The Fair Admissions Task and Finish Group set up by the independent SPA Steering Group in 2012 to revisit the principles of fair admissions reaffirmed the importance of contextual data to fair admissions.4 Use of contextual information and data in undergraduate admissions has also been highlighted in recent higher education policies across the UK, as discussed below.

1.1 Aims of the research

The research was undertaken to scope and critically evaluate:

- the methodologies used to apply contextual information and data, and
- the analyses and research used to support the use of contextual information and data

in undergraduate admissions for UK applicants across the higher education sector in the UK.

This report considers the studies and evidence undertaken by higher education providers using or planning to use contextual data, as well as other academic studies, to assess how the research and analysis has been used to change the higher education admissions landscape, and to identify gaps in the evidence base for using contextual information and data in undergraduate admissions. The institutional and wider research is detailed, but typically relates to a particular set of contextual factors or particular higher education providers.

The research is part of SPA’s programme of work to develop good practice in fair admission and to support higher education providers to improve admissions decision-making in relation to what data is used, and how

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1 http://www.qaa.ac.uk/AssuringStandardsAndQuality/quality-code/Pages/Quality-Code-Part-B.aspx (forthcoming)
4 The group was chaired by Professor Mary Stuart, Vice-Chancellor of the University of Lincoln, further details at www.spa.ac.uk/resources/fair-admissions-task-and-finish-group
it is used, monitored and researched. The research builds on a previous review of the purpose of the use of contextual data and the contribution it can make to good practice in admissions, commissioned by SPA (Bridger et al., 2012). In addition SPA has carried out two surveys (July 2011 and November 2012) on the current and possible future use of contextual data across the higher education sector (SPA, 2011; SPA, 2013).

1.2 Method of approach
The study involved:

- Desk research: searches of a range of databases to identify key academic studies and texts relating to the use of contextual data. To supplement this, a publicised scoping survey was undertaken to capture potentially unknown uses of contextual data in university admissions. Invitations to participate in this survey were circulated on list-servers for professional service staff in admissions and amongst academic researchers.

- Semi-structured interviews with a range of staff in eight higher education providers (researchers, analysts, academics and senior staff who undertake or commission the research) to clarify the methodologies and applications of contextual variables. Further research to clarify research methods used was also conducted with one key contact in a further six higher education providers.

- Analysis of the research within providers on contextual information and data use in undergraduate admissions and the rationale for this, research methods used, content and quality of the evidence, and findings of research on the outcomes and impacts of the application of contextual variables to undergraduate applications. A series of critical case studies were undertaken of published studies which looked at evidence evaluating the relationship between indicators of disadvantage and predictors of potential in higher education.

- Telephone interviews with national stakeholders to identify the constraints and opportunities by which providers’ strategies are defined, to explore national research and analysis and perspectives on the value or otherwise of contextual data in admissions. Representatives from a range of sector organisations were interviewed, as were representatives from funding bodies in England, Scotland, Northern Ireland and Wales. Stakeholders were asked for their views of the current evidence base for the use of contextual data in admissions and to give their perspective on the place holistic admissions has in current policy and may have in future policy. The organisations included in the stakeholder interviews are listed in Annex A.

1.3 Scope of the research
The research focused on admissions of UK-domiciled applicants to undergraduate courses at higher education providers in the UK.

The in-depth research focused on providers which have well-developed approaches to contextualised admissions, underpinned by research. These tend to have high entry grades and identifying prior attainment and potential in admission is critical when there are many more applicants than places for study. Characteristics of providers covered by the research are given in Table 1. We used the research with providers to:

- describe the contextual data tools and data items chosen by providers and the rationale and justification for their use in the admissions process
- analyse and evaluate the methodology, research, statistics and data analysis used as the evidence base to support and validate contextual data use (both published and in-house research)
- confirm the rationale and justification for using one or more ‘flags’ highlighting particular information and data items about an applicant
- assess the evidence and justification for making an allowance for or considering contextual factors in the admissions process for any of these factors or flags, from in-house analysis

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5 Reports are available online at [www.spa.ac.uk](http://www.spa.ac.uk)
6 Seven responses were received.
7 We are grateful to Professor Peter Davies at the University of Birmingham for input to the critique of Anna Mountford-Zimdars’ work.
• identify the methods used and their value at the admissions stage, both institution-wide and in particular departments/faculties, in terms of what they add to the institutional strategies for admissions and the impact on and integration with fair access and widening participation objectives

• examine the lessons learned, including where methods, research or analysis have not been useful in supporting the use of contextual information and data

• identify gaps where improved data quality or additional data, data items or further sector-level analysis would be helpful to universities and colleges in their use of contextual data, and specific suggestions for what such further analysis should cover

Table 1: Overview of higher education providers included in fieldwork elements

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<th>Location</th>
<th>Sample included in in-depth research</th>
<th>Telephone interview sample</th>
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<td>England (5); Scotland (2); Wales (1)</td>
<td>The average UCAS Tariff score of new students entering across the sample in 2011-12 ranged from 431 to 608 points (average 511).</td>
<td>England (5); Wales (1)</td>
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Entry standards ¹

The percentage of graduates achieving a first or upper second class honours degree (2011-12) ranged from 74.5% to 90.9% (average 85%). Expected completion outcomes ranged from 90.8% to 98.9% (average 96%).

Degree achievement and expected completion ¹

The percentage of graduates achieving a first or upper second class honours degree (2011-12) ranged from 60.1% to 79.6% (average 69%). Expected completion outcomes ranged from 78.6% to 95.7% (average 88%).

Full-time young entrants 2011-12 from underrepresented groups ³

The percentage from NS-SEC classes 4-7 ranged from 10.3% to 19.7% (average 14%). ³ The percentage from state schools and colleges ranged from 57.7% to 83% (average 64%). The percentage from low participation neighbourhood (LPN) areas (using POLAR3 definition, excluding Scottish providers) ranged from 2.5% to 6.5% (average 4%).

The percentage from state schools and colleges ranged from 18.6% to 35.4% (average 27%). The percentage from LPN (using POLAR3 definition, excluding Scottish providers) ranged from 5% to 19.8% (average 12%).

*UK average was 30.7%; ^UK average was 88.9%; > UK average (excluding Scottish providers) was 10.2%.
Sources: ¹League tables, Complete University Guide (CUG 2014); ³HESA Performance Indicators 2011/12

1.4 Structure of this report

The report begins with an overview of contextualised admissions (p. 5), describing the UK admissions context, how contextual information and data is used, and the application of contextual data to admissions by higher education providers.

It goes on to give a brief analysis of the policy context (p.13) including current constraints and issues as identified through a series of interviews with national stakeholders and other organisations.

The report then examines the evidence base for contextual information and data in undergraduate admissions (p. 18). The section includes a discussion of studies showing how education can, often inadvertently, transmit social inequality. There is a particular focus in this section on evidence evaluating the relationship between indicators of disadvantage and predictors of potential in higher education. Descriptive detail on the individual studies that look at contextual factors and potential is limited in order to allow for the development of sector-wide conclusions, for example, emerging methodological and data issues. However, this section is supported by a series of annexes which provide further detailed findings including the results, and critical assessment, of a number of published studies. This report brings these together in one place for the first time and aims to be comprehensive but is not exclusive; there may be other studies that would be of use to review, and even after publication of this report SPA would be keen to learn of these.

The report goes on to describe how contextual information and data is applied in practice at the higher education providers included in the research (p. 36).

The final section offers conclusions and recommendations (p. 46) about how data can best be applied, identifies gaps in the evidence, and provides guidance on the need for further research.
1.5 Audience for the report

The use of contextual data and information remains important to higher education providers and stakeholders in national organisations, as part of a range of strategies to increase participation in higher education by underrepresented groups and as a key element in holistic admissions. By drawing on a range of institutional sources and published research, this report presents evidence from the sector as a whole, and makes recommendations that can be used by providers to inform their future strategies and policy discussions.

The findings will be of interest to higher education providers that are looking to implement contextualised admissions processes; sector bodies with an interest in fair admissions, widening participation and access; and other organisations and stakeholders, including applicants to higher education and those working to support them.
2. OVERVIEW OF CONTEXTUALISED ADMISSIONS

**Key points**

- **Contextualised admissions is key to undertaking holistic assessment of individual applicants. Using contextual information and data supports the principles of fair admissions, and can support the promotion of fair access and widening participation.**

- **Higher education providers have been using contextual information and data when considering applications, to supplement qualifications and attainment information, for many years. Sources include information supplied in the application, educational, geo-demographic and socio-economic background data, and participation in targeted widening participation outreach activities.**

- **The formal consideration of contextual background data supplied by UCAS and/or from publicly available datasets or commercial sources mainly applies to young applicants to full-time courses at providers with high entry grades.**

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### 2.1 Introduction

This section provides a brief overview of developments in the promotion of fair admissions and the use of contextualised admissions, as part of the UCAS applications process. It particularly focuses on the application of contextual data in admissions matched to UK applicants. In addition to the developments noted here, providers recognise the importance for applicants, and those working to advise and support them, of transparency and clear information in admissions practice.

### 2.2 Promotion of fair admissions

#### 2.2.1 Guidelines and support to develop fair practices

The report on *Fair admissions to higher education: recommendations for good practice*, referred to as the ‘Schwartz Report’ (Admissions to Higher Education Steering Group, 2004), was a driver for higher education providers to develop their admissions policy and practice according to agreed principles of fair admissions, while recognising the autonomy of providers and their legitimate aim to recruit the most able students on the basis of merit, taking account of past attainment and future potential. In order to recruit on the basis of merit and at the same time have ‘fair’ admissions, given that each applicant will have had different experiences and opportunities afforded to them, the review showed a need for providers to consider not only formal educational achievement, or examination grades, but also contextual factors which can support the reconsideration of potential indicated by the attainment and ability as part of an holistic assessment of applications. The review urged providers to look at “the background and context of applicants’ achievements” *(ibid., p. 24)*, including ‘hard’ quantifiable measures and qualitative judgements.

SPA was established in 2006, following a recommendation in the Schwartz Report, to provide a central source of expertise, evidence-based good practice and advice on admissions to support higher education providers in delivering fair and professional admissions.

The QAA Code of Practice (QAA, 2006, section 10: recruitment and admissions) was revised in line with the recommendations made by Schwartz and gave further impetus to the development of admissions processes (McCaig *et al.*, 2008). The revised QAA Quality Code consultation made explicit reference to the use of contextual data by giving the guidance that providers that “use contextual data in recruitment and admission processes are open and transparent about what data are being used, for what purposes and with what intended outcomes” (QAA, 2013, p. 4).

#### 2.2.2 Developing approaches to contextualised admissions

A review of the implementation of the ‘Schwartz Report’ for SPA in 2008 (McCaig *et al.*, 2008) showed emerging differences in the use of contextual data by different types of higher education provider: on highly competitive programmes contextual data was used to differentiate between highly qualified applicants; on recruiting programmes it played a role in targeting support.
In 2010, SPA, in consultation with providers, produced a set of principles for the use of contextual data in admissions.¹ These are given in Annex B, and highlight that the use of contextual data within a course’s entry criteria/decision making must be justified, relevant, valid and reliable, used to improve inclusivity, and transparent to applicants and their advisors. The principles give guidance on good practice in using contextual data, such as regular monitoring of the use of the data, communication of the issues surrounding contextual data to admissions staff (including professional development and training if appropriate), and offering additional learner support. The principles were agreed by the sector, recognising the autonomy of individual providers to decide how contextual data might be used as part of a holistic assessment of applicants’ potential for a course/programme. Contextual data informs professional judgement, which ultimately defines whether or not an offer is made (or confirmed).

2.3 Overview of contextualised admissions

2.3.1 The application process

Applicants to full-time undergraduate programmes at UK higher education providers normally apply through UCAS, where the central application facility allows applicants to submit a range of information including some contextual details. Applicants can apply to up to five programmes of study. Usually each course has a target (or targets) to achieve each year² and decisions are made by academic or other professional admissions staff involved in the selection process as to the criteria to be used in decision making. These are published online and in prospectuses and other course information. Generally the applicant’s record of academic achievement, including predictions in any forthcoming exams, features high in the criteria. Some courses advertise a grade range. Some courses may specify additional or alternative criteria, for example, a portfolio of work or an audition depending on the type of course. At around the mid-point in the application cycle applicants must narrow their choices to one conditional firm choice,¹⁰ and may choose a further offer as their conditional insurance choice.¹¹ Many applicants will receive up to five conditional offers relating to applications to different courses.

Admissions decision makers decide how many offers to make in order to admit the target numbers of students. They base the decision on estimated ‘conversion rates’ of how many applicants will choose their offer as firm or insurance, how many will meet the conditions and how many will take up the offer of a place. Admissions decision makers may choose to make an unconditional offer (i.e. not dependent on the applicant attaining specific minimum grades in forthcoming examinations’ or meeting other conditions), although school/college leavers are usually made offers which are conditional on the level of achievement being realised. The conditions are usually related to the grades (or UCAS Tariff points) agreed in advance of the process for entry (which could be a range).

2.3.2 Contextualised admissions

Figure 1 recognises the range of factors that contribute to contextualised admissions, and the stages in the application process at which providers bring contextual factors to bear in their decision making, as discussed below.

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¹See [www.spa.ac.uk/resources/what-contextualised-admissions](http://www.spa.ac.uk/resources/what-contextualised-admissions)

²From 2012 entry, the Government changed the way student number controls operate in England for full-time students. For 2013 entry HE providers can openly recruit students with ABB+ or equivalent high grades on the HEFCE exemptions list as these students do not count towards their total number of controlled places. HE providers are also be given a controlled set number of places for students who are not ABB+ or equivalent, which reflects the number of students they have recruited in the past. The individual HE provider decides how these are distributed across their courses. Different number control policies operate in other administrations of the UK.

¹⁰If they satisfy or exceed the conditions then the HE provider is committed to accept them and the applicant is committed to going.

¹¹If the conditions of the firm offer are not met but the insurance offer conditions are then the insurance HE provider must admit them.
As Figure 1 illustrates, contextual factors are relevant throughout the application process and can be used to assess, prior to registration, the student support that the applicant may need in their transition to becoming a student. Some admissions decision makers use contextual information and data when considering applicants for interviews, auditions, and portfolio based assessments and admissions tests. Contextualised admissions has the potential to inform admissions decision makers about whom to make offers to, and subsequently accept, depending on the progress of applicants and the needs of the provider at each stage of the process. Contextual information and data is also used to ‘flex’ the offer by some higher education providers (as discussed below). The institutional approach to offers may vary according to a number of factors, such as stage of the cycle and demand for the programme. Not all providers make offers to contextualised applicants in line with predictions: some may give a ‘standard’ offer, even if this is above the grades the applicant is predicted to achieve (an ‘aspirational’ offer) if they are seeking to give encouragement to boost attainment. Some providers are concerned that a reduced offer may affect applicants’ perceptions of the quality of their provision.

At the confirmation stage (when examination results are known), providers may admit applicants who have not quite met the conditions if they feel a reason to do so, and contextual information and data can also be used to inform the decision at this point.

Contextual information and data can also be used in tracking student’s progress and to support the student experience from pre-application, through higher education and beyond.

2.3.3 Sources of contextual factors

As shown in Figure 1, there are various sources of contextual information and data available to providers in relation to individual applicants. Many providers combine different approaches and the range of data and information employed are diverse, as discussed below. Different approaches include:

- **Contextual information in the application.** As might be expected, individual information is a key source for admissions decision makers and is available through the application form. In this case contextualisation is based on (mainly qualitative) information included in the application such as the
personal statement or reference or other information from the applicant or their school, college or employer.

- **Contextual data matched to the applicant from other sources.** This data can be linked to the application to flag up additional information about the applicant’s personal, educational or social context (this mainly applies to courses with high entry grades and that meet the SPA-agreed principles for the use of contextual data – see Annex B). Sources of contextual data include fields in the UCAS application, institutional data (including outreach and progression initiatives), publicly available datasets (including those provided via UCAS), and commercial sources. Since 2011 UCAS has developed a service providing contextual data related to applicants, available to UCAS members who sign up to access it. Contextual data are discussed in detail in Section 2.4 below. Whilst contextual information tends to be available for all applicants, additional contextual data, in the main, tends to be applied to young applicants, as discussed further below.

- **Targeting through outreach/widening participation.** Contextualisation prior to the application stage is designed to put in place measures to work with potential applicants as part of outreach and progression support (which could include support over time leading up to an application being made).

- **Institutional trend data** may be used at application stage to provide the context for the decisions being made.

Wider considerations are also brought to bear as part of contextualised admissions, in particular research evidence about outcomes and institutional and external policy priorities. How providers set decisions on applicants in the context of wider knowledge and evidence is discussed in Sections 4 and 5 below.

### 2.4 Application of contextual data to higher education admissions

#### 2.4.1 Types of data

A range of different data can be applied relating to individual applicants, their school/college, and/or their neighbourhood areas. Within these broad categories a fairly wide range of specific indicators are available. Table 2 gives an overview of common problems identified with different types of measures (see Annex C for a fuller review of the strengths and weaknesses of different contextual indicators and measures).

#### Table 2: Categorisation of contextual data types

<table>
<thead>
<tr>
<th>Types</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area/community focused</strong></td>
<td>Postcode data allows analysis of the area where applicants live against a range of data related to socio-economic indicators of relative disadvantage or rates of higher education participation.</td>
</tr>
<tr>
<td>Socio-economic data/area-based deprivation indicators or measures of participation in higher education</td>
<td>Area-based measures are not necessarily indicative of the specific circumstances of individuals. Recent research found a proportion of students from independent schools were located in low participation neighbourhood (LPN) areas (6%) (Taylor et al., 2013). Similar observations were made in a study at the University of Oxford. The Scottish Index of Multiple Deprivation (SIMD) does not correlate with poverty (Geddes and Houston, 2012). Young people living in the same area may attend different schools/colleges. Area-based data uses different geographical units and may work better where the units used are smaller to represent people living within a few streets of each other. However, even here, populations within the neighbourhood do not necessarily share the same characteristics.</td>
</tr>
<tr>
<td><strong>School or college focused</strong></td>
<td>Information about schools or colleges enables consideration of individual applicants in the light of the circumstances in which their attainment is achieved. In England, identifying pupils with potential through targeting low achieving schools/colleges has been endorsed as an appropriate way to broaden access by the government, in guidance to the Director of Fair Access (BIS, 2011a). Some higher education providers have been concerned to separate out the effects of school performance from school type (independent schools are overrepresented amongst the highest performing schools).</td>
</tr>
<tr>
<td>Types</td>
<td>Issues</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Issues arise because this requires applicants to correctly indicate previous educational establishment in their UCAS application and there are matching issues (depending on the school being identified in the data), as well as issues where individuals have changed schools. Changes over time in establishment name, type, and admissions process or cohort composition make school/college analysis problematic. This is usually historical data, which tends to be worked out each year or as an average over a number of years, because of the issue of movement between years. If at Level 2, the data is based on when the applicant was 15/16 so does not capture their recent progress. The data may be hard to interpret (some may overachieve in underachieving schools). Schools that have worked hard to raise their attainment in spite of high levels of disadvantage in the pupil profile may be missed, and the data may need to be interpreted to assess the extent to which schools are managing their curriculum to influence their results. Location makes a difference. The format in which school data is published varies between the UK systems. Participation in higher education by students from state or independent schools is measured through the higher education performance indicators but schools vary considerably within each type. Comparison of the predicted attainment of individuals against the average for their school may indicate they are demonstrating potential to perform at standards of excellence that exceed the level of performance of their peers (where this is supported by research evidence).</td>
<td></td>
</tr>
<tr>
<td>Individual focused</td>
<td>Individually focused factors particular to the individual, including family history of higher education, low income household, care status Individual indicators are commonly picked up in admissions to provide a fuller picture of a person’s constraints and opportunities. This is mainly self-declared data, and therefore there is potential for misinformation or misunderstanding of the category. Individual factors may be significant but can be difficult to verify. Classification may be problematic (e.g. data on household occupational group is collected on the UCAS application(^\text{13})). Non-response can also be a problem affecting the coverage of the data (e.g. around a fifth of UCAS applications have non-declared for the household occupational group question). Different data may be available to researchers than that which is available at the point of admission. Although researchers have used income measures, and detailed parental background measures at the generic level, such data at the individual applicant level is not available to providers as part of admissions decision making.</td>
</tr>
<tr>
<td>Outreach focused</td>
<td>Targeting younger learners at the pre-entry stage for inclusion in outreach programmes, depending on the processes used, may draw on detailed assessment of the individuals’ circumstances (e.g. through a detailed application or discussion with teachers). Identification at the application stage helps to reaffirm the providers’ commitment to widening access, and, depending on the internal systems, data on outreach programme participants can be linked to applicants. There are relatively small numbers in these types of programmes, which are unlikely to be open to all learners who could benefit from them (and usually there is a local focus). Validating participation and completion in targeted programmes can be problematic (usually relying on institutional widening participation teams to input). Targeting of different outreach provision could be inconsistent. Communication may be an issue: when providers are promoting programmes</td>
</tr>
</tbody>
</table>

\(^{13}\)Data is collected in a free-text field. UCAS matches the free-text response to the Office for National Statistics occupation codes to assign an occupational group.
2.4.2 What makes a ‘good’ quantitative indicator?
Annex C gives a detailed assessment of the different contextual indicators which the higher education providers included in the research were applying to their admissions processes. Because different contextual data indicators have different advantages and disadvantages, the last few years have seen the promotion of ‘baskets’ of data whereby more than one source is used to improve coverage (Bridger et al., 2012). Some providers favour ‘triangulation’ of data (i.e. identifying disadvantage on the basis of more than one indicator). Approaches to the application of data at the providers included in the research are discussed further in section 5.3.2 below.

It is worth stating an obvious point: the data and indicators used in admissions should be strategically aligned to what providers wish to achieve in using them. Ideally, therefore, the providers’ stated admissions strategies and policies would be the starting point for the use of a particular indicator. Such strategic alignment would also aid the evaluation of the effectiveness of the use of indicators.

It needs to be clear what a specific quantitative indicator is seeking to achieve. This will then help in selecting the most appropriate ‘proxy’ for which data can be found and this will help in evaluating the advantages and disadvantages of such an indicator. For example, if the strategic objective is to increase the diversity of the student body through targeting those who lack a tradition of higher education progression in their families, then individual-level background information would be desirable. Where individual-level data is unavailable or unreliable, a proxy measure (such as POLAR data) may need to be used. A focus on increasing the diversity of economic backgrounds of the student body means individual-level income/wealth information would be desirable (household-level data might be appropriate for teenagers). However, where such individual-level data is unavailable, a proxy economic indicator may need to be used (for example, postcode-linked socio-economic data may provide relatively small area-level measures of the economic condition of households). At the same time, there needs to be awareness of the extent to which the measure is inexact because the information on a particular household is not directly available.

In using quantitative indicators, the ‘gold standard’ for any measure is to be robust, verifiable, reliable, and valid at the individual level. Available proxy measures need to be evaluated and a decision made on which one is most relevant or whether using several proxies might be the best way to get closest to the ‘ideal’ indicator. Table 3 summarises the characteristics and issues emerging in the identification of indicators.

Table 3: Characteristics of ‘good’ quantitative indicators

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of the indicator</td>
<td>The indicator needs to be relevant to what you are trying to measure. For example, the general level of attainment and/or the rate of higher education progression in a school/college are often chosen to measure differences in school/college performance. These indicators, backed by research evidence, capture the relative disadvantage faced by students at poor performing schools/colleges compared to those at schools/colleges that are better able to support their students to a higher level.</td>
</tr>
<tr>
<td>Coverage/availability</td>
<td>It is desirable to have indicators that cover as many applicants as possible in a consistent and transparent way. Often, using multiple sources can achieve better coverage than using a single source. For example, different administrative data is necessary to achieve coverage for all UK schools. Even when an indicator has high coverage in principle – like the UCAS socio-economic class (NS-SEC) variable – consideration needs to be given to actual response rates. The (self-verified) social class reporting through UCAS is low, and data is not available at the admissions stage, so is limited as an effective indicator of applicants’ socio-economic group.</td>
</tr>
<tr>
<td>Considered use of indicators</td>
<td>When indicators are used or the purpose of analysis, attention needs to be paid to whether the measure is a nominal, ordinal, or continuous variable. These require different treatment. Often, raw indicators need to be deconstructed into quintiles or other categories. This requires decision on the threshold – i.e. cut-off level. For example, below-average school...</td>
</tr>
</tbody>
</table>
2.4.3 Contextual data in outreach programmes

Contextual data plays a key role in channelling the resources higher education providers have to work with schools, colleges and individuals to reach those groups which meet widening participation criteria, enabling them to benefit from targeted outreach activity. The relevance to undergraduate admissions is that where data sharing systems allow, providers have flagged outreach participants for contextualised admissions, based on the additional contextualisation that has taken place ‘lower down the pipeline’ prior to the application process. Importantly, where schemes include an element of academic work, some providers are using them to demonstrate potential and/or log additional attainment (e.g. via UCAS Tariff points) which can, in effect, allow for a reduced conditional offer (subject to satisfactory completion of the outreach programme).

A number of providers run institutional schemes with tracking through the applications stage (and beyond), and we found examples of collaborative use of contextual data to support the targeting of outreach programmes with a feed through into admissions:

- **Realising Opportunities (England)** supports 15 partner higher education providers to use a common set of data to identify Year 12 learners for participation in a shared, but also differentiated, outreach
programme, potentially leading to supported progression to any one of the Realising Opportunities member higher education providers. Some partners will give an alternative offer to recognise student achievement on the programme. This differs from individual institutional compact schemes which facilitate access only to the providing institution.

- **LEAPS (Lothians Equal Access Programme for Schools) (Scotland),** founded in 1995, works with 59 state schools in the Edinburgh, Lothians, Forth Valley and Scottish Borders regions. The programme targets and supports young people in these schools with little or no family experience of higher education and those who have experienced adverse social and/or economic circumstances, encouraging them to apply to higher education. The scheme tracks applications into higher education.

- **HEAT (Higher Education Access Tracker) (England, mainly south east)** provides 20 subscribing higher education providers from a range of mission groups with a web-enabled data system that enables them to enter outreach participant details and match them to UCAS and the Higher Education Statistics Agency (HESA) records. Providers can also check them against a range of contextual variables including school performance and POLAR data. Participating providers are able to track the higher education destinations of outreach participants and to access their contextual information at the application stage.

### 2.5 Use of contextual data in admissions

#### 2.5.1 Contextual data practice

In-depth research undertaken in 2011 with a sample of seventeen higher education providers from across the spectrum showed that practice in using contextual data in admissions varies widely in terms of which data issued and how data is applied to admissions decisions (Bridger *et al.*, 2012). It was intended as an initial resource for providers. Rather than providing ‘off the shelf’ solutions, it provided a starting point to stimulate debate about how the systematic use of contextual data is a means to recognise achievement and identify potential, and can support the development of professional practice. It identified a number of data issues and limitations, and also found that, in the main, contextual data is applied only to certain categories of applicants, namely school and college leavers.

The second annual SPA survey of the use of contextual data in admissions, in November 2012, was carried out in the context of the changes to tuition fees in England and changes to student number controls in England and Scotland. Over a third (37%) of providers that responded to the survey said they were currently using contextual data in admissions and 57% planned to use it (SPA, 2013). The vast majority of providers used personal details. More than half used participation in aspiration-raising activity, just over half used school/college data and around a quarter used area-level data relating to the applicants’ home neighbourhood (SPA, 2013).

The SPA survey suggests the most common ways of using contextual data, in order of prevalence, were:

- in considering ‘borderline’ students at confirmation;
- deciding to whom to make an offer;
- deciding who to invite for interview;
- use in clearing decisions; and
- considering whether or not to make a differential offer (SPA, 2013).

While fitting within the framework of their institutional policy, admissions staff may make decisions on a rolling basis throughout a cycle, while others may operate a fully gathered field, waiting for all applications to be received by the closing date before making any offers. The approach may be affected by the situation affecting programmes, and external factors such as the need to manage risk.

#### 2.5.1 Admissions approaches

There has been a trend towards increasing centralisation of admissions functions. This has played a role in enabling providers to have accurate and timely management information throughout the admissions cycle, as well as increasing their responsiveness to applicants. Centralisation can support the systematic application of contextual information and data by providing admissions decision makers with access to indicators and

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14Based on 67 unique responses from different HE providers.
measures early on in the process. Both centralised and decentralised systems currently coexist in the UK. Between 2010 and 2013, SPA carried out three surveys requesting from higher education providers the simple information of whether they would describe their institution’s admissions model as “centralised”, “devolved” or “mixed”.

The overall survey responses show an increase in the number of institutions responding “centralised” and a decrease in those responding “devolved” with each successive survey. However, not all institutions responded to each survey, which may have skewed overall findings.

Analysing the responses only of those higher education providers who have responded to all three surveys corroborates that trend. Of the 71 higher education providers to have responded to all three surveys, 46 have given the same answer on each occasion, with 30 of these being consistently centralised, 8 consistently devolved and 8 consistently mixed.

Of the 25 institutions whose answers have changed between 2010 and 2013, all but one have shown a direction of travel from a devolved towards a centralised structure – either moving fully from devolved to centralised during that period, or from devolved to mixed, or from mixed to centralised. The one institution bucking that trend has moved from a centralised model in 2010 to a mixed model in 2013.

As Figure 2 shows the spread of centralised, mixed and devolved admissions models, for the 71 higher education providers which responded to all three surveys, in 2010 and 2013.

Figure 2

The direction of movement in admissions models between 2010 and 2013, for the 71 higher education providers which responded to all three surveys, is shown in Figure 3.

Figure 3
3. POLICY CONTEXT

### Key points
- Policy approaches broadly endorse the use of contextualised admissions to give additional consideration to priority groups of UK applicants.
- There are differences in higher education policy approaches and priorities across each of the UK administrations, which present challenges when thinking about applicants’ context. Differences in compulsory and post-16 education provision across the UK make it difficult for higher education providers to obtain comparable information on the educational background of all UK applicants, and the differences in the education systems are widening over time. Provision and applicant/student profiles are very diverse. The introduction of student number controls and changes in higher education funding and the student support system further add to the challenges facing providers in their admission strategies.
- The stakeholders included in our research identified some areas where they would welcome further development, including proxy indicators for school and college disadvantage and measures of successful student outcomes. Changes to curriculum over time mean that the evidence may need to be continually revised and remodelled.
- The implications of contextualised admissions for part-time and mature applicants to higher education, and across a range of qualification types, are of policy interest.

#### 3.1 Introduction

Throughout the UK, higher education providers set their own criteria for admission to their courses. At the same time, they are committed to widening participation/access, and widening participation/access is embedded in the funding and scrutiny of providers, including annual publication by HESA of student intakes against ‘performance indicators’ and benchmarks for participation by selected widening participation groups. This section sets out the wider policy context in which the development of contextualised admissions is taking place.

#### 3.2 Context

##### 3.2.1 UK policy approaches

In England and Wales, institutional autonomy in admissions is enshrined in the Higher Education Act of 2004. Acknowledging this principle, in 2011 the Higher Education White Paper for England (BIS,2011b) encouraged English higher education providers to consider the use of contextual information to identify potential where grades alone may fail to do this, provided that the institutional policy is transparent and based on evidence, and that merit remains the principal criterion. In order to demonstrate commitment to widening participation and fair access, English higher education providers are required to submit an Access Agreement to the Office for Fair Access (OFFA) if they charge tuition fees higher than the baseline of £6,000 per year. Access Agreements are individual and providers establish their own targets, taking account of nationally produced performance indicators. Guidance to providers submitting Access Agreements for students to be admitted in 2014-15 endorsed the use of institutional access funds to support or to evaluate the use of contextual data in admissions (OFFA, 2013). OFFA and HECFE are developing a joint widening participation strategic statement for 2014.

The Post-16 Education (Scotland) Bill, passed by the Scottish Parliament in June 2013, places a duty on Scottish providers to set ‘widening access agreements’ as a requirement within the conditions of grant from the Scottish Funding Council (SFC), with a focus on socio-economic groups designated by the SFC as underrepresented in higher education. Pending the changes required by the new law, the SFC currently monitors progress in widening access using the Scottish Index of Multiple Deprivation (SIMD). The strategy for the 2013-14 academic year includes the provision of ring-fenced places to recruit 727 additional students that live in Scotland’s most deprived areas (40% most deprived on SIMD). This represents a 15% increase in the number of Scottish entrants from the most deprived neighbourhoods.17,18 Detailed widening access and

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15Further information at: [http://www.hefce.ac.uk/whatwedo/wp/currentworktowidenparticipation/natstrat/](http://www.hefce.ac.uk/whatwedo/wp/currentworktowidenparticipation/natstrat/)
16Available at: [http://www.scottish.parliament.uk/parliamentarybusiness/Bills/56717.aspx](http://www.scottish.parliament.uk/parliamentarybusiness/Bills/56717.aspx)
17See [http://www.universities-scotland.ac.uk/index.php?mact=News,cntnt01,detail,0&cntnt01articleid=148&cntnt01origid=18&cntnt01returnid=23](http://www.universities-scotland.ac.uk/index.php?mact=News,cntnt01,detail,0&cntnt01articleid=148&cntnt01origid=18&cntnt01returnid=23)
retention goals have been agreed in Outcome Agreements, which are a requirement for each Scottish provider (SFC, 2013a; SFC, 2013b).\textsuperscript{19}

In Wales, the higher education strategy continues to emphasise the importance of widening access to higher education for all with the potential to benefit. Particular attention to date has been placed on underrepresented groups in the Heads of the Valleys and other low participation areas of the country (Welsh Government, 2009). A key goal of the strategy was to increase access to, and participation in, higher education from designated ‘Communities First’ areas by 10% and higher education providers that recruit students from Communities First postcodes currently receive a financial premium for each such student. In keeping with the twin pillars of Welsh Government policy of social justice and economic regeneration, continuing to widen access has been reaffirmed in the recently launched higher education policy statement by the Welsh Government.\textsuperscript{20}

In Northern Ireland, the widening participation and higher education strategies published in 2012 (DELNI, 2012) have generated a series of projects and sub-projects covering the higher education lifecycle. Contextual information is being considered most particularly in sub-projects exploring the possibility of new application routes for disadvantaged and disabled persons. A pre- and post-entry data project is underway to explore the potential for improved tracking.

Recent changes in higher education arrangements, including the ability to charge higher tuition fees and new student number controls in England, are likely to have affected how providers made offers to applicants in the latest application cycle.

3.2.2 Widening participation indicators
A range of measures are used by the administrations within the UK to assess progress towards widening participation (Table 4). Latest data shows a gap between the proportion of young people in the population in the most relatively disadvantaged categories (however defined) and those in more affluent, higher socio-economic groups. However, as Table 4 shows there are also differences in the UK administrations in the ‘gap’ in young higher education participation between the least and most disadvantaged groups.

Table 4: Key widening participation measures for UK administrations

<table>
<thead>
<tr>
<th>Region (latest data)</th>
<th>Measure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>Full-time young higher education participation figures for 2009-10 showed there is a gap of 18 percentage points in the proportion of young people entitled to Free School Meals (FSM) at 15 who enter higher education by age 19 compared to the non-FSM group (18% v 36%). 71% of learners who attended state sector education providers aged 17 in 2007-08 had progressed to higher education by age 19, compared to 89% of independent sector counterparts. Around a quarter (26%) of the state sector group went to the providers with the highest entry grades, compared to 65% of independent sector counterparts.</td>
<td>Young HE participation by Socio-Economic Class (BIS, 2012a; BIS, 2013).</td>
</tr>
<tr>
<td>Scotland</td>
<td>The Scottish Higher Education Initial Participation Rate (HEIPR) for 2011-12, which measures participation of all initial entrants aged between 16 and 30 (inclusive), shows a gap of 20 percentage points between the rate of participation in the most deprived 20% of areas on the SIMD 2009 and the least deprived 20% of areas (39.1% compared to 59.9%). HESA performance indicators show that 27.7% of Scottish-domiciled young full-time entrants in 2011-12 were from NS-SEC</td>
<td>Participation Rates for Entrants to Scottish Higher Education (National Statistics Scotland, 2013)</td>
</tr>
</tbody>
</table>

\textsuperscript{19}The 2013-14 Outcome Agreements aim to increase the proportion of students from disadvantaged and challenging backgrounds, and increase the representation of students from protected characteristic backgrounds (by age, race and disability); and support students from these groups to stay in higher education once they have gained a place.

\textsuperscript{20}A summary of outcome agreements, Delivering for Scotland 2013/14, has been published by Universities Scotland, available at: http://www.universities-scotland.ac.uk/uploads/US-OutcomeAgreements1314-Summary.pdf

\textsuperscript{21}See http://wales.gov.uk/newsroom/educationandskills/2013/130611highereducation/?lang=en

\textsuperscript{22}In this report Scottish Index of Multiple Deprivation (SIMD) version 2 is used for all years presented. Entrants were matched to one of the deprivation quintiles using their pre-study location postcode.
### Contextualised Admissions

#### 3.3.1 Challenges for Contextualised Admissions

The UK policy context presents some additional challenges when thinking about the use of data on applicants’ outcomes. Stakeholder interviews cited the USA percent scheme as an example of a different approach that smooths access to higher education for the highest performers in all schools, irrespective of specific attainment grades. This ensures a more diverse student body in US higher education providers using the scheme. There are, however, a range of important differences between the two systems that make the USA model difficult to apply in the UK.

**3.2.3 Higher Education Performance Indicators**

HESA calculates performance indicators and associated benchmarks for each higher education provider, indicating what level of intake of widening participation groups might be reasonably expected, taking account of each provider’s location, subjects offered and entry qualifications. These performance indicators are not targets. Annex D provides further information on the performance indicators for higher education. Table D.1 in Annex D presents the latest figures for the proportion of young full-time entrants in 2011-12 from state schools/colleges, low participation neighbourhoods, and lower socio-economic groups.

### Constraints and Issues in the UK Context

**3.3.1 Challenges for Contextualised Admissions**

The UK policy context presents some additional challenges when thinking about the use of data on applicants’ context to be applied in admissions. Issues highlighted in research with stakeholders included the following:

- **Differences in Applicant Data Between UK Administrations.** As the differences between the education systems in the four UK administrations widen, it is increasingly difficult for higher education providers to find comparable contextual information that can be applied fairly to all UK applicants. This is particularly the case for school-level data. While each administration in the UK presents information about the outcomes of pupils in their schools and colleges, they do this in different ways, such that consideration of

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For some providers and policy makers, progress towards more equitable access to higher education is still too slow and strategies in all four UK administrations seek ways to increase the pace of change. In England, the government has asked OFFA and HEFCE to “inject pace and rigour to the next phase” (BIS, 2012c, p. 1) and triggered a wide review of access and widening participation and a joint national strategy to be published late in 2013. The ending in recent years of Education Maintenance Allowance (EMA) in England (which supported low income students), the Aimhigher programme (which aimed to widen participation) and the Connexions service (responsible for progression information, advice and guidance) along with cuts to funding across the post-16 state school and college sector are likely to change the pattern of disadvantage both within the state sector and between state and independent applicants. Stakeholders consulted for the research stressed the increasing importance of higher education providers contextualising undergraduate admissions in this context.

Stakeholder interviews cited the USA percent scheme as an example of a different approach that smooths access to higher education for the highest performers in all schools, irrespective of specific attainment grades. This ensures a more diverse student body in US higher education providers using the scheme. There are, however, a range of important differences between the two systems that make the USA model difficult to apply in the UK.

<table>
<thead>
<tr>
<th>Region (latest data)</th>
<th>Measure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Ireland</td>
<td>In 2011-12 the Higher Education Age Participation Index for Northern Ireland was 50.4% (defined as the number of Northern Ireland-domiciled young entrants to full-time undergraduate higher education in the UK or Republic of Ireland as a percentage of the 18-year-old population of Northern Ireland). HESA performance indicators show that 36% of Northern Ireland-domiciled young full-time entrants in 2011-12 were from NS-SEC classes 4-7 (above the total for all young full-time UK entrants (30.7%)) (HESA, 2013).</td>
<td>Higher Education Age Participation Index for Northern Ireland – 1989/90 to 2011/12 (DELNI, 2013)</td>
</tr>
<tr>
<td>Wales</td>
<td>Nearly 4% of the Welsh population was estimated to be engaged in higher education in 2006-07. HESA performance indicators show that 32.5% of Wales-domiciled young full-time entrants in 2011-12 were from NS-SEC classes 4-7 (above the total for all young full-time UK entrants (30.7%)) (HESA, 2013).</td>
<td>Participation Rates for Welsh Students in Higher Education within the UK during 2006/07 (HEFCW, 2009)</td>
</tr>
</tbody>
</table>

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22Race-sensitive admissions approach whereby the overall ethnic composition of the undergraduate student body as well as the qualifications of its individual members is taken into account. See for example see for example Bowen and Bok, 2000.
contextual data for applicants requires close scrutiny of different kinds of information about previous schooling.

- **Data complications.** Some datasets are either difficult to obtain or to apply to all applicants in a systematic way, or the data itself is subject to interpretation. For providers that attract applicants from a wide range of backgrounds and who bring a diversity of entry qualifications, closer scrutiny is routinely applied to the applications and the addition of further data adds complexity to the system, especially if the data is not robust. UCAS is providing publicly available contextual data for applicants and is able to take account of some differences – for example, they note Welsh applicants who continue to receive the Education Maintenance Allowance (EMA) – but their system is still in development. Individual self-declared information from applicants, such as care background or disability, may not be completely reliable since there is scope for applicants to misunderstand the question on the form or make false claims (requiring verification by providers).

- **Proposed curriculum reforms.** Proposals for remodelling the school curriculum over the next few years, in terms of changes in assessments at 16 and 18 and the loss of additional evidence of AS attainment at 17, will limit the future usefulness of current contextual data studies based on the present education system. Such changes imply that the evidence needs to be continually revised and re-modelled.

- **Managing student numbers.** The introduction of the HEFCE student number control (SNC) in England and the SFC number control in Scotland adds further layers of complexity to admissions processes. The effect of the SNC will depend on the number of students who may move from the group exempt from the control to the institution-controlled number or vice versa, although under present arrangements the impact of this is likely to be small.

- **Higher education in further education (HE in FE) colleges.** The patterns of provision vary across the UK, with ‘HE in FE’ (also known as College HE) assuming more or less importance in some areas (although there is a general growing trend of this provision). SPA is working with a number of further education colleges to build a community of practice to raise awareness of holistic admissions strategies. As student numbers in colleges vary widely, from very small, locally recruited, to large programmes of higher education, and as some colleges are working in partnership with several universities, admissions expertise and the potential for the use of contextual information varies widely. In Scotland, colleges play an important role in supporting access to higher education for local students.

- **Changes in higher education funding arrangements.** The introduction of higher tuition fees in 2012 in England has led to stark differences for students in the four UK administrations, which have the potential to impact on overall demand for places and the flows of applicants and entrants between the administrations.

- **Future sustainability of the student support system.** Future amendments to the student support system or to the level of fees charged could imply a further set of differentials, which might need to be taken into account in future with potential implications for the size of student cohorts.

These issues for contextualised admissions are set within the wider environment of changes in the ‘higher education marketplace’ which further add to the challenges facing providers in their admission strategies. Moreover, few providers are only in one market, and increasingly few are wholly ‘selecting’. Partial deregulation and new patterns of competition between providers, including the introduction of new providers, add an additional dimension (Eastwood, 2013).

### 3.3.2 Stakeholder perspectives of the current evidence base

Evidence to support the use of contextualised admissions is important in order to ensure that applicants are assured that policies and procedures support fair admissions. The evidence base currently relies on published studies undertaken by and relating to admissions to individual providers, together with a small number of sector-level analyses. The institutional studies have used tailored measures of educational disadvantage, whilst the focus at sector level so far has been on school type. Some providers also draw on unpublished evidence. Interviews with stakeholders highlighted that some feel the available evidence is often not sufficient to provide an informed sector-wide response when the use of contextual data in admissions is challenged, or to support robust policy decisions. Universal application of one basket of data or one approach to holistic admissions is unlikely to succeed when the recruitment and access profiles of providers are so diverse. However, acknowledging some conflicting evidence, there is a general view that the available
evidence supports the use of contextualised admissions decisions and demonstrates that students admitted by the use of contextual information and data are likely to achieve outcomes that are at least as good as comparable others.

The stakeholders included in the research identified some areas where they would welcome further development:

- **Proxy indicators for school and college disadvantage.** Higher education-related information, advice and guidance (IAG) is an issue for some learners owing to gaps in provision and a lack of experience/expertise in some providers in supporting applicants, particularly in England where IAG professional structures have recently changed, affecting the quality and level of support available to applicants within some schools and colleges. Indicators based on the type of school an applicant attended (independent, state, grammar, academy, comprehensive etc.) are considered a very blunt instrument because they fail to recognise the differences within each school type. There is a recognition that more work needs to be done to identify which indicators most effectively capture the disadvantages which some applicants may face linked to their school/college circumstances (and that localised links with schools/colleges or networks of schools that include outreach and support for staff may also be ways of identifying contextual disadvantage). The sense emerged from stakeholder comments that more needs to be done to help schools and colleges to understand how contextualised admissions might affect applicants. Both media reporting and movements in entry grades, together with a complex array of bursaries and other access support, make the task more difficult for school and college staff that support applicant decisions.

- **Measures of successful student outcomes.** Most research to assess the outcomes for students, admitted through holistic assessments of potential, looks for evidence that students achieve degrees at least equivalent to the majority or to those with similar characteristics at entry. There is an argument, however, for an approach that would seek to identify the value added to the individual’s life chances, as is the case in US measurement of outcomes for students admitted to US higher education providers through the percent scheme (see for example Bowen and Bok, 2000). Tracking into employment is of policy interest, in part to assess the extent to which social capital affects outcomes in addition to academic performance (bearing in mind that employers’ recruitment practices may favour graduates from particular types of provider or background). There is also a concern that the profile of graduates is representative of society in general. The report of the Panel on Fair Access to the Professions, *Unleashing Aspiration*, led to the promise of a new drive towards a broader social mix of graduates going into professional careers (Panel on Fair Access to the Professions, 2009).

- **Part-time and mature applicants to higher education.** The focus for the application of contextual data in admissions has tended to be on younger full-time applicants as they progress directly from a state funded school or college to higher education. This focus is partly driven by the greater ease with which contextual data – rather than contextual information – is available for the young full-time group, by the relative homogeneity of the qualifications they offer at application and by the channelling of applications in a single format through UCAS. Contextualisation for mature non-traditional learners tends to be more informal on a case-by-case basis and may take account of experience as well as qualifications. Following a large drop in applications to part-time higher education in 2012, Universities UK is currently undertaking a major study of part-time higher education which includes examination of the reasons for the relative decline in part-time applicants. Applications from mature entrants are often assessed holistically, however, the variety of approaches to part-time admissions, the range of entry points and criteria, and the timing and nature of qualifications held constrains the application of contextual data.

- **Dealing with a range of qualification types.** Contextual data is more readily available in relation to achievements in academic qualifications at age 16 and 18/19 than for vocational qualifications or other qualifications gained from a wider range of providers. Contextual data is less readily available for part-time and mature applicants who may no longer be closely linked to a specific school or college, or for those who apply with different or unusual qualifications. The attainment levels of such applicants can

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23Mature students were a priority for some providers included in the research which were developing mature access and admissions strategies, including developing expertise in holistic assessment of mature applicants. However, this group was not found to be a priority for admissions research resources in terms of developing the evidence base for contextualised admissions.
often not be assessed in relation to those of their peers in the way that A-level students can be measured against the average performance of their local cohort group.
4. EVIDENCE BASE FOR USE OF CONTEXTUAL INFORMATION AND DATA IN UNDERGRADUATE ADMISSIONS

**Key points**

- **There is a broad base of evidence showing inequality in educational outcomes, and in relation to differential levels of higher education participation between social groups, which underpin concerns about social mobility and social justice.**

- **Research within the higher education sector has been undertaken to identify how different indicators of relative disadvantage (for example, socio-economic data and individual-level indicators) inform understanding of how groups and individuals facing disadvantage can be best identified for research purposes and in admissions. Most higher education providers use more than one indicator, and there is no clear consensus on which indicators and data to use.**

- **Sector and institutional research suggests that prior qualifications are the main predictive factor of degree performance. Coming from a widening participation background (area of low higher education participation or lower socio-economic group) has not been found to influence degree performance, but these factors can be associated with lower levels of attainment on entry to higher education. Applicants from state schools/colleges entering higher education, and at some providers, have been shown to outperform entrants with the same grades from independent schools in degree performance. Similarly, the evidence suggests that students from disadvantaged backgrounds admitted to providers with high entry grades do as well as those from more advantaged backgrounds. The evidence raises questions about how students entering with lower average qualifications can be supported to achieve their full potential.**

- **Those providers that have used contextualised admissions over several years are starting to build up evidence about how individuals and groups admitted using contextual information and data succeed when in higher education. Overall, these groups appear to be on a par with other students.**

4.1 Introduction

This section outlines the types of evidence for the use of contextual data that were identified in our research. The discussion breaks down the evidence into the following categories:

1. Evidence showing **trends in higher education participation** (discussed in Section 4.2) showing how education can, often inadvertently, transmit social inequality across generations. We present evidence concerning higher education transitions and participation, which relates to a body of literature not confined to higher education transitions but drawing on general insights from inequality research. This is helpful in understanding the processes by which social inequalities are reproduced and in anticipating the likely effects of policy interventions. The studies are qualitative or quantitative in nature and relate to patterns of participation in higher education and barriers and enablers for applying to and obtaining a place in higher education.

2. Evidence evaluating the relationship between indicators of disadvantage and **predictors of potential in higher education** (discussed in Section 4.3). Such research includes statistical studies looking at the effect of contextual data on predicting undergraduate outcomes (however defined) and modelling the relationship between contextual factors and attainment on entry and exit.

3. Evidence from **tracking entrants for whom contextualised admissions applied**, which is starting to build, alongside the implementation of contextualised admissions, in relation to the outcomes for individuals and providers (Section 4.4). This includes evidence emerging through monitoring the implications for the **profile of admitted students**, through ongoing tracking of students, and also from measuring performance against outcomes identified in institutional plans such as Access Agreements (OFFA), Outcome Agreements (SFC) and Fee Plans (Higher Education Funding Council for Wales (HEFCW)).

4. Related studies with a focus on the evidence associated with tools and techniques for **additional testing** which may also be applied by some providers or subjects/departments as part of the process of assessing applicant potential (Section 4.5).

The first and second lines of research are the most important for this report, but we draw selectively on fundamental research to support the specific evidence on the use of contextual data in admissions. The
sections below include an assessment of the strengths of different types of evidence about how groups fare in higher education transitions and admissions, and we evaluate the strengths and weaknesses of different empirical analyses.

Discussion of how providers have collected and started to apply the evidence of predictors of success in higher education, triangulated with measures of disadvantage, to their admissions processes is the main subject of Section 5.

4.2 Higher education participation trends and issues

4.2.1 Differences in higher education participation

It is well known that participation in higher education varies across social groups.\textsuperscript{24} The public policy focus in the UK tends to be on group differences in rates of participation by social class\textsuperscript{25} and schooling[and in some cases by neighbourhood higher education participation rates following the development by HEFCE of data on participation in local areas – the POLAR data].\textsuperscript{26} Looking firstly at the evidence on higher education transition and enrolment, there is a fairly broad evidence base, briefly reviewed here, into how educational disadvantages can be transmitted into undergraduate admissions. Within the literature a range of ways of measuring disadvantage and identifying groups who are experiencing disadvantages are used. Sector studies into higher education[many of which are based on relatively large scale analysis and draw conclusions across the sector] have been influential in highlighting underrepresentation of people from low socio-economic groups, and the research literature emphasises that the differences in participation levels between socio-economic groups are primarily associated with inequalities in educational experience and attainment.

A number of key considerations have been identified as underpinning differences in application rates and participation, including:

- Levels of prior attainment in exams (Chowdry et al., 2013; Gorard, 2008; Anders, 2012)
- Type of school or college attended (HEFCE, 2003; HEFCE, 2005; Smith and Naylor, 2005; Hoare and Johnston, 2011)
- Parental and community background, associated with lack of exposure to higher education(Sutton Trust, 2010b; Chowdry et al., 2011)
- Demographic factors, particularly age, gender and ethnicity (Broecke and Hamed, 2008; Croxford and Raffe, 2013)
- Type of higher education provider (Bradley et al., 2013)

Differences in individual and institutional (i.e. school/college) level access to economic, cultural, and social capital are the key drivers of these group differences. Participation rates are especially low for some groups which are a focus for policy. Figures for progression of care leavers in 2012 showed that 7% of 19 year olds who had been in care were in higher education(compared to 1% in 2001) (DFE, 2012).\textsuperscript{27}Buttle UK has been working closely with higher education providers to raise awareness of the underrepresentation of care leavers in higher education and many of the providers visited as part of this project automatically flag applicants who had spent more than three months in care. These numbers tend to be within low double or even single digits for individual providers. The SPA survey 2013 identified that ‘care leaver’ status was the most frequently used piece of contextual data reported by providers.

The dynamic between school type, attainment and socio-demographic factors has been a key area of interest in the literature. The differences in achievement rates are substantial in relation to achievement of A-level, Applied A-level and Double Award A-level students in England in 2011-12. The percentage who achieved grades AAB or better was higher in independent schools (45.3%) compared with state-funded schools (17.9%).

\textsuperscript{24}Figures for England for example showed that some 13.7\% of 18 year olds in the lower socio-economic groups (NS-SEC 4-7) had progressed to higher education in 2008-09, against around half of the number of 18 year olds from higher socio-economic group households (NS-SEC 1-3) (27.8\%)(BIS, 2010). However, measures of participation by socio-economic groups should be used with caution due to some uncertainty and volatility in the data.

\textsuperscript{25}There are debates about how social class should be measured. The Free School Meal indicator has replaced occupational measures in England.

\textsuperscript{26}In other countries, notably in the US, ethnic differences in higher education entry are closely monitored. In the UK, ethnic minorities tend to be overrepresented in higher education at large, although underrepresented at providers with high entry grades (Boliver, 2013). Gender and rural/urban location and geographic proximity to higher education providers are salient public policy dimensions in other countries.

\textsuperscript{27}From 2014 the Department for Education plans to report care leavers’ outcomes at age 19, 20 and 21.
and further education colleges (14.5%) (DFE, 2013a). In Scotland, 10.5% of pupils from the 20 percent most deprived areas obtained the normal minimum entry requirements for higher education in 2011 compared to 48% from the least deprived 20 percent (Universities Scotland, 2012). The levels of attainment in qualifications included in the UCAS Tariff score for higher education entry of UK-domiciled learners show a clear variation by school type: applicants from independent and grammar schools groups have a much higher proportion of students with qualifications in the UCAS Tariff system, and in the highest tariff band (representing higher educational achievement in examinations), than amongst applicants from non-selective state schools and further education colleges (and proportionally more further education college students apply without tariff points) (Bridge et al., 2012). Tracking of applicants in 2012 shows that young people in areas of high higher education participation are substantially more likely to confirm an offer of a higher education place and hold A-levels than those living in low participation neighbourhoods (UCAS, 2012).

The high attaining pupils (the 10% highest attainers at age 11) in the most deprived schools (measured using FSM) enter fewer full GCSE examinations and achieve about half a grade less per full GCSE examination entered than highly academically able pupils in the most advantaged schools, after individual factors (ethnicity, social background, prior attainment) of pupils are taken into account (Sutton Trust, 2009). Crawford, Machin and Vignoles (2008) calculated that only 4% of males and 6% of females who are in the bottom quintile in terms of income are in the top fifth in terms of Level 2 results (compared to 16% and 24% of the highest income quintile students). In 2006 children of degree-educated parents were four times more likely to obtain five or more A*-C GCSEs than children whose parents did not enter higher education (Sutton Trust, 2010b). Lack of progression from Level 2/SCQF Level 5 to Level 3/SCQF Level 6/7 is likely to be a barrier to higher education progression. Young people from lower socio-economic groups are more likely to attend lower achieving secondary schools, offering a clue to the reasons for their lower progression. The highest achieving state comprehensive schools at Level 2 in England have below the average share of FSM pupils, and are “unrepresentative of their local area” (Sutton Trust, 2013).

Post-16 achievement levels can reflect socio-economic differences as well as educational disadvantage from attending a relatively low achieving secondary school. The type and range of qualifications which different applicants have is also an issue. Vocational education and training (VET) qualifications are more commonly offered by lower socio-economic group applicants who are less likely to be on an ‘academic route’ (Unwin et al., 2004). Applicants with vocational qualifications have a lower chance of a higher education acceptance than applicants with academic qualifications (Hayward, 2008; UCAS, 2012). Compared to A-level students, applicants with VET qualifications have a reduced chance of entering higher education. Applicants who combine both vocational and academic qualifications were found to have a better chance of higher education progression.

Some have argued that underachievement could have been addressed had the student been able to enter a higher quality school (Gorard, 2008). Chowdry et al. (2013) used administrative data to track different cohorts and showed that the differences appear very early on. This study found differences at the start of the data in Year 11. Others have speculated that differences may show even earlier. The education gap between FSM and non-FSM groups is wide and tends to widen throughout secondary education (Vignoles and Crawford, 2009). Raising achievement at Key Stage 4 (the two years of GCSE in England) and encouraging young people to stay in education post-16 remains a key policy objective in England.

Holding secondary schooling effects constant, Chowdry et al. (2008) showed that students on FSM are only slightly less likely to progress to higher education providers with higher entry grades once their NQF Level 3 or SCQF Level 6/7 performance is taken into account. Further analysis by Vignoles and Crawford (2009)

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28 The research identified a ‘hidden poor’ – over 40,000 pupils eligible for Free School Meals earlier in their schooling but not in receipt of them. Pupils receiving FSM were more likely to achieve five or more A* to C grade GCSEs if they attended the most deprived schools than if they attended more advantaged schools.

29 Data on two cohorts of state school students in England (those who took GCSEs in 2001-02 and 2002-03), including repeated measures of pupils’ prior educational achievement, from age 11 to 20 years. Secondary school attainment is more important in explaining relatively low participation rates for students from disadvantaged backgrounds than point of entry barriers into higher education.
concluded that the differences in levels of participation between FSM and non-FSM disappears for males and is very small for females once prior attainment is taken into account.\textsuperscript{30}

### 4.2.2 Participation in higher education providers with high entry grades

Progression to higher education is relatively low for young people from lower socio-economic groups and stratification within the higher education sector across providers with different characteristics adds additional intricacy.\textsuperscript{31} The differences in relative participation are even greater when considering take-up at those providers with high entry grades, suggesting that existing patterns of educational privilege can be perpetuated in this way. The most advantaged young people (those in the highest 20\% of areas in terms of parental education) have been calculated to be seven times more likely than the most disadvantaged 40\% to attend higher education providers with high entry grades (Harris, 2010 p. 17). Cambridge and Oxford have the highest proportion of independent school students (HESA, 2012). Of course attainment at Level 3 is a strong predictor of higher education participation at providers with high entry grades.

Factors affecting higher education progression include differing aspirations and family expectations. Mullen’s (2011) analysis of entrants to medicine, law and arts at Scottish providers with high entry grades suggests that students from lower attaining schools/colleges with the necessary qualifications choose to study elsewhere.\textsuperscript{32} Qualitative research with students with vocational qualifications concluded ‘self-limitation’ was at work, “which leads students to exclude HE providers beyond their perceived boundaries of physical, academic or social space from their choice processes” (Hayward, 2008).

There are differences in progression between groups with similar levels of (high) attainment. Relatively low progression to the providers with high entry grades by the highest achieving young people from some types of state schools and colleges suggests that the sector and providers with high entry grades in particular are missing out on potential talented applicants (Harris, 2010). For 2004-05, it was estimated that there are 3,700 students from state schools and colleges and about 840 students from low participation neighbourhoods who attained at the level required for admission to selective courses but who did not apply (Sutton Trust, 2008, p. 31). Overall the intake of the providers with the highest entry grades has not become markedly more socially representative over recent times. Overall, young people from different educational backgrounds with similar attainment who applied to one of the most academically demanding degree courses were equally likely to get an offer, regardless of the type of school or college they attended (BIS, 2009).

Comparative survey research pointed to disparities in application patterns to providers with the highest grades, being underpinned by differences in preferences for particular courses or institutions, with a suggestion that “mitigating or reinforcing interventions” may also play a part (i.e. information, advice, guidance, preparatory work, preliminary research) (BIS, 2012b, p. 17).

Potential applicants from different social and school backgrounds appear to negotiate the application process differently. Research points to issues around access to information and pre- and post- application advice, guidance and support (Kintrea et al., 2011; Collins et al., 2001). The Sutton Trust (2008) suggested that students at the least advantaged state schools/colleges are not given appropriate guidance on the A-level subjects advisable for entrance to a leading research university.\textsuperscript{33} Some subjects taken at 14-16 influence students’ progression options (such as in the sciences). The proportion of students from outside the top 20\% of high performing schools – i.e. non-privileged rather than under-privileged groups – was identified as an issue for providers with high entry grades (Sutton Trust, 2010c).

The adequacy of information, advice and guidance about progression to higher education for prospective students has been found to be determined in part by type of school attended. The Sutton Trust (2008) reported that at least half of all advice and guidance was judged by young people to be inadequate, and raised concerns over the ability of teachers to support young people educated in non-selective state schools, particularly learners in 11-16 schools. Research published by the Department for Education and Skills showed

\textsuperscript{30}The FSM indicator is available for research purposes, but has not been supplied to providers at individual level for contextualised admissions.

\textsuperscript{31} Diversity of the higher education sector has been identified by UUK as a principle underpinning a strong system and one which promotes social mobility and social inclusion. See http://www.universitiesuk.ac.uk/highereducation/Pages/ResponseToTheHigherEducationWhitePaper.aspx

\textsuperscript{32} Addressed through SFC funded REACH and ACES programmes to certain Scottish providers.

\textsuperscript{33} Guidance has been developed by the Russell Group on facilitating subjects (‘Informed Choices’, 2011) at http://russellgroup.ac.uk/informed-choices/
the impact of the school in the decision to participate in learning post-16, highlighting that learners from schools with sixth forms are more likely to express an interest in higher education study than learners from an 11-16 school (Foskett et al., 2008). Evidence of better access to adequate support in selective schools is presented in a report from the Futuretrack longitudinal tracking project (Purcell et al., 2008). Based on applicant surveys, UCAS has identified a need for students from less privileged backgrounds to receive information about the benefits of higher education and ways in which it is being made affordable for them, encouragement to apply, and help to make wise choices about the courses and providers to which they apply (UCAS, 2013, p. 21).

Parental background effects are noticeable in England (Ross and Lloyd, 2013). Learners with university-educated parents were found to be five times more likely to reach higher education than those from disadvantaged backgrounds, and are also more likely to go to providers with high entry grades (Jerrim et al., 2012).

Provider perspectives
Taking account of the different experiences of applicants came out in higher education provider interviews as a key driver for contextual data use at departmental and institutional level. Providers used their own experiences as well as academic studies.

“It was blatantly obvious that a diversity of experience leads up to each application... a strong view that it was not a level playing field...”

“We are very aware of the differences out there, and it’s obvious when students come to study with us that the brightest sparks do not always come with the best results.”

“The quality of careers advice differs...it was blindingly obvious that this [contextualisation] is something we should do...”

“You can see differences, for example in personal statements...there is more ‘grooming’ in independent schools which have more experience to give better careers advice, support and preparation.”

4.2.3 Outcomes through higher education
Outcomes through higher education become relevant when thinking about whether higher education can deepen existing differences and considering the wider fairness argument in terms of supporting those who had fewer opportunities. In a comparative longitudinal study using data from the National Child Development Study and British Cohort Study, Green et al. (2012) looked at degree acquisition as one outcome factor and found that private school leavers were more likely to have a degree by the time they were 23 and had higher earnings than those educated in state schools. This issue is likely to be increasingly important given the emergence of evidence of inequalities of opportunities for graduate employment for different social groups and calls into question whether this creates additional barriers to higher education entry.34

4.2.4 Summary: Key findings of research into higher education participation
The reasons for continuing inequalities in higher education participation are complex, particularly in relation to the take up of undergraduate places at the most selective providers with the highest entry grades. Overall, the evidence suggests that outreach and other types of support for progression, particularly access to good information, advice and guidance, are important to support aspiration-raising and widening participation. But this will not be sufficient to equalize participation rates without a levelling of the educational playing field. The literature supports the conclusion that gaps in young higher education participation between socio-economic groups are mainly linked to the relatively weak academic performance of disadvantaged young people compared to their more advantaged counterparts, rather than low socio-economic groups who meet the standard for entry choosing not to progress at age 18-19.

The main policy drivers for the original work of the Admissions to Higher Education Review remain relevant. Providers continue to handle very large numbers of applications to their courses and, in spite of an upward

34 For example, a HEFCE funded review by Adnett and Slack (2007) highlighted how the labour market could be a barrier to widening participation by failing to offer sufficient incentives for potential marginal entrants from less advantaged backgrounds. The research raises methodological questions which prevent firm conclusions, although it does highlight that in employment terms some groups of non-traditional graduates are penalised in the labour market.
trend in applications and admissions from students from lower socio-economic groups, some applicant
groups remain less likely to be successful in gaining entry to higher education. Some progress has been made
in narrowing the gap in participation levels, although in the 2012 end of cycle report UCAS notes that entry
rates for 18 year olds in advantaged areas remain three to four times higher than for those in disadvantaged
areas (UCAS, 2012, p. 5).

4.3 Relationship between ‘higher education potential’ and ‘educational disadvantage’
In building the evidence base underpinning the use of contextual data, researchers have set out to measure
whether the results that educationally disadvantaged groups of students have on admission fully represent
their higher education potential. These studies include sector-wide and institutional level analyses, discussed
here.

4.3.1 Sector level research into general patterns of outcomes for different groups
Previous educational attainment has a strong relationship to attainment in undergraduate programmes
(McNabb et al., 2002; Smith and Naylor, 2001; Bekhradnia and Thompson, 2002), particularly in relation to
programmes with high entry grades such as medicine (Ferguson et al., 2002; McManus et al., 2003; Lumb and
Vail, 2004). The differences in relative achievement between socio-economic groups, noted above, brings into
question whether prior attainment in examinations is an accurate reflection of ability for all groups of
students.

Previous studies suggest that, other things being equal, state school students appear to outperform those
from fee-paying independent schools in their degree performance. Smith and Naylor (2001) estimated that
independent school students had a nine percentage points lower probability of obtaining a good degree (first
or upper second) than a maintained school student with the same prior attainment (Smith and Naylor, 2001).
McNabb et al. (2002) suggested maintained school students were a fifth more likely to get a first class
honours degree at some higher education providers. These studies support the view that independent
schools are able to educate most pupils to the best of their potential, and students from poorer performing
state schools may ‘catch up’ to their full potential when they become undergraduates, where ability is the
main determinant rather than the extent of school inputs. This finding is robust in Smith and Naylor’s (2001)
research, where providers are divided into seven sub-types (excluding post-1992 providers).

Research in England by HEFCE into schooling effects on higher education participation has been particularly
influential in highlighting key issues for the higher education sector. Early analysis (based on 18 year-old
entrants with A-level qualifications to degree courses in 1997-98 and subsequently extended to include 19-
year-old entrants) found that students from independent schools did consistently less well than students
from other schools and colleges, when compared on a like-for-like basis. For all but those undergraduate
students attending the providers with the highest entry grades, a student from an independent school is
expected to achieve as well in their degree as a student from a state school who has between one and four
fewer A-level points. Gender has been found to influence success when additional factors including subject
are taken into account (HEFCE, 2003; HEFCE, 2005). The findings come with some caveats, including
limitations in distinguishing grade scores in prior attainment since UCAS Tariff points were used. UCAS
research suggests that many pupils, especially at independent schools, take additional qualifications, which
would boost their attainment score as measured in Tariff points. However, analysis shows that above a
certain level this makes no difference in the likelihood of being admitted to higher education. Controls for the
number of qualifications held by applicants tended to be applied by providers undertaking research in order
to address this issue.

HEFCE (2003) suggested that the relative performance of different student groups in higher education is less
consistent for providers with higher entry grades. This is something the University of Cambridge publicly drew
on when contextualising within the wider literature their findings that school type did not predict degree
performance at Cambridge (Partington et al., 2011).

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35The proportion of all applicants who were unplaced at the end of the 2012 application cycle was larger than was typical in previous cycles (despite a
recent fall). It should be noted that overall 15 to 20% of unplaced applicants actively withdraw from the application process (UCAS, 2012)
36Analysis of 60,000 students graduating in 1992 from pre-1992 higher education providers (excluding medicine and dentistry).
37This analysis is being updated and extended for publication later in 2013.
38Equates to 20-80 UCAS Tariff Points.
Recent sector level research (HEFCE, 2013a) based on UK-domiciled entrants who started higher education between 2005-06 and 2010-11 evaluated outcome status for different groups with regard to transfer and continuation after one year. Overall, non-continuation was low, at around 8.2%. Predictors of being no longer in higher education included lower attainment at entry, being disabled, being an ethnic minority (other than Chinese), mature student status, coming from a low participation neighbourhood (POLAR3 measure), being male, state-school as opposed to independent school educated, and coming from the north west of England. The research design then controlled for age, subject studied and qualifications on entry, and here it emerged that there were no significant differences between state and independent school students once these controls were taken into account (p. 16). The findings from this report are open to partisan interpretations. One interpretation is that disadvantage in opportunities for secondary schooling spill over into disadvantages in higher education experiences. At least one of the providers visited as part of this project considered such evidence to support allocating greater targeted resources for students identified as coming from backgrounds more at risk of non-completion in order to improve their student experience and support. Another provider had holistically redesigned student support services in an inclusive way to enhance the student experience for all students while hoping that this would particularly improve retention for those from less advantaged backgrounds. The picture is complicated, not least because of intersectionality between a range of factors (age, gender, ethnicity, geographical location, and type of provider studied at might all play a part) (Rose Adams, 2013).

Further HEFCE (2013b) analysis of student outcomes is a welcome addition to the ongoing research into predictors of degree attainment and other outcomes. This sector level analyses concluded that independent sector educated students were more likely to complete their degrees, to obtain good degrees (2:1 and higher) and to transition into employment than those educated in state schools/colleges. This is in contrast to the findings of several studies by higher education providers with high entry grades of their institutional student cohorts (discussed in section 4.3.2 below), where those educated in state schools/colleges surpassed the achievements at degree level of those educated in private schools when matched on a like-for-like basis. The difference in the findings between studies is likely to be due to differences in methodological approaches and the measures of educational attainment that are used. In comparing the prior attainment profile of state and private school students, the national analyses grouped students according to attainment at age 18 using UCAS Tariff scores (HEFCE, 2013b, Table 10). This contrasts with the approach taken by the higher education providers with high entry grades included in our in depth research. The profile of entrants to these institutions means that attainment at age 18 does not vary greatly for these providers (i.e. most applicants and entrants are highly attaining), and therefore analyses between equipotential groups often uses attainment at age 16 (such attainment in GCSEs) because it is a better differentiator. It is also noteworthy that previous HEFCE research (HEFCE, 2003) identified that the findings of their sector-level analyses changed when restricting the dataset to those students with a high Tariff score. Further sector wide individual-level regression analyses which matches students on a range of school/college attainment measures would be desirable to further enhance the evidence on the relative potential of private and state school/college applicants to complete their degrees, to attain highly, and to transition into employment at different types of higher education providers.

Difference between the methods and results of different studies makes clear conclusions on the higher education ‘potential’ of educationally disadvantaged group problematic. However, this is perhaps understandable given the complexity involved in undertaking statistical analysis on diverse groups of students, across a diversity of higher education provision, over time, and where underlying variables may not be captured in the data. Moreover, as a basis for informing admissions policy decision, higher education providers have been concerned to investigate the patterns specific to their own provision. Provider level research is discussed in detail below.

### 4.3.2 Institutional research to assess higher education potential

Providers are looking to admit applicants with the best potential for success, and therefore they have made efforts to explore how educationally disadvantaged students perform within their own provision throughout their degree programmes relative to higher attaining, more advantaged students. We identified examples of institutional research which had been undertaken with a view to systematic analysis of the progression and outcomes of students from different groups, using provider datasets. There are a variety of approaches,
discussed below. Some results have been published although in other cases the research captured institutional analysis which remains for internal purposes only.

The studies varied in scale and sophistication. Several of the analyses took account of the relative influence of particular determinant factors (such as attainment and gender) together with looking at the specific influence when other factors are taken into account (such as where students came from and educational background).

‘Critical case studies’ of a number of key published sources are provided in Annex E. These provide a detailed critique of the coverage, methods and reliability of different studies which appear in the published literature. Some overarching emerging conclusions are discussed below (drawing in aspects identified in the wider research, which includes unpublished studies within providers). It is important to note that not all existing knowledge about the implications of the use of contextual data is captured in the published or written findings. Providers and researchers hold tacit knowledge internally which is important to consult when drawing conclusions or designing studies.

**Research methods**

Regression analysis is the main tool used to see if students with particular characteristics assigned to a contextual group are more or less likely to have the same outcomes as students who have the same characteristics but are not in the contextual group. The approach identifies variables among the student samples that appear to be important in predicting the success outcome and the direction of the relationship (p<0.05 used as a measure significance). A common approach is to start with simple descriptive analyses and then move on to multivariate modelling.

Some studies have used a binary approach, notably comparison of grades on entry with outcome, looking at whether students in contextualised and other groups who are above/below the median in their entry cohort to higher education improve or fall back relative to other students based on institutional measures of success. There are also mixed method approaches (notably the Oxford Admissions Study). Qualitative studies into the outcomes for specific cohorts of students were also found, the qualitative nature of these tending to relate to the small sample sizes involved (e.g. Hammond et al., 2012).

There are clearly practical and methodological issues to undertaking this type of research. One interviewee from a higher education provider commented, “we conduct big studies that don’t find any associations”.

The strengths and weaknesses of different methodological approaches are reviewed in Table 5. In-depth research with providers shows that the analysis, at least when starting out, was very resource intensive, often involving the bringing together of different datasets (applicant data and student records), and a high degree of manual matching of records to data to categorise them. Initial research undertaken prior to contextual data being applied by providers included in our in-depth sample included an example of admitted students being retrospectively assigned contextual data indicators for the purpose of monitoring and evaluating their progression. However, the provider interviews revealed that in some cases providers had moved to a situation where data to enable tracking and analysis was now routinely collected and stored in an appropriate way so that ongoing (annual) analysis could be completed much more easily in future. Over time this enables more detailed analyses, because as additional years of data are added there is more scope for analysis of subsets.

The issue is complex and the categories and definitions used have a role to play in determining the results. There is also an issue in how the variables change over time (for example, one provider changes its methodology to reassess the contextual data indicators each year in line with changes in examination performance and progression rates for schools).
Table 5: Review of methods of analysis (see annexes for a review of the variables used)

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistic regression</td>
<td>Robust analysis minimises the colinearity between the variables which potentially impact on the outcome (determinant) measure.</td>
<td>Requires a large enough sample as the cell-sizes underlying the calculations can get small. This can be a particularly challenging issue when seeking to undertake subject-level analysis or when analysing small sub-groups with regards to ethnicity or social class.</td>
</tr>
<tr>
<td>Comparison against the median</td>
<td>Because this analysis is working with a binary outcome measure rather than finer grained categories it has the advantage of generating larger samples for comparison and a stronger model in terms of results (significance levels increase for larger samples).</td>
<td>Tends to apply to fairly homogeneous groups of students (with similar qualification type on entry).</td>
</tr>
<tr>
<td>Qualitative analysis</td>
<td>Gives an in-depth understanding of how and why potential applicants apply or do not apply to higher education, and their responses to offers; yields nuanced accounts of higher education experiences and can identify factors that would further facilitate an enjoyable and productive student experience for all students and widening participation students in particular.</td>
<td>Repeated and institutionally embedded regular qualitative research has resource implications; there is a trade-off in terms of breadth and depth. Triangulation (mixed methods research) can address some of these issues.</td>
</tr>
</tbody>
</table>

Key weaknesses of institutional level research of this nature include the following:

- Analysis of student data only looks at students who gained access to the provider (and often without contextualised admissions at the point when they were admitted). It does not say anything about the population of learners who might have applied but did not do so or who applied but did not get an offer of a place.

- It tends to relate to the A-level cohort and to that extent misses the point about the role of other qualifications as a way of diversifying the curriculum to demonstrate potential and ability in a different way. As a general rule the analysis tends to focus on fairly homogenous groups of entrants (mainly A-level pupils from England). Providers have struggled to use UCAS Tariff score as a measure of prior attainment, due to the number and type of qualifications an applicant has and in relation to the scoring system which UCAS has applied to that type of qualification, although it could be that neither of these may be a true measure of the person’s latent ability. However, narrowing the analysis goes against inclusiveness. Vocational and other qualifications have been developed as an important alternative way for non-traditional students to demonstrate higher education potential, and ignoring this group of students risks removing a key widening participation target group.

- Mature students or part-time students do not tend to be systematically included in these studies. This is perhaps understandable given that most research is undertaken by providers with high entry grades that are offering mainly to young A-level applicants the residential, full-time undergraduate experience. However, it is important that the models used in the research do not risk disadvantaging applicants who are mature or require part-time modes of study.\textsuperscript{39}

- The analysis assumes that what happens during a student’s time in higher education is neutral in value-added and affects all students equally (although there is an obvious role providers play in teaching and learning which enables students to fulfil their potential). It could be argued that in an ideal world there would be no relationship between prior qualifications and the success of students once in higher education, which would demonstrate that latent potential is being reflected rather than the starting point on entry.

\textsuperscript{39} Analysis of mature applicants may need to be qualitative in nature given the numbers involved at the providers included in the in-depth research for this study, and problems associated with the application of educational data to this group.
• Subject level analysis has not always been possible, depending on sample size and data availability. The significant difference between the profiles of students and performance between subject areas in providers warrants investigation.

• Combinations of subject choice may be missed. Major published studies of education disadvantage by provider do not take systematic account of subject combinations studied prior to higher education and their relation with success in higher education. This might illustrate on the one hand that the debate around the usefulness or otherwise of ‘facilitating subjects’ is younger than these studies, but also – especially for the case of the smaller Oxford sample – that this level of detailed analysis is difficult to achieve with data from just one provider unless analyses are pooled over several years.

• There is an increasing policy focus on different approaches to evaluating outcomes – which might be described as the value-added to the individual and the community and to society as a whole – and is generally outside the scope of these studies, which tend to look for grade equivalence with students from more privileged backgrounds.

Another confounding factor in drawing overall conclusions from the separate institutional-level studies is that differing results and conclusions from the evidence could reflect institutional factors which are not transferable to other providers or the sector as a whole. Clearly what happens between taking up a place and graduation is not a ‘black box’ without any effect on an individual’s prospects. The student experience and quality of teaching and learning comes into play here, but this is difficult to capture through quantitative studies, and may vary within as well as between providers.

Furthermore, evidence which relies on looking at what happened in the past to try to predict the future is ultimately fraught with problems. Researchers have tended to make a case for analysing student outcomes over several successive cohorts rather than a ‘snap-shot’ over one year. While this has some merits, the changeable nature of different student cohorts over time – described in one report as ‘turbulence’ – is inevitably a limiting factor in how far the results can be trusted.

Capturing disadvantage

The data is complex as well as being large in scale. Sourcing and matching variables for use in analysis is a challenge. There were different approaches to how groups of students were categorised in the data, each study using different indicators and definitions. Several studies tested a range of data. One interviewee commented, “we played around with the data to find what would give the most statistically significant results”. In applying the results to practice, interviewees who had commissioned research identified a concern to use the groupings and definitions which were most relevant in practice terms (i.e. that could be successfully used in admissions) and/or in policy terms (for example, using indicators of disadvantage favoured by the different administrations of the UK) as well as indicators that could be matched to existing records and gave best coverage of the records. Inevitably most researchers and practitioners noted discrepancies, caveats and data gaps.

However, school type tends to feature more prominently in the models. Several studies use – at least some of the time – binary variables such as a state/independent school divide for robustness of findings (while acknowledging the diversity within social classes and school types). Few studies have tested for school/college selectivity (i.e. whether the establishment admits students on the basis of some sort of selection criteria, usually academic), although unpublished work on the Oxford Admissions Study suggested that school selectivity could be a better predictor of attainment than the state/private school dichotomisation. This merits further investigation.41

Lack of commonality in approaches means that some studies include variables that others do not. For example, research in Oxford included parental education (Ogg, 2009), whilst Bristol research included additional individual level (disability), school level (achievement) and area level information (POLAR data) (Hoare and Johnston, 2011). Because the Oxford social class measure is derived from a survey including

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40Facilitating subjects were initially those identified by the Russell Group as generally required for entry onto their degree courses, see http://russellgroup.ac.uk/informed-choices/

41Selective state schools have a good record in higher education progression, at levels comparable with the independent sector. 89% of young people aged 17 at a selective state school progressed to higher education by age 19 in England in 2009-10 (above the rate for independent schools (87%)). The figure for ‘other state’ was 69% (BIS, 2012a).
information on both parents rather than the UCAS information on head of household, there is more ‘known’ data for the Oxford study and perhaps slightly higher trust in the accuracy of the reporting. Both studies, though, ultimately use a binary divide between professional and non-professional or white and blue collar workers. An issue which is hard to capture in large scale statistical studies is that notions of ‘cultural capital’, attitudes towards education and exposure to higher education, vary within (as well as between) social class groupings.

Most studies acknowledge limitations in terms of the underlying cell sizes in the analyses when trying to give consideration to sub-groups of students by breaking the analysis down into small categories.

**Prior attainment measures**

Different approaches were identified to capturing students’ prior attainment using their qualification level in exams or performance in other tests, where this information was available within the datasets available for analyses. None of these measures of prior attainment were without problems (see Annex F for a full description and discussion). Some researchers have developed new composite indicators drawing on individual and school level factors (for example, the relative position of the individual against other students in their peer group within their school/college at 16-18).

Institutional context has influenced which measures might be the most effective discriminators. In particular, while the Oxford Admissions Study tested for the inclusion of A-level results, these did not show in the findings in the models. A-level performance was found to be a poor predictor owing to the profile of admitted students at the time of the research (who almost uniformly had at least three As at A-level). There was no robust advantage in having more than three As at A-level although there was a significant disadvantage in degree performance for the small number of students who had achievement lower than that. Therefore, the study uses GCSE results as the main achievement measure from secondary schooling. While there are disadvantages in using the mean GCSE score, the Oxford study tried different GCSE measures and found the same pattern of findings regardless of which measure was used, establishing that GCSE attainment was the most important predictor of final A-level examination performance.

A contribution of the Oxford Admissions Study (Ogg et al., 2009) is that it contains a measure of potential/ability that is not available in other recent admissions research, that was not available to admissions decision makers at the point of making admissions decisions, and that aims to triangulate the idea of ‘potential’ as not completely captured by school examination performance.

**Outcome measures**

Annex G provides an overview of different approaches to defining outcome measures. A common approach was to use the on-programme or end of course outcome as the dependent variable and undertake regression analysis to examine the influence of each of the covariates (i.e. the other factors) on the outcome, separately or in combination. Where data was available, analysis of raw scores (which can be analysed as a continuous variable) was seen as preferable to degree classifications (which are categorical and inconsistently applied). The outcome measures used varied – one study looked at nine outcome measures (across Years 1-3 and including resits and scores in each year’s examinations). The number of measures used in this study was exceptional; for most providers this level of detail was impractical for tracking and monitoring and was not available in their student datasets in a usable form. Most studies concentrated attention on final year degree classification, although it was recognised that this is not an ideal measure.

The studies acknowledge that the predictors of gaining a first as opposed to an upper second and the predictors of gaining a lower second and below as opposed to an upper second are not symmetrical. The Oxford study takes this into account by using a multinomial logistic regression model. Conceptually, the multinomial model seems to fit the data. Using percentile marks out of 100 rather than the crude measures of first, upper second, lower second is preferable. Whilst research in Bristol gave some recognition to the asymmetric nature of the degrees awarded (and so modelled the explanatory variables against above and below Year 1 and finals median scores to reflect this, as well as against degree class), the study proceeded to

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42Bristol research used socio-economic class of student’s household derived from UCAS with high level of missing data (42%).
43Alice Heim scores were used.
44The binary logistic regression technique used enables the analyses to show the contribution each characteristic makes together with prior attainment in predicting the probability of an outcome occurring.
use binary logistic regression to focus on the modelling by degree class.\textsuperscript{45} The approach allows for detailed analysis of the intersection between different entry scores (based on A-level scores out of 360 UCAS Tariff points which can equate to AAA at A-level) and degree performance. This is particularly useful as an evidence base for the use of school-type contextualised data in admissions because it provides a greater degree of differentiation than analysis based on categorisation into attainment bands.

Contextualising achievement by subject appears to be an area that would warrant further investigation. The Oxford study focuses on subject level differences to a greater extent than the Bristol study, although subjects are acknowledged as an analytical factor for understanding degree performance in the Bristol data as well. The Oxford study analyses arts and science subjects in separate models and includes a control for the number of firsts awarded in different subjects (see e.g. Bickel et al. (1975) on admission to Berkeley).

Tracking into employment was on the radar of providers although not all had undertaken research. Employment outcomes may be of limited use as a measure of potential given that employers’ recruitment practices may favour graduates from particular types of provider or background.

4.3.3 Key findings of research into higher education potential

Those who tend to do well at school also do well in higher education, although other factors also have an impact (gender, ethnicity, subject, measure of achievement used). As might be expected, studies have shown that on average widening participation indicated students tend to have slightly lower prior qualifications on entry than others. Although a range of measures were used, in general, analysis of prior attainment variables tended highlighted students from certain areas and educational backgrounds as having relatively low levels of prior attainment on entry to higher education (Hoare and Johnson, 2011, Taylor et al, 2013, Lasselle, forthcoming). For example, research in Bristol (Hoare and Johnson, 2011) used four categories (independent, state grammar, state comprehensive, and state other). Students from all three types of state school were less likely to obtain an above-median A-level entry score – significantly so for those attending comprehensive schools and other non-grammar (so non-selective) establishments. Unpublished research commissioned by one higher education provider highlights that students from further education colleges and comprehensive schools are more likely to be found in low higher education participation areas and that their UCAS Tariff scores were lower on average.

Several institutionally based studies included in the research have identified that students from educationally disadvantaged backgrounds (defined in different ways) perform relatively at least as well as their more advantaged peers, including independent sector students with the same levels of qualification on entry. In some cases, those from state schools do better than those from private schools with the same GCSE grades (Ogg et al., 2009) or A-level grades (Hoare and Johnston, 2011) or outperform their peers with the same grades in Scottish Highers (Lasselle, forthcoming). Students from state schools were more likely to get a first-class degree and less likely to get a lower second or lower degree than a student from an independent school. Models of progression and attainment by school type have strongly significant results although they have proved hardest to put into practice, as discussed further below. However, the results are not consistent. For example, research at Cambridge did not show differences in degree classification between students with different educational backgrounds at A-level.

While both Oxford and Bristol are providers with high entry grades, A-level performance differs in the extent to which it is a variable, suggesting that the providers are subtly different in terms of the profile of admitted students and that different research methodologies might be appropriate. It is in this context that research at Cambridge has considered GCSE performance as well as fine-tuned AS and A-level performance data.

In the Oxford study, Alice Heim (AH) scores add to the prediction of achievement over and above secondary school grades.\textsuperscript{46} Those with the highest AH scores are more likely to achieve a first class degree than those with the highest average GCSE grades. AH scores predict equally well for private and state school students. AH scores measure something distinct from GCSEs. A high AH verbal ability score is predictive of firsts in sciences.

\textsuperscript{45}It would be interesting to see the Bristol data re-run using multinomial logistic regression analysis, although this may not change the findings.

\textsuperscript{46}Scores on the Alice Heim Group Ability Test developed in the Cambridge Psychological Laboratories.
The above studies found that individual and household level predictors of success remained in line with what sociologists call the ‘maximally maintained inequality’ framework whereby students from blue collar backgrounds performed less well than those from white-collar homes, non-whites performed much less well than whites and females less well than males. Disadvantaged neighbourhood and high/low school performance contexts did not influence performance at the higher education provider, although they influenced A-level scores at entry with those from low performing schools entering with lower scores and those from high participation neighbourhoods entering with higher scores.

The Bristol study aimed to identify the extent of schooling effects. Widening participation students from state schools entering with at least BBB+ performed to the same level as non-widening participation students with AAB+ on exit (based on the proportion above the median entry and exit grades), making the case for up to a two grade differential. Unpublished research at a further higher education provider also found evidence of ‘added value’ but to a lower level (around one grade difference).

While most students in all groups achieved an honours degree (or equivalent), the patterns vary between providers. In one (unpublished) study a lower proportion of students with widening participation indicators achieved the highest awards (with a gap especially between the proportion of honours class 2.1 compared with 2.2). Prior qualifications were the main predictive factor, and the analysis raises questions about how students entering with lower average qualifications can be supported to achieve their full potential.

There is some indication of differences by subject. The Oxford Admissions Study (Ogg et al., 2009) finds a clear importance of subject-level differences (however crudely measured) and the importance of taking into account the number of firsts in a subject (e.g. research in Oxford showed GCSE grades are much better predictors of examination success for arts students than for scientists (Ogg et al., 2009)). Research at Cambridge also found that while AS Uniform Mark Scale (UMS) was the best overall predictor of Tripos (degree course) performance, for mathematics performance in the STEP III examination was most predictive. And while for arts subjects the best three AS-level UMS were the best predictor of performance, attainment in ‘relevant subjects’ (i.e. subjects that are identified in the University undergraduate prospectus as essential, highly desirable or desirable to the proposed course of study) was the best predictor for science subjects (Partington et al., 2011). Subject variation was found in some (unpublished) analysis, although in this example the dataset was considered too small and ‘lumpy’ to draw reliable conclusions. Building up the dataset over time may enable further investigation. In another example, tracking of student outcomes had shown that students with widening participation indicators achieved lower degree outcomes overall, with variations by type of prior qualification and degree subject studied (Croxford et al, 2013a, 2013b, 2013c). Further qualitative research with staff members was being undertaken to explore whether differences in teaching and learning strategies between departments could account for the differences, with a view to identifying helpful practice to boost outcomes for different groups.

The studies also raise some questions about the comparability of students with different prior qualifications, especially qualifications based on different school systems. Even among ‘home students’ from the UK, entry qualifications can vary greatly between the four UK administrations and between schools/colleges. With the research from Bristol, Cardiff and Oxford relying heavily on GCSEs and A-level qualifications and Scottish research relying on Scottish Highers, groups of students studying for other – or sometimes mixed – qualifications, for example, combining the Cambridge Pre-U with A-levels, are frequently not covered in the evidence base for contextualised admissions. Differences were found in degree outcomes for groups with different types of prior qualification, raising concerns about whether some groups might need more academic preparation than others. The researchers observed that students with qualifications based on the different education systems in the UK are not entirely comparable in terms of their background characteristics. Educational systems and qualifications vary. There may also be differences related to socio-economic status and cultural capital between groups who can afford and have chosen to study in a different administration of the UK, compared to groups studying closer to home.

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47The STEP (Sixth Term Examination Paper) Mathematics is a well-established mathematics examination designed to test candidates on questions that are similar in style to undergraduate mathematics. The STEP is used by the University of Cambridge to underpin conditional offers. The STEP Mathematics III paper is a three hour unseen examination consisting of 13 questions – 8 Pure Mathematics, 3 Mechanics and 2 Probability and Statistics based on A Level Further Mathematics content. See http://www.admissionstestingservice.org/our-services/subject-specific/step/about-step/
48Including subject-level analyses can also affect the relationship between gender, achievement factors and performance (Bickel et al 1975).
Overall the research suggests that students from disadvantaged backgrounds, when admitted to the higher education providers with the highest entry grades, do as well as others from more privileged backgrounds when other key determinants are taken into account (including their prior attainment level) and controlling for other factors (gender, ethnicity). Coming from a disadvantaged background does not affect performance but a low level of prior attainment and the particular qualifications studied might.

Although there are limitations with all the studies, findings have proven to be statistically significant. Moreover, there is some consistency in the findings, and across analyses which include different measures of outcome and ability. However, it is apparent that learning experiences and outcomes vary between courses and providers.

Questions are raised about the usefulness of this type of analysis, as discussed in more detail in section 4.3.2, but it is worth repeating here that a key issue is that research based on past student intakes will never be completely reliable for predicting the future performance of the student body. The pace of change in the current higher education landscape is not helping this issue. It would be useful to explore the impacts of year on year increases in GCSE and A-level performance, and whether this varies in relation to school type and/or student characteristics.49

Slightly higher rates of non-completion were observed amongst educationally disadvantaged entrants from poor performing schools/colleges in one (unpublished) study, although this was not borne out by the experiences of the providers in the research overall. There was also unpublished evidence that among the low non-completion rates (usually below 4%) among the providers visited for this project, mature students were significantly overrepresented. This is a group not usually contextualised at admission through the application of contextual data, although holistic assessment may be applied.

The institutional visits highlighted two instances where research into the outcomes for widening participation students and other groups included the tracking of students beyond higher education into employment. A large scale comparative study from one provider found no significant difference in the proportion of widening participation graduates going into graduate level employment compared to other groups (University of Edinburgh, no date). Institutional research of how students from different neighbourhood classifications fared in employment found that earnings were highest for the most deprived quintile of students but lowest for the second most deprived quintile (this research did not distinguish students admitted on the basis of contextual factors from other students in the same categories).

4.4 Tracking of students for whom contextualised admissions is applied

This section covers the evidence from tracking entrants for whom contextualised admissions is applied, which is starting to build, alongside the implementation of contextualised admissions, in relation to the outcomes for individuals and higher education providers.

4.4.1 Tracking of entrants

Research into progress of groups of admitted applicants where contextual data was used is evolving alongside practice in contextualised admissions. Practice varies:

- In a number of providers, where capacity has been developed for large scale statistical analysis, datasets were building up capable of re-running descriptive statistics and detailed regression and other types of analysis year on year. In some cases results were being fed into developments in relation to data and how it is applied. The general consensus was that the ongoing analysis supported the view that entrants from disadvantaged backgrounds achieved at an acceptable level.

- In other cases the research is focused more at a programme level, and is of a much more qualitative nature owing to the sample sizes involved. A number of published studies of this type were showing that the students admitted on the basis of contextual data were making reasonable to good progress, raising no concerns that might affect the general policy (Hammond et al., 2012; Allison, 2013).

Usually the contextual data ‘flag’ did not routinely appear on an individual’s student record as a trigger for student support, and there was little appetite for doing so as this might be seen as stigmatising. While there was a clear concern to support students who may face issues in transition to and progression through higher

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49 GCSE attainment will now be capped. There was an overall deflation of top A-level grades in 2012.
education, these were not seen as specific to applicants admitted on the basis of contextual data. One of the providers included in the research was looking into whether additional support and preparation for higher education study was desirable for some groups. However, this was seen as an issue related to the educational background of students, for example those with fewer academic qualifications, rather than aspects of contextual data. At the same time tracking of students is important for good data and for evidence to feedback into developments in admissions policy.

4.4.2 Progress of outreach cohorts

Widening participation or access outreach encompasses a broad range of activities, usually targeted by school and college, and often (though not always) linked to being based in a low participation neighbourhood. In 2008 it was estimated that approximately 50% of English higher education providers were using some kind of structured pathway or compact scheme, and a number of schemes offered some form of benefit to participants in the form of a guaranteed interview or adjusted offer (which could be based on participants earning additional UCAS Tariff points through participation in additional pre-entry learning activities) (ACL, 2008). As part of outreach, identification of contextual factors can draw on additional information available as part of an application process to join the scheme, or through data sharing by schools and colleges (SPA, 2012). Focused and targeted outreach means the providers can start to work with future students to help them to achieve their potential at pre-entry stage. SPA (2012) highlighted that ‘compact students’ often meet or exceed the standard offer.

The evidence is starting to build in relation to mapping the progress and outcomes for groups contextualised through outreach activities (both qualitative and quantitative studies depending on the scale of the programmes involved). Institutional research of a longitudinal nature shows that students identified as participants in widening participation outreach do relatively well in higher education. Participants in Newcastle University’s ‘PARTNERS’ programme are a case in point: recent analysis shows PARTNERS students have much lower non-completion rates and perform in line with their peers in degrees. In the last three years, almost 90% of PARTNERS students received a 2:2 or above, compared to 95% of non-PARTNERS students in the comparable year groups. Analysis of PARTNERS graduates shows an increase in the number of 2:1 and above classifications during these three years, and for the most recent cohort proportionally more PARTNERS students received 2:1 or above than non-PARTNERS students (unpublished). Longitudinal tracking evidence of students admitted to the University of Edinburgh through the Lothians Equal Access Partnership for Schools (LEAPS), which takes account of family circumstances as part of work in local schools in order to raise aspirations and attainment, concluded that LEAPS students achieved as good outcomes as their peers with the same prior qualifications (unpublished).

The Realising Opportunities project, led by Newcastle University, demonstrates an example of the development of partnership systems in the field of contextualised data and information in outreach programmes. The central team has recently appointed a new external research team to look at longer term tracking of Realising Opportunities student outcomes. The team collects data within an agreed evaluation framework during the course of the Realising Opportunities programme and there are two published retrospective reports on the progress of cohorts 1 and 2 (Lamont et al., 2011, Kettlewell and Aston, 2012). The first Realising Opportunities cohort is due to graduate in 2014.

4.4.3 Implications for the profile of admitted students

The criteria used in the contextualised admissions models at institutional level provide the key to managing the number of applicants identified for additional consideration. Monitoring shows, as might be expected, that the proportion of applicants who are flagged varies depending on the definitions and data used, ranging from around one in twenty to well over a third across the sample of providers in the research.

Impact modelling at one provider showed that of the applicants that warranted a contextual flag prior to the policy being introduced to inform short-listing, around two-fifths (43%) had not been short-listed, whereas following the decision to formally flag contextualised applicants for extra consideration by admissions decision makers, this had reduced to around a third (32%) not being short-listed. In another example, a provider which had provision to make offers to applicants with a contextual flag at the lowest end of their advertised grade range found that in 2012 the proportion of students with a contextual flag who accepted
offers was seven percentage points above the proportion of all offers made (24% compared to 17%). This was seen as a direct benefit resulting from the offer strategy\(^{50}\): "if we make offers most choose to come... it may have been a big thing for them to apply in the first place and getting an offer boosts their confidence". Information was not available to assess what proportion of these applicants would have met the standard offer or whether a low offer was required for them to take up their place.

One provider with devolved decision making spoke about how formal efforts were made to assess and challenge whether offers were made in line with the overall profile in order that entrants are a fair reflection of the attainment and potential of applicants (i.e. those holding offers should be representative of the general pool). In other providers, consideration of offers against applicants was kept under review to highlight any inequalities. These different emphases map onto nuanced philosophical shifts between emphasising opportunities alone or opportunities as well as outcomes. In general, providers aimed to support the greatest possible number of eligible students to apply but then did not have an explicit concern to admit students which reflected this pool.

Working out which applicants received an offer and subsequently entered the provider due to the contextualised admissions process is somewhat problematic, due to the fact that a range of factors feed into decisions which are not always recorded centrally. This is in line with other research: the SPA survey of contextualised admissions at a sample of providers concluded that the diverse range of factors taken into account in decision making makes it problematic to track and measure the number of applicants each year for whom contextual factors play a significant part in consideration and decision-making (SPA, 2013). Providers in the in-depth research monitored retrospectively against performance indicators including using socio-economic data based on (household) occupational group supplied by UCAS, after the applicant is unconditional firm or is a registered student. Intuitively, where contextual data is used to inform offer making there was a stronger sense that contextualised admissions was having a significant impact. Some interviewees implied that unless admissions decision makers had scope to make differential offers to applicants the implications of contextual data would never be at scale. Some systems were deliberately designed to be "low impact".

Depending on the policy for how data will be applied, there is potential to put in place extremely sophisticated and resource intensive approaches in terms of the data processes involved, which could still end up making fairly minimal difference in terms of the overall numbers of applicants directly affected. However, it is up to each provider to decide what approach to the data, and level of resource, is most appropriate to their own provision.

There was general consensus that contextualised admissions were helping providers to make progress towards their widening participation/access performance indicators. Some providers in England have also agreed an additional goal in their Access Agreement (and in one case had already exceeded this). Some had calculated internal figures in the current cycle which suggest ongoing improvement in widening participation/access performance using the HESA performance indicators measures.

### 4.4.3 Key findings of tracking research

Overall, contextualised admissions is likely to be making a difference to some groups of educationally disadvantaged students who might otherwise have not been admitted (even though the scale of the numbers involved may be hard to assess).

A key point to emerge is that because of the high number of excellent applicants at most of the providers included in the sample, contextualised admissions is most often used at the margins to distinguish between equally well qualified applicants. Because of the selective nature of the providers with high entry grades included in the research, those benefiting from the contextualised admissions policies tended to be higher achieving students who may be in limited supply,\(^{51}\) and whose prior attainment may have meant they would

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\(^{50}\)It should be noted that a one-off bursary was offered to students with contextual flags who achieved standard offer grades.

\(^{51}\)At one highly selecting provider with high entry grades, research was undertaken into the profile of those potentially eligible for admission in terms of their A-level attainment and school sector with a recommendation to slightly reduce the OFFA target, and to introduce additional targets using low participation neighbourhoods (Partington, 2011a, Partington, 2011b).
have a good chance of obtaining a place at many providers. Whilst institutional level widening participation performance indicators have improved, it is unclear, from a sector level perspective, whether contextualised admissions has widened participation and access across the sector. It is, however, making some difference to the pattern of entrants between providers, which may be important in the long term for social mobility.

Generally the evidence for students who were admitted with contextual factors, including those involved in outreach cohorts, supported the view that these students do well in higher education. Even where results were found to be less positive, a key issue is how the results of tracking of contextualised applicants should be interpreted – i.e. whether the findings say as much about the student experience and nature of the teaching and learning received as about the nature of the applicant cohort. Clearly, once students are admitted, providers have an interest in and commitment to making sure their ‘potential’ is fully realised. For example, at one of the participating providers, some students admitted on the basis of contextual admissions fared worse in degree attainment evaluations. The provider interpreted this as a lack of student support and a need to re-evaluate the support available for students who are admitted on the basis of contextualised admissions decision making. The provider is currently collaborating with in-house researchers from its education department to conduct a qualitative study to find out whether, and what sort of, support might be useful for contextualised students, and to explore the attitudes of academic staff. Another provider has restructured its student support systems to create a more inclusive support structure for all students, including contextualised students.

Qualitative research at course level, as part of a contextualised admissions pilot at one of the case study providers, raised issues about the importance of individual and personal factors in student retention and success, as might be expected. The group studied is too small for reliable analysis but interestingly some students who were admitted with three grades lower than standard were doing better on the basis of on-programme measures than students who were admitted with one or two grades below on the same course. Qualitative factors were important here, such as motivation and personal circumstances.

4.5 Other evidence: application of additional testing

There is a general question concerning the extent to which A-level and equivalent qualifications are ‘school/college-leaving’ or ‘higher education entrance’ exams (Stringer, 2008). Internationally, some countries have removed any confusion in this area by having separate school-leaving and higher education entrance examinations. The danger is that additional testing based on notions of ‘potential’ can be construed in subjective ways (Burke and McManus, 2011) which can further deepen pre-existing inequalities. Furthermore, different groups may have different access to tutoring for additional testing and cultural capital with regards to test taking.

This section briefly highlights some of the issues that arise in additional testing, and sets out a range of further issues for considering context in admission that are outside the remit of this report.

Three types of approaches identified for some UK higher education providers include:

- Admissions tests including essay writing exercises, critical thinking assessments, problem solving tests, subject specific tests, cognitive and non-cognitive tests and so on, designed to be predictive (i.e. to enable a correlation to be made between test results and degree success). Some providers assert that these may be useful across a range of subjects.
- Auditions and portfolios, associated with some subjects which tend to lend themselves to particular types of additional testing, such as auditions for voice, instrument and performance, manual dexterity tests (e.g. for dentistry), portfolio assessment for art and design.
- Interviews, which are used by some providers although not in general as standard practice, and are a requirement for some professional courses (e.g. nursing and teaching). Proponents highlight how an interview can be the only aspect of the selection process where selectors engage with the actual applicants.

SPA has developed definitions of tests and guidance on the use of tests as one element in the admissions process. See [www.spa.ac.uk/resources/admissions-tests](http://www.spa.ac.uk/resources/admissions-tests)
A potential benefit of using additional assessments for admission is to evaluate something that is not already evaluated in the scores in other examinations, with the aim, for instance, of more creative thinkers and those with an ability to contribute to during higher education and beyond that might not be captured in achievement scores (Sternberg, 2010). Tests also have the potential to provide an additional differentiator among applicants with very similar prior attainment records. There is a general question whether additional testing increases the likelihood that ‘traditional’ applicants will be successful, with higher education decision makers exacerbating existing divisions in society. The argument here is that tests risk disadvantaging those who may not have had a chance to fully convert their potential into measured examination successes in their previous schooling. In the US, the SAT tests are used as a crucial additional ability indicator in many selection decisions; but the tests are controversial, as illustrated by the history of the SAT in the US. Discussion of whether this test is able to tap into raw aptitude, unrelated to achievement, has proved controversial, resulting in a re-branding of the test as an ‘assessment test’ and then, finally, to a rebranding to SAT without the name designating it as either an aptitude or an achievement test. The SAT has been criticised as being neither social class nor race neutral and, in fact, aggravating and legitimising racial differences in attainment rather than seeing them as strongly influenced by processes related to social, cultural, and economic capital (Kobrin and Patterson, 2011). The National Foundation for Educational Research carried out a five-year longitudinal study examining the use of a generic reasoning test which was piloted as an aptitude test, alongside A-levels, in higher education entrance. Evaluation concluded that the test did not add value in an English context (Kirkup et al., 2010).

As with admissions testing, interviews have been criticised as a potential source of homophily and biases that inevitably lead to a reproduction of white, middle-class students being selected by predominantly white, middle-class selectors (Jacquernet and Yannelis, 2012). Research from selection into medicine suggests that using multiple, focused, and task-oriented mini interviews can enhance selection decisions (Eva et al., 2009). There is also a view that interviews can be used in order to have a dialogue with applicants that helps matching applicants with the most suitable courses for them to prevent degree programme changes and drop-outs.

There is a wide body of literature on the use of admissions testing and interviews as part of the selection process to higher education which was beyond the scope of the current research. For this report on contextual data, the main question is whether admissions testing is a barrier or an enabler for the progression of those potentially eligible for contextualised admission. The institutional visits showed that where tests and interviews were used, they were viewed as providing additional information about an applicant just as contextual data provided more information on the applicants as part of holistic evaluation. Where they are used, success in tests or interviews might thus be necessary, but is hardly ever a sufficient condition for securing admission. In some cases contextual information and data could be used to contextualise an applicant’s test or interview performance. Further research will be required in this area as part of the development of good practice in contextualised admissions.

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53 This used to be called the Scholastic Aptitude Test, then the Scholastic Assessment Test and is now simply SAT.
54 The Scholastic Aptitude Test (SAT) is not currently in use by any higher education provider in the UK as part of the admissions decision making process.
5. APPLICATION OF CONTEXTUALISED ADMISSIONS IN PRACTICE

Key points

- Strategic considerations, and a concern for social mobility and social inclusion by higher education providers and policy makers, have also been important drivers of contextualised admissions. The higher education providers with high entry grades included in the research have strong drivers for contextualising admissions, as a way to widen access and improve the diversity of the student intake, while maintaining excellence.

- Having an evidence base showing strong outcomes for educationally disadvantaged entrants has helped to achieve consensus internally in some providers. Not every provider which uses contextual information and data in admissions researches it to the same extent.

- There are different approaches to applying contextual ‘flags’ and these have differing implications for offer making, and reflect institutional factors. Only a minority of the providers covered by the research used contextual data to make differential offers.

- Contextualised admissions has been supported by gaining leadership ‘buy-in’ at a high level, use of systems and structures capable of integrating data and presenting it to decision makers as part of the admissions process, close links with widening participation practitioners to share data and expertise, and allocation of staff time and resources to apply the data and research and keep it up to date. For any approach to work well, providers need to ensure they receive applications from the types of individuals their policies are designed to address.

5.1 Introduction

This section discusses the conclusions from the fieldwork with higher education providers in the UK to explore the application of contextual information and data in admissions, focusing on the development of policies and how the providers included in the research were applying contextualised admissions in practice.

5.2 Rationale for using contextualised admissions

The fieldwork for this research project with a range of higher education provider staff across the sample of providers suggests that they are seeking to use contextualised admissions to ensure fair access and maintain excellence. A common argument across all the providers included in the in-depth research was that they seek to select applicants with the greatest potential for success on undergraduate programmes, rather than simply those with the highest prior attainment.

Provider perspectives

“We are looking to find those with the highest potential to achieve while they’re here... it’s not perfect but we can say that this is a measure of potential... and seems to be more transparent than someone making a judgement call... we have the top level evidence for it.”

“Our concern is to attract the strongest applicants, a. to university and b. what might be seen as an elite university.”

“...particularly important as a route into professional qualifications, and a route into diversity.”

“Contextual admission is very much the Zeitgeist now.”

In some cases particular managers or academics had been a driving force. These individuals had played an important role in driving forward the development of contextualised admissions policies and gaining consensus for them internally.

There was a clear sense emerging from the fieldwork about how contextualised admissions supports strategic and operational objectives. Institutional mission statements thus might explicitly include references to seeking to admit the students with the highest ability and potential to succeed regardless of background. Or institutional missions might explicitly endorse contextual data, as in the case of University of Edinburgh’s admissions statement: “We recognise that applicants have differing backgrounds and experience and that they do not all have an equal opportunity to demonstrate their potential. We seek to set academic
achievement in context through the consideration of a range of factors.” Some differences in institutional emphasis across the UK reflect the overarching policy discourses in the four UK administrations.

5.2.1 Use of evidence
Not every higher education provider that uses contextualised admissions has undertaken extensive research to inform its institutional policy. Philosophical commitment at institutional and individual level to the principles of fair admissions is an underpinning factor, in addition to empirical evidence both from within the provider and from published work elsewhere. Even where evidence is in place, in some cases the research came after the decision to pursue contextualised admissions had already been taken. The providers in this research who use contextual data, as in the previous study into contextual data use (Bridger et al., 2012), were responding to sector level evidence about under-representation in higher education. The arguments may be different for different learner groups, for example, social justice concerns were most evident in relation to care leavers. Sector level evidence has been factored into providers’ thinking about care leavers, and some providers reference sector reports on this group on their websites as part of their institutional rationale for contextual data use.55

Having an evidence base has benefits because it helps to get consensus internally, and can help to make the policies and reasons for them more transparent to potential applicants, as well as supporting the arguments externally should the need arise. Even where evidence exists it is not always used directly, since other considerations of a strategic and practical nature may come into play. Central admissions teams may need to drive the work, with support from academics and managers with a particular understanding of applicants’ social and educational backgrounds.

There are resource and capacity issues for providers undertaking research, especially large scale statistical analyses, and preparing data for use in admissions. The eight case study providers found the costs to be justified in relation to the benefits to the provider and its students and the message that having a contextualised admissions approach sends to stakeholders, including potential applicants. Some of the providers would like to see improvements in the sharing of access to high quality data to reduce their individual costs. This study found that there is generally an openness to reflect on and actively use findings from other providers, and sector studies.

5.2.3 Risks in not contextualising admissions
Contextualised admissions is identified as having the potential to be a ‘win-win’ for providers with the highest entry grades (widening participation and maintaining excellence). Providers draw on the evidence that has been undertaken at sector level and that is building through institutional studies. Even where ‘value-added’ (above and beyond their entry qualifications) has not been identified for contextualised applicants, the approaches are still considered valid on the basis of social mobility and equal opportunities objectives. Once applicants are admitted, it then becomes the job of the provider to offer them teaching and learning and a student experience that maximises their potential.

Approaches to contextual data are complex in relation to the methodologies for selecting contextualised applicants and when/how it is using during the admissions process. To an extent this reflects the differing institutional contexts: how they approached the problem, what they were trying to achieve and the practical constraints and opportunities facing them. It could be argued that the providers with the highest entry grades and which have high numbers of excellent applicants face the biggest challenge as their risks may be greater. However, these providers also appear to be better resourced in relation to undertaking research and monitoring.

55 The Buttle UK quality mark provides additional focus and imperative.
Risks in not contextualising admissions

- It is increasingly recognised that programmes in any sector which disregard inequalities usually make those inequalities worse by benefitting groups who already have access to good prospects.
- Over reliance on narrow criteria and assessment processes runs the risk of restricting the pool of potential students the provider can draw on.
- Students with genuine potential who are likely to do well in higher education (and beyond) may be missed.
- There are educational and pedagogical benefits within the classroom and for the student experience from having diverse learning communities in higher education (Admissions to Higher Education Steering Group, 2004). Holistic admissions processes at leading US providers for example are based on an idea of ‘crafting a class’ (Stevens, 2007) that includes many aspects of diverse populations (recognising that focusing on group characteristics rather than individual ones carries its own philosophical, political, and methodological challenges).
- Providers may lack useful knowledge and understanding about the circumstances and prior experiences of their students. For example, contextual data may prove important for onward tracking, monitoring and reporting on progress of students, as part of students’ records, both internally and externally (as well as to enable tracking, monitoring and reporting on how groups fare throughout the application and admission stages).

In terms of the risks of applying contextualised admissions, admissions professionals recognise that they may be subjected to challenges, including legal challenge. Decisions about who to admit to higher education rely, ultimately, on academic judgement. Aside from legal challenges, there can be challenges to the use of contextual data and charges of social engineering in public opinion through the media. Providers balance these risks against the equally potent risk of being charged with complacency, elitism, and inaccessibility. This environment highlights the delicate professional balancing of using contextualised admissions in a valid manner that addresses concerns from different stakeholders.

Added into the mix are institutional profiles and priorities and external policy imperatives, including higher education league tables. Higher education indicators such as the UCAS Tariff score averages of admitted students can conflict with the desire to give minimum or differential offers, although in practice since any applicants bring additional qualifications with them their level in terms of Tariff points may be higher than expressed purely in the qualifications that were looked at on application (which may have taken account only of their best three A-level grades, for example). The indication is that overall the number of students who are admitted with lower grades due to the application of contextual data in admissions is rather low across the providers included in the research (and likely to be a small fraction of the 465,000 applicants accepted overall (UCAS, 2012)).

Provider perspectives

The main dilemma is how using contextualised admissions to identify educational disadvantage might conflict with other objectives, because of the potential impact on who gets an offer. These comments relate to a provider which made differential offers.

“Contextual data can be seen as in conflict with other institutional objectives, in particular league table position... This is the main challenge when trying to convince governing councils of the case for contextual data in admission.”

“...an additional dimension is that children from governing council members tend to be in private schools and would be unlikely to be contextualised.”

5.3 How evidence has been transferred into practice in admissions

A key feature of contextualised admissions at the higher education providers included in the research was the formal application of data to applicants. Providers take differing approaches to applying contextual data at different points in the application process and there are differences within as well as between providers (see Annex H for an overview). Although institutional level policy and procedures are in place, many are keen to
stress the imperative to avoid a blanket approach. Rather, they incorporate data into holistic decision making, whereby contextual data offers an additional source of information to be taken into account along the way.

5.3.1 Application of data and indicators
As might be expected, there has been a focus within providers to test different data and indicators. Problems with data caused one academic school to abandon contextual data use during a pilot year: the area indicator chosen in the first instance flagged a particularly high proportion of applicants (around one in four) and the number of ‘false positives’ was high (i.e. analysis found that flags identified too many applicants and schools/colleges that were outside the definition of those the provider was aiming to target, so the system could not be relied on). New data was introduced and alternative definitions agreed: this helped support an institutional approach. Providers appear to have rolled out agreed approaches across their provision in cases where they feel data quality issues have been addressed, or have other reasons for doing so. Annex I details some practices that were identified to address emerging data issues. One provider included in the sample was considering defining (and publishing) the circumstances in which a contextually flagged applicant would not be given additional consideration, because of concern about inaccurate flagging. This would enable admissions decision makers to exercise judgement when encountering flagged applicants who do not appear to merit the designation.

Where expertise and resources allowed, researchers in providers were continuing to refine their use of indicators, and were looking at innovative ways to test the usefulness of different measures. For example, one provider had used income data on students (available retrospectively) to test how far a Classification Of Residential Neighbourhoods (ACORN) correlated with low declared income. This work signalled a move to the use of freely available data from the Output Area Classification (OAC), an Office for National Statistics project, which appeared to be a better option in that it provided a stronger relationship to students’ declared income, which the provider receives from the Student Loans Company (SLC).

In light of possible changes in qualifications (including proposed changes to GCSE and A-level in England, agreed changes following the Welsh Qualifications Review and the introduction of the Curriculum for Excellence in Scotland), the feedback from providers was that further work on attainment indicators was not going to be useful until the details of changes were known.

Provider perspectives

“At individual level you know exactly what the disadvantage is but no one writes about lack of support at home, or deprivation of the area, or poor schooling on their application. I don’t know how finely tuned the data can be…we give them benefit of the doubt.”

“It’s better to have a box where you accidentally take in the wrong people if this helps to access those you’re wanting to reach.”

“Unless you accept the data it’s not workable... It’s resource intensive if you have to rely on the capacity of admissions tutors to interpret it.”

The data and indicators were key areas identified where greater economies could be made. The UCAS Contextual Data Service was found to provide varying degrees of usefulness depending on the institutional approach taken.

Because of the complexity of the data, within providers there is a job to be done to make sure staff involved in the selection process at all levels have a full understanding and appreciation of the data and any issues, sufficient that they are able to make informed decisions in line with institution or faculty/department policy and practices.

A key point to emerge is that providers are working from a premise that socio-economic background, where you live, type of and performance patterns of school attended, along with other factors such as subjects and qualifications studied, can all impact on a person’s attainment and therefore are pertinent to higher education progression. This serves to highlight the embedded nature of the issues that widening participation/access practitioners are seeking to address, and militates against simplistic solutions.
5.3.2 Approaches identified at the higher education providers with high entry grades

The higher education providers with high entry grades included in the in-depth research stressed that decisions were taken on the basis of professional judgement. The degree of discretion given to admissions decision makers varied: some were directed by the institutional policy for offer making, whilst others had more freedom to make decisions that were driven by specific priorities for the subject/course in question.

A key feature of contextualised admissions at the providers was the formal application of data to applicants, which tends to work in three ways, as shown in Table 6. Flagging against a range of criteria is the most straightforward approach, and can allow for differences in data availability to be taken into account. Some providers favour triangulation because they feel it provides more certainty that the applicant merits additional consideration and can reduce the number of ‘false positives’. However, the counter argument is the potential for ‘double counting’ disadvantages, given association between the variables. Decisions also need to be made about what to do with those with only one flag. In some cases data was used as an ‘independent’ measure to corroborate other information on disadvantage for those participating in outreach.

Adjusting applicants’ attainment information is a more sophisticated and time consuming approach, and requires a greater level of investigation in order to provide the evidence for how scores should be viewed so that the applicants’ adjusted scores better reflect their potential to succeed than their ‘raw’ scores. The time and resources involved in undertaking this type of analysis should not be underestimated, especially as it usually needs to be undertaken in a very concentrated period of time at the start of the application process (plus the time it takes to provide guidance and support on how this data should be used). There can be benefits in presenting data to challenge admissions decision makers’ perceptions, especially at the margins of decision-making, and where the option of making differential offers has not been agreed. However it is unclear how much of a difference this has made to individuals being made offers who might otherwise not have been so.

Table 6: Approaches to the formal application of contextual data matched to applicants

<table>
<thead>
<tr>
<th>Approach</th>
<th>Example</th>
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<tbody>
<tr>
<td><strong>Flagging</strong></td>
<td>Example: The most commonly used single flag, or ‘super flag’, used to</td>
</tr>
<tr>
<td>Identification of applicants who</td>
<td>identify that an applicant should have special consideration is the ‘in care’ flag which identifies those who had been in care for three months or more. For several providers, this factor alone triggered a contextual data flag for the application while non-care applicants might need to meet, for example, three other criteria before being flagged as a contextual data applicant throughout the admissions process. Not all providers, however, used the ‘in care’ information in admissions. In one instance, in care status was used for admission and progression monitoring but not as a contextual flag in admission. The institutional data in this instance showed a significant decline for the very small pool of care-leaver applicants between applications (around 0.4% of applicants) and admitted students (0.15%). This instance seems to illustrate that, without flagging, the ‘in care’ group are not admitted in the same numbers as other applicants, thus potentially further exacerbating their previous educational disadvantages. Another provider individually verified the ‘in care’ information by contacting the applicant. Even though the ‘in care’ flag affects a very low number of applicants, within single or low double-digits, the provider still found that the in care identifier on the UCAS form had sometimes been ticked in error, thus further reducing the number of those eligible for this flag.</td>
</tr>
<tr>
<td><strong>Triangulation</strong></td>
<td>Example: In this scenario, providers might test, for example, five contextual flags related to schooling and area information. If an applicant scores low on three out of the five indicators, this would trigger a contextual data flag. For example, an applicant might be in the bottom quintile or bottom two quintiles of general school GCSE performance, school progression to HE and POLAR or ACORN. This would trigger a flag whereas only meeting two of these criteria would not. This approach needs to take account of the extent to which area-based measures are correlated, in order to avoid the potential for double counting disadvantage.</td>
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There is some suggestion from the fieldwork with providers that the link between contextualised admissions and outreach may be increasing in importance (which could reflect applicant experience strategies). Certainly some providers in the sample have increased their outreach activities over time, and schemes which have proven to be very popular with applicants and schools/colleges have been a key source of progression. At the same time there was a recognition that contextualised admissions needs to go beyond those (mainly local) learners engaged through outreach. This is illustrated by one admissions tutor who commented: “those in widening access initiatives are very motivated and may apply anyway...we also want to get to those who are more reticent or gain motivation later in the day, as well as the ones who took part in activities”.

Whilst all the providers in the in-depth study sample had moved to an approach that enabled contextualised consideration of all applications, several of them had initially piloted the formal application of contextual data to applicants on a small scale. Common findings in the pilots related to consistency in flagging and the need to allow some discretion at the level of academic schools within providers. Interviews with admissions staff gave a strong sense that strategic considerations were balanced with pragmatic considerations, which included developing an evidence led approach which enabled ‘buy-in’ internally by a range of academic colleagues and senior managers with different priorities and viewpoints. In some cases they were also thinking about how changes would be received externally, especially amongst their “traditional” target market, whilst wanting something that could be positively promoted to a wider market of potential applicants.

Provider perspectives

A key point to emerge from the fieldwork was that consistency of approach to the factors used to contextualise applications in the admissions process is seen as a valuable corollary to the systematic use of contextual data. Note that this does not mean applicants were being treated the same, but that admissions decision makers were all taking the same contextual information and data factors into account. There could also be greater transparency internally and externally through the publication of the agreed approach to the information and data to be used.

“There is a degree of fairness and transparency... and at least we are being consistent. It’s better than stereotypical decision making by an individual member of an admissions team.”

“not an admissions person just reading something...applying prejudice... or taking pity on you.”

“It gives admission decision makers more information – so they can make a more informed choice…”

“Before it was down to local knowledge or anecdotal information about [the] school and area they’re from.”

The measures (i.e. how the contextual factors were captured) and definitions (i.e. the criteria applicants would need to meet for additional consideration) varied, and in most cases took account of evidence collected by piloting in admissions or retrospective flagging of student data to explore the implications of applying different measures and definitions. In some cases the definitions to be used had been discussed in the light of pragmatic concerns about achieving a manageable volume of applicants. Table 7 gives an overview of the data, methodologies and approaches used to contextualise young applicants, in the context of the types of research and analysis undertaken.

In addition to applying data, many of the providers in our in-depth sample considered contextual information at different stages in the admissions process, particularly information contained in personal statements, to varying degrees. The process varied from formulaic scoring and weighting of the statement to a more
qualitative evaluation. Approaches to the use and assessment of personal statements were based on particular institutional rationale and tradition, although the evidence base for use, and the extent of contextualisation, was unclear.

The picture is complicated because provider decisions take account of a range of internal and external factors, including the availability and interpretation of evidence, and professional judgement on applicants’ attainment and potential. There are data constraints, there are resources implications, and the intricacies of how provider admissions processes work in practice need to be respected.

The application of data brings an element of consistency which is considered to move in the right direction towards transparency and fair admissions. However, practical constraints around data/indicators, coupled with the strong focus in many cases on a more ‘traditional’ view of higher education, suggests that it minimises rather than removes unfairness. Some widening participation applicants benefit from extra consideration or priority for inclusion in the offer group or for available places, but others inevitably fall outside of the policy if data cannot be applied or their qualifications profile does not fit. On balance the providers with high entry grades said the benefits of using contextual data outweigh the disadvantages.

| Table 7: Data, methodologies and approaches used at application stage in case study providers |
|-----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                           | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
| Indicators:                               |        |        |        |        |        |        |        |        |
| School performance indicator for Level 2/age 16 (range of definitions used) | ✓      | ✓      | ✓      |        |        |        |        |        |
| School/college performance indicator for Level 3/age 18 (range of definitions used) | ✓      | ✓      | ✓      | ✓      | ✓      |        |        |        |
| School/college higher education progression indicator (provider derived using own methodology and definitions) | ✓      | ✓      | ✓      |        |        |        |        |        |
| Low Participation Neighbourhood indicator | ✓      | ✓      | ✓      | ✓      | |        |        |        |
| Area of relative deprivation              | ✓      | ✓      |        |        |        |        |        |        |
| Other geo-demographic indicator (includes packages such as ACORN and OAC) | ✓      | ✓      | ✓      |        |        |        |        |        |
| Outreach indicator (completion of agreed programme)** | ✓      | ✓      | ✓      | ✓      | ✓      |        |        |        |
| Declaration of exceptional circumstance   | ✓      | ✓      |        |        |        |        |        |        |
| Higher education background indicator     |        |        |        |        |        |        |        |        |
| ‘In care’ indicator*                      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      | ✓      |        |
| Other individual indicator (refugees)     |        |        |        |        |        |        |        | ✓      |
| Methodology:                              |        |        |        |        |        |        |        |        |
| Application of data*                      |        |        |        |        |        |        |        |        |
| Institutional level approach:             |        |        |        |        |        |        |        |        |
| Implications of contextual data beyond additional consideration*** | AO     | I      | AO     | (some) | GO/I   | AO     | MO     |        |

*F* – flagging; *T* – triangulation; *A* – adjusting scores (i.e. calculating adjusted grades to reflect relative performance as well as using ‘raw’ grades). Providers that triangulate using a range of flags tend to use the ‘in care’ indicator to trigger additional consideration on a stand-alone basis.

** Participation could be flagged in various sustained engagement activities. Depending on the arrangements in place locally, for some schemes participants may qualify for a guaranteed offer. Providers that make adjusted offers could adjust the offer to some groups in line with their policy; in some cases these applicants might also need to meet other contextual criteria to qualify. Under collaborative arrangements for Realising Opportunities, an adjusted offer may be made in line with the broader Realising Opportunities agreement.

*** ‘I’ – highly likely or guaranteed interview; GO – guaranteed offer; AO/MO – adjusted offer (could include an offer at the bottom of the advertised grade range (MO), or an offer which was adjusted from the standard offer on a case basis (AO). Note further indicators and additional consideration may be given at confirmation stage.

56 Depending on the provider’s approach to reviewing applications, those for whom data was unavailable may still have other opportunities to demonstrate their context through their UCAS application, including personal statement and references.
5.3.3 Other higher education providers included in the research

Other higher education providers included in the telephone research were taking similar approaches although several in this group were at an early stage, including trialling approaches as the basis for learning. For example, one provider ran a pilot in 2012 on a particular strand of its provision (Foundation Year programmes); initially considering a range of data but finding that working with the data required a large amount of individualised testing for which there were limited resources in the admissions team. In another provider, with devolved admissions structures, very different approaches to the application of contextual data had been taken within three subject departments (research and analysis is ongoing). Another was undertaking research into outcomes for its student cohort prior to developing an institutional approach.

For providers that recruit students with a wide range of entry qualifications and that, therefore, already scrutinise UCAS applications in order to assess the comparability of their qualifications against the Tariff tables, the application of additional data tests to create contextual data flags to applications risks creating an overly complex system.

Interviews with the additional higher education providers for this study included a number that attract a more diverse range of applicants and where entry grades are generally lower than is the case for the case study institutions. These providers showed considerable interest in the use of contextual data and several had explored the potential for contextualised admissions either through pilots or by undertaking research to compare the outcomes of current students. The post-92 providers included in the study prioritised limited resources in order to support pre-entry outreach and student transition, and improve student retention and success. They were using evidence collected in their institutional research to strengthen and target student support. One provider also pointed out that providers that attract a more diverse range of applicants are already considering a number of different qualifications offered by applicants, and a wider range of learner journeys including more mature applicants and more applicants with vocational or non-traditional qualifications. In this context, it is less easy to find robust datasets that will apply equally to all applicants in order to devise systematic and transparent processes. There were also major issues in relation to the capacity and capabilities of admissions teams to handle complex additional data in relation to a very large number of diverse applications.

In one case, there is evidence that contextualised admissions can benefit all providers, not only those that are highly selective and have high entry grades. One of the providers from the telephone sample is pursuing a pilot that identifies applicants by the use of low participation neighbourhood (LPN) definitions for English applicants and Communities First postcodes for Welsh applicants. Identified students are then considered holistically and may be given a ‘beneficial offer’ at a lower grade than the usual grade for the course. The institution is careful, however, not to provide disincentives to achievement by making lower offers to students who are predicted to achieve higher grades. During the pilot this provider is closely monitoring the impact on entrants and the progress of students admitted through the scheme. Although tracking of data is in its early stages, evidence so far indicates that applicants admitted with ‘beneficial offers’ do well at the provider (based on measures of retention) and that the offer acceptance rates for these applicants are high.

5.4 Internal training and communication

The QAA Quality Code on admission to higher education highlights the need for admissions processes to be supported by appropriately trained and duly authorised staff. In the current version of ‘Chapter B2: Recruitment, selection, and admission to higher education’, the QAA states that “Each stage of the recruitment and admissions cycle is conducted in a professional manner by authorised and competent representatives of the higher education provider” (draft indicator 2).

Furthermore, individuals “are appropriately trained and are sufficiently experienced to carry out their respective roles” (QAA, 2013).

The institutional visits highlighted examples of good practice where all those involved in admissions decision making processes undertook compulsory training before participating in the selection process. This training is more resource intensive in decentralised admissions systems, where hundreds of individuals may be involved in admissions processes, than in centralised admissions processes. Quality assurance systems also require a

http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/B2-consultation.aspx, viewed 12 June 2013
wider reach in decentralised systems. However, examples of good practice are found in both decentralised and centralised admissions systems.

At least one decentralised provider in our visits did not require existing staff to undergo admissions training but there was a compulsory training requirement for new staff. In another example from a centralised provider, the training of ‘readers’ for personal statements was constrained by timings and resources and it was not clear what evidence base and quality control mechanisms were in place for this reading task.

5.5 Constraints and opportunities to contextualised admissions

The in-depth research with higher education providers showed that those that have made most progress in contextualised admissions shared some common features:

- Leadership ‘buy-in’ to the approach at the most senior levels. This could be underpinned by having an evidence base, although was also related to a commitment to progressing widening participation/access objectives and social mobility.
- Systems and structures capable of integrating data and presenting this back to admissions decision makers as part of the regular admissions process. Providers differed in terms of using online systems, paper forms or customised spreadsheets, but all had to make some investment in putting in place systems to integrate contextual data with their admissions information systems and technical expertise to maximise the usefulness of the data.
- Close linkages between admissions and widening participation teams. Widening participation/access outreach teams played an important role in supporting the implementation of contextual data in admissions, including offering expertise and experience of the data, and in explaining the policy to potential applicants.
- Agreement that the policy will be supported in staff time and resources to keep the data up to date and to undertake research and analysis, and monitoring. Several English providers were using resources through their Access Agreement with OFFA to support this work, and elsewhere providers had some financial support for research from their funding council, and more resources may become available in future. Some had invested in datasets for analysis as part of their commitment to research activities.

In addition to issues relating to the availability and quality of data, and the need to use proxies for individual disadvantage discussed above, the barriers identified by providers to contextualised admissions were identified by interviewees as:

- having to balance the needs of competing agendas; managing a programme of contextual data work alongside other admissions initiatives was seen as a particular issue
- problems with getting commonality and in some cases ‘buy-in’ across the range of staff across large and diverse providers
- issues of dealing with external perceptions and communication with potential applicants, which could be time consuming; having an institutional level approach might help here
- problems associated with the amount of extra work generated if a large volume of applicants are identified through the contextual flagging process

The providers included in the in-depth research all had different experiences of how these factors had played out to bring them to their current position. The upside is that this evolutionary process reflects and respects the diverse nature of the UK higher education sector. The frustration for the sector is sheer variety in approaches and lack of clarity and transferability in the conclusions which can be drawn, with the empirical findings from the providers with high entry grades differing from findings from those with slightly lower entry grades. In the meantime, the higher education funding environment and patterns of take-up and demand for higher education continues to change: new rationales for and against contextual data use may come into play if providers see their traditional markets shifting as a result.
**Provider perspectives**

Ultimately, for contextualised admissions to work there needs to be a pool of suitable applicants to apply it to. Provider interviews gave indicators of what else needs to be in place: i.e. linking to their communication with potential applicants and stakeholders and their widening participation/access outreach.

“...there is a lot to be said for making sure the application pool is big enough to deliver the applicants you want to take.”

“...can only work if you can get the applicants... to do that you need to change perceptions that the university is ‘not for me’.”

Importantly, having a policy for contextual data in place in itself appears to have led to gains for providers in terms of generating additional applicants:

“the [contextual data] policy is helping to raise the sight lines year on year.”

“...seeing that we are open to a broader range of applicants has got to make a difference to them applying to us.”
## 6. CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Introduction

This section summarises the key conclusions from the research into the evidence base for contextualised admissions and provides recommendations for future action.

### 6.2 Key conclusions

1. Socio-economic differences in higher education progression persist and are underpinned by educational inequalities. Unless higher education providers take account of disadvantage as part of their undergraduate admissions processes, people with the potential to succeed may be overlooked.

2. This research project evaluated the research and documentation on contextualised admissions that was available from sector level sources, academic literature (some unpublished) and in-house analysis by a number of providers (published and unpublished). The body of research available was quite small, demonstrating that research in the area of contextualised admissions, contextual data and information in the UK is still relatively limited.

3. There are both internal and external drivers supporting the use of contextual information and data in undergraduate admissions. It is part of a strategy to ensure fair access, particularly in providers with high entry grades, and is encouraged by widening access and social mobility policies throughout the UK. Equally there are constraints resulting from conflicting demands and pressures on providers. Complexity has increased for providers by shifts in policy – including increasing divergence across the UK, political imperatives, changing patterns of demand, increased competition, new recruitment practices and incentives, and proposed changes to the curricula for schools and colleges. This complexity reinforces the need for renewed dialogue and leadership about how contextualised admissions plays within an evolving higher education environment.

4. Individual providers are autonomous in their admissions and thus the use of contextualised admissions. Different approaches are taken with varying implications for admissions decision making, which reflect institutional mission and drivers and priorities, as well as being underpinned by differences across the four UK administrations. Providers with high entry grades have strong drivers for contextualising admissions, as a way to widen access and improve the diversity of the student intake, in the context of maintaining excellence. For all providers, including those which already recruit from a diverse pool, contextual information and data enable institutions to inform transition strategies and support for retention and success.

5. Contextual information and data has a role to play throughout different stages of the admissions process. Approaches identified in this research include using contextual information to support holistic decision making by flagging/identifying applicants who warrant additional consideration in the admissions process, which may include interviews or further testing; to identify potential and target attention on applicants whose prior attainment may have been affected by disadvantage; to identify applicants for whom a standard or differentiated offer might be made, or as part of additional consideration of ‘near miss’ applicants at confirmation. The situation is complicated because it may come down to the confidence that providers have about what is going to work best in different circumstances. In some providers different policies apply across the range of subject provision or there may be differences in the approach towards applicants contextualised in different ways (for example, the approach to applicants contextualised through outreach may differ from those contextualised through the application of other data). It is important for providers to be clear about their rationale for using contextual information and data in different ways, and the evidence base they are drawing on to inform their decisions (which could be external as well as internal evidence) and ensure this rationale is published.

6. The research showed that contextualised admissions is used to address disadvantage in the circumstances in which the prior attainment of individual applicants had been achieved. Where, in a minority of cases, differential offers were made, these reflected a judgement that defined applicant potential in relation to course entry requirements and provider evidence of potential to succeed.
### 6.2 Key conclusions

1. Evidence shows that students from disadvantaged backgrounds do at least as well as and, in some providers, better in degree attainment than comparable groups of more advantaged students. Not all studies are in the public domain. Results from the various institutional studies are difficult to bring together because of differences in the data and variables used. Quantitative analysis of large student cohorts over several years produced the most robust evidence but this research indicates the need for more nuanced and qualitative analysis of the influence of student experience on final outcomes.

2. There is some agreement about the value of different data and indicators and recognition of the potential for sharing of data and approaches to avoid duplication of effort. The idea of a centralised source of contextual data and expertise is positively supported by providers, although there are some continuing issues about confidence related to problems of consistency and quality in the additional contextual data from education departments given to providers as a shared service through UCAS. Improving the coverage of the school and college information at 18 and at 16 was particularly high on the wish list of providers. High quality data matched to applicants is welcomed because this would provide efficiencies for the sector (although providers would continue to undertake in-house analysis to determine which data to use according to their individual requirements).

3. The level of resources and expertise required in researching, applying, and monitoring/evaluating a systematic approach to the use of contextual information and data at the sample institutions is a potential barrier to further adoption across the higher education sector, particularly where admissions decision makers are considering a wide range of entry qualifications and prior attainment. However the research noted the increasing number of data analysts within admissions offices, which may be due to the increasing complexity of managing admissions as well as the need to support contextualised admissions.

4. In some providers a significant level of expertise has been built up over a number of years. Providers are working with contextual data in the context of major data limitations and there is no easy solution owing to problems with data accuracy, coverage, reliability and timeliness. Access to better quality data and more individual level data might overcome some of the problems associated with using proxy data indicators of educational disadvantage. Providers wish to focus on individuals, which may be in conflict with external policy drivers towards a focus on populations/area based groups.

5. For any approach to work well, providers need to ensure they receive applications from the individuals their policies are designed to encourage. As contextualised admissions practices become embedded and extended across the sector it is essential that applicants understand what is meant by contextualised admissions, and specifically how information and data will be used in relation to offers of a place. The variety of approaches taken by providers potentially confounds understanding by potential applicants, and staff members in schools and colleges who advise and support them, about what the implications are when applying for an undergraduate place.

6. The use of contextualised admissions fits within a concern to support the applicant experience, as defined by SPA, and the learner journey from pre-application through to entry, graduation and beyond to employment. Some research studies are tracking students not only throughout their undergraduate courses but also into subsequent destinations.

7. A successful widening access strategy is likely to encompass outreach, admissions and student support. Providers with different student profiles will take an institution-specific approach to these elements. Further detailed research and discussion with providers with a wide recruitment base would be useful in order to produce examples of contextualised admissions across the sector.

8. The institutional research undertaken for the project had a strong focus on providers with high entry grades for which contextualised admissions, especially the application of matched data, mainly applied to certain groups of applicants – young applicants with ‘traditional’ qualification profiles, applying for a place on full-time undergraduate courses. This is understandable given issues around assessing data and its relevance for different groups, and the profile of the providers that have made most progress in applying contextual data. However, this narrow concentration creates an issue in relation to thinking about how contextualised admissions can be made more relevant to applicants as a whole, especially in
### 6.2 Key conclusions

the context of the groups that widening participation policy seeks to include.

### 6.3 Recommendations

Consideration should be given to the following:

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<th>1. SPA</th>
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| 1. **Rationale for the use of contextualised admissions:** SPA should refine the definition of contextualised admissions and its rationale and communicate these to the higher education sector, and to schools/colleges for applicants and other stakeholders. This would highlight the aims and objectives for contextualised admissions, and what higher education providers are doing with contextual data and information; and consider the diverse policies in the UK administrations that providers are working under, and the empirical evidence found in this report. The aim would be to ensure **conceptual clarity** on how and why contextualised admissions:  
   - supports fair admissions  
   - makes a difference to widening access  
   - can be a tool for maintaining excellence  

Using this research report SPA should provide clarity on a number of key issues. This could include highlighting that contextualised admissions is not about making lower or differential offers per se, but that such offers following contextualised admissions and holistic assessment would widen the range of applicants applying to higher education providers which have very high entry grades. This is backed up by the evidence from some of the studies in this report, which show that applicants admitted on lower grades in some circumstances do just as well as students admitted with no disadvantages in their educational background. Transparency in the rationale for making lower offers, and at what grades, would encourage more disadvantaged students to apply to courses/providers with very high entry grades. |

| 2. **Sharing expertise and good practice**: SPA should provide good practice guidance, with worked examples, for contextualised admissions that is evidence based, for consideration and agreement within the admissions community. SPA should continue to facilitate the sharing with professional admissions staff of expertise in relation to methods and practices, including for monitoring and evaluating the impacts of contextualised admissions data. The newly established national Admissions Data Analysts Forum could provide one opportunity for this. |

| 3. **Strategic network:** SPA’s expertise should be used in collaboration with leaders in higher education to develop a greater understanding of the use of contextualised admissions within the wider context of institutional strategies, including the applicant experience, teaching and learning, widening access and external policy drivers such as student number controls. |

| 4. **External communication:** SPA has a key role to play in communicating messages and disseminating information to the higher education sector and stakeholders about the use of contextualised information and data for fair, holistic admissions. Admissions procedures and practices should facilitate contextualised admissions and maintain excellence in academic standards, thereby supporting the applicant experience. This should enable the further development of widening participation and social mobility policies. |

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### 2. UCAS/government departments – Centralised data provision

| 1. **Centralised data provision:** To achieve sector efficiencies, there is a case for more central resources and expertise to support timely, high quality data in a form which higher education providers can use in admissions. Technical solutions may need to be applied to ensure accurate matching of data to applicants and the best possible coverage. Further development of the UCAS contextual data service using publicly available data is the most obvious option here. Data-matching to enable providers to access the school or... |
college records of individual applicants may only be achieved through the development of the Unique Learner Number (ULN) System.\(^\text{58}\)

2. **New indicators**: A pilot project would be useful to explore the potential for new school and individual level indicators which could be applied as part of higher education admissions. In terms of school level indicators, the government should investigate the potential for a school selectivity indicator. At verified individual level, a household income indicator at the start of the admissions process would be helpful.

3. **Provision of data through the UCAS contextual data service**: UCAS should continue to support and develop the provision of contextual data to members who request it, matched to the UCAS application data transfer process.

4. **Further development of UCAS provision of school/college indicators**: UCAS should work with education departments in all parts of the UK to further develop the usefulness and quality of school and college level higher education progression indicators for use in admissions, and to explore new measures/indicators working with SPA and UCAS members.

5. **Consultation with UCAS members**: If additional or new indicators are developed, UCAS should consult its members as to whether or not these should be supplied via UCAS as part of its contextual data service, which matches external data sources with individual applicant information.

6. **UCAS data transfer**: UCAS should ensure school and college data for individual applicants is transferred to higher education providers in such a way as to facilitate accurate matching to relevant data indicators.

### 3. Higher education providers

1. **Transparency and good practice**: Higher education providers should ensure their admissions policies are transparent to applicants by being clear about their contextualised admissions process, the information and data that are considered and how and why it is used, in line with the QAA Quality Code on Recruitment and Admissions. SPA will also provide further good practice guidance.

2. **Scope**: Consideration should be given to how applicants presenting with non-A level/Scottish Higher qualifications fit within a higher education provider’s approach to contextualised admissions.

3. **Data and research**: Working with the sector, higher education providers should aim to develop principles and common standards and approaches for tracking and monitoring the outcomes for students admitted through contextualised admissions. This would aid understanding of the impacts of contextual data use, as would the sharing of expertise, data and results by providers, working together to evaluate approaches and outcomes. This type of research requires investment in robust student level datasets. In addition a more integrated approach to data in one IT system (rather than a number of small disparate systems), from widening participation and outreach to admissions and student records, would enhance the availability of data for tracking and monitoring from pre-entry to graduation and employment.

4. **Higher education comparative studies**: Comparative studies would help to identify conclusions about the relationship between attainment at entry and degree performance and the extent to which some providers are able to provide ‘added value’ for educationally disadvantaged students. This would require providers to share data, and such work might include studies related to particular subject groups. Such research can be facilitated by existing higher education networks.

5. **Support to applicants**: There is scope for more active understanding and positive promotion of contextualised admissions to stakeholders (potential applicants, their advisors, schools and colleges, parents/carers) to enable a wider pool of applicants to be considered and ensure that potential applicants do not rule themselves out from even applying owing to fears that their disadvantaged background would not be considered favourably. It would be desirable for higher education providers and sector bodies such as HELOA (the Higher Education Liaison Officers Association) and UCAS to work in partnership with these groups to provide the fullest possible information and support for prospective applicants. This could be

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\(^\text{58}\) ULN is a reference number allocated to UK learners over the age of 14 and linked to individual Personal Learning Records.
taken forward through setting up a specific cross-organisational task group. Research into existing levels of awareness and understanding could be a starting point for this work.

### 4. HE Funding councils

1. **Reform of SNC**: The HE funding councils should make sure that student number controls do not unintentionally constrain some higher education providers from making offers to widening participation students.

2. **Performance indicators**: Those reviewing the performance indicators should be minded to consider that higher education providers may well be using contextual data as part of admissions decision making. Any indicator must take this into account, especially the widening participation indicators.

### 5. Research councils/ HE funding councils

1. **Large scale comparative research**: The research councils or funding councils should undertake a long term comparative study of the performance of disadvantaged students compared to those with no disadvantage using higher education and/or administrative datasets. This approach would allow for in-depth analysis of progression to higher education and outcomes over time by different definitions of socially and educationally disadvantaged students. A programme of research should be instigated including investigation of intersectionality issues, outcomes for statistically insignificant ‘hidden’ groups such as care leavers, consideration of ‘net’ effects, and tracking beyond graduation.

2. **Investigation of other entry requirements**: Further research is required in terms of the implications of contextualised admissions for courses for which entry requirements are based on auditions and portfolios.

3. **Models for different types of higher education providers**: More research would be desirable to identify models of contextualised admissions with a wide range of higher education providers, to support the development of guidance on contextualised admissions which can be applied across the sector as a whole, in addition to providers with high entry requirements.
Annex A: Stakeholders included in the research

Association of Colleges

Association of School and College Leaders (ASCL)

Department for Business, Innovation and Skills (BIS)

Department for Employment and Learning Northern Ireland (DELNI)

GuildHE

HEAT (Higher Education Access Tracker)

The Headmasters’ and Headmistresses’ Conference

Higher Education Funding Council for England (HEFCE)

Higher Education Funding Council for Wales (HEFCW)

National Union of Students (NUS)

Office for Fair Access (OFFA)

Quality Assurance Agency (QAA)

Realising Opportunities

Scottish Funding Council (SFC)

UCAS

Universities UK (UUK)
Annex B: SPA Principles of the use of contextual data in admissions

Principles of the use of contextual data in admissions were agreed by the SPA Steering Group on 18 March 2010 and subsequently updated on 7 June 2010 and are:

i. The use of contextual data within a course’s entry criteria/decision making must be
   - research based and justifiable to ensure the use of data adds value to the process and that HE providers adhere to good practice
   - relevant to the purpose for which it is being used e.g. to add context to the admissions decision making process
   - valid and reliable (bearing in mind that much of the data, for example via UCAS, is self declared)
   - used to improve inclusivity, by recognising potential assessed using evidence based judgement (i.e. applicants may not be treated in exactly the same way as different factors may be considered, all applicants are individuals with different backgrounds)
   - transparent to applicants and their advisors in terms of what contextual data is used, if any, how it will be used, when it is used and how it was used in the previous cycle. This must be communicated to applicants in a transparent, clear and timely manner via Entry Profiles, WP activities; HE websites, in feedback to unsuccessful applicants etc.

ii. Regular monitoring of the use of the data and related audit trails should be an integral part of the admissions process.

iii. Admissions staff using contextual data in decision making should be aware of the issues surrounding contextual data. Professional development and training maybe appropriate to ensure staff understand, and can interpret and use the data. Contextual data should be used as a part of the overall consideration of an applicant and not in isolation; a combination of various items of contextual data should be used in order to arrive at an holistic assessment of the applicant’s potential for the course/programme. Contextual data informs the process of professional judgement which ultimately decides whether an offer is made.

iv. Applicants needing additional learner support or practical advice during their application, transition or when registered as a student, should receive appropriate transition and in-session learner support to ensure their potential continues to be developed.

v. Whilst there may be shared principles in the use of contextual data, it is recognised that individual HE providers are autonomous in the contextual data they use and how it is used within their admissions decision-making process.
### Annex C: Comments on indicators and data sources

<table>
<thead>
<tr>
<th>Individual level:</th>
<th>Example measure(s) used by HE providers</th>
<th>Strengths</th>
<th>Limitations</th>
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<tbody>
<tr>
<td><strong>Description of data and sources</strong></td>
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<tr>
<td>Targeted programme participant Obtained from institutional internal data or other schemes (e.g. Realising Opportunities) Obtained from question in UCAS application</td>
<td>• Successfully completed Realising Opportunities or other compact scheme programme • # Widening participation and aspiration raising activities in preparation for higher education (e.g. summer schools, taster courses, subject specific enhancement courses. Does not include open days). Applicants are also encouraged to give details in their personal statement and/or the referee may expand on this in the reference</td>
<td>• Articulates with HE provider targeting for outreach and WP • Can be used to recognise additional achievement and commitment to the HE provider where the individual has taken part in a structured programme of work. HE provider staff may have good understanding of context of these applicants • Available for all applicants to complete as part of the UCAS application</td>
<td>• There are relatively small numbers in these types of programmes which are unlikely to be open to all learners who could benefit from them. Usually limited to HE provider activity so the focus tends to be mainly local (or regional) • Varied availability of data on participation • The criteria for participation in targeted programmes are applied differently to different types of activities and across the sector • Validating participation and completion in targeted programmes can be resource intensive and problematic (especially for external programmes) • Self reported optional question in the UCAS application. The UCAS drop-down menu does not offer much choice to detail the experience of the applicant</td>
</tr>
<tr>
<td><strong>In-Care status Obtained from question in UCAS application</strong></td>
<td>• # Whether an applicant has spent any time in local authority care • # Whether an applicant has been in care for more than three months • Whether an applicant has been in care for more than six months</td>
<td>• Available for all applicants to complete as part of the UCAS application (Codes C-E are 3 months or more in care)</td>
<td>• Self reported optional question in UCAS application • Open to misinterpretation by applicants • Needs to be verified by HE provider, usually in conjunction with the relevant local authority or applicants themselves</td>
</tr>
<tr>
<td><strong>Disabled learners Obtained from question in UCAS application</strong></td>
<td>• # Disability, special needs (including dyslexia or another specific learning difficulty) or a medical condition</td>
<td>• Available for all applicants to complete as part of the UCAS application</td>
<td>• Self reported optional question in UCAS application • Some issues among case study HE providers about where the reasonable adjustment requirement begins</td>
</tr>
<tr>
<td><strong>Socio-economic class Obtained from question in UCAS application for monitoring</strong></td>
<td>• &lt; Lower socio-economic group household (NS-SEC groups 4-7). Derived from occupation of head of household for young applicants (under 21). Those aged 21+ give their own job title/most recent job</td>
<td>• Available for all applicants to complete as part of UCAS application • Is directly related to HESA performance indicator for HE</td>
<td>• Self-reported optional question in UCAS application • Open text field which is open to misinterpretation • High percentage of missing data (over 20%) • Hard to verify and open to abuse</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>• &lt;Ethnic origin of applicant (UCAS categories)</td>
<td>• Available for all applicants to complete as</td>
<td>• Self-reported optional question in UCAS application</td>
</tr>
</tbody>
</table>

---

58 The UCAS system matches the free-text response to the ONS produced SOC2000 occupation codes to assign an occupation group. The question used from 2008 is: “If you are in full-time education, please state the occupation of the highest-earning family member of the household in which you live. If he or she is retired or unemployed, give their most recent occupation. If you are not in full-time education, please state just your own occupation.”
### Individual level:

<table>
<thead>
<tr>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers (# and &lt;denotes data available to UCAS members for 2013 entry. # available at point of application; &lt;available after decision is made)</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Obtained from question in UCAS application form | • Receipt of FSM at age 15<sup>46</sup>  
  (Held by DFE and used by BIS to derive progression rates to HE by FSM/non-FSM groups) | • Associated with disadvantage as to qualify for free school meals, the child or the child’s parent or carer must be receiving particular qualifying benefits.  
  • Indicates levels of disadvantage amongst learners within the establishment which tends to correlate with HE progression (relative rates of progression by FSM groups in England for example lag behind non-FSM group (BIS, 2011c)) | • Individual applicant data on who is registered for (Scotland) or eligible for (England, Wales and NI) FSM not in public domain and not accessible by HE providers  
  • A study at the universities of Bristol and Bath has identified that FSM eligibility can fluctuate greatly over a child’s schooling (Kounali et al., 2008)<sup>47</sup>  
  • Levels of FSM take-up may not reflect actual need (not everyone who is eligible to receive FSM, for example, chooses to do so). School approaches may affect take-up rates  
  • FSM eligibility is based on benefits claimed and does not include those employed on low incomes | |
| HE heritage obtained from question in UCAS application form | • #Whether or not any of the applicant’s parents, step-parents or guardians have themselves undertaken a course at HE level | • Self-reported optional question in UCAS application | • Self-reported optional question in UCAS application  
  • High percentage of missing data  
  • Hard to verify and open to abuse | |
| Free school meals (FSM) | | | |
| Not currently available at individual level to HE providers at the application stage. | | | |

### Neighbourhood/area level:

<table>
<thead>
<tr>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers (# and &lt;denotes data available to UCAS members for 2013 entry. # available at point of applicant; &lt;available after decision is made).</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Area deprivation, available for the different administrations of the UK. Includes: Index of Multiple Deprivation (England, Wales, Scotland, NI); Communities First clusters (Wales) | • Resident in area within the 40% most deprived super output areas  
  • # (from 2014) SIMD 40 and SIMD 20 | • Readily accessible for all applicants with a valid postcode  
  • Easy to obtain from look-up tables as the data is in the public domain | • Geographical measure which may not represent the person’s individual circumstances  
  • Applicants who move between areas may score differently at different times  
  • Nation specific data (lack of consistency and transferability of data between the four administrative areas in the UK)  
  • Resource intensive to look up individual applicants when HE | |

<sup>46</sup>No examples found of this measure being currently used at institutional level, although BIS tracks higher education participation for individuals in FSM group for annual reporting. Pupil Premium may replace school/college level measure.  
### Neighbourhood/area level:

<table>
<thead>
<tr>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(# and &lt;denotes data available to UCAS members for 2013 entry. # available at point of applicant; &lt;available after decision is made).</td>
<td></td>
<td>providers have thousands of applications</td>
</tr>
<tr>
<td>Socio-economic indicator linked to postcode sectors</td>
<td>• Defined by the most socio-economically deprived categories/deciles in the dataset being used</td>
<td>• Data is available for relatively small geographical units which may come closer to approximating individual circumstances</td>
<td>• Geographical measure which may not represent the person’s individual circumstances</td>
</tr>
<tr>
<td>Sources include: Output Area Classification (OAC) (by Office for National Statistics (ONS): public; MOSAIC (by Experian): commercial; ACORN (by CACI): commercial</td>
<td></td>
<td>• The data is in the public domain</td>
<td>• Draw on a range of underlying data which may not be intended for this purpose</td>
</tr>
<tr>
<td>POLAR: HE progression measure (ward based and linked to postcode) Produced by HEFCE for young participation and adults</td>
<td>• # Lives in an LPN area with low rates of young participation in higher education</td>
<td>• Readily accessible for all applicants with a valid postcode</td>
<td>• Some require commercial packages (license required to be paid for by each HE provider using it ), and may lack transparency about the calculation of categories</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The data is in the public domain</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct relationship with HE performance indicators</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Indicative of background factors for HE progression</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Geographical measure which may not represent the person’s individual circumstances</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The LPN definition (lowest participation quintile) is fairly narrow and may exclude some widening participation/access applicants that HE providers wish to target</td>
<td></td>
</tr>
</tbody>
</table>

### School/college level

<table>
<thead>
<tr>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>School/college deprivation From UK administrations’ school/college profiles Available via UCAS at points of</td>
<td>• # Percentage of students entitled to free school meals (for Scotland percentage registered) by school (from 2013 entry – historical data only by local authority) • The FSM measure is a school-level measure that is associated with disadvantage as to</td>
<td>• Indicates levels of disadvantage amongst learners within the establishment which tends to correlate with HE progression (relative rates of progression by FSM groups in England for example lag behind non-FSM group (BIS, 2011c))</td>
<td>• Measures are not UK wide</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Data is not consistent across all schools/colleges</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Evidence suggests under-reporting of eligibility for free school meals. Drawing individual level inferences from aggregate level FSM data is problematic since it may not reflect the applicant (HE providers can access school/college</td>
</tr>
</tbody>
</table>

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62 The POLAR3 and POLAR2 low participation measures are based on a UK wide classification of areas into participation bands.
<table>
<thead>
<tr>
<th>School/college level</th>
<th>Example measure(s) used by HE providers (# and &lt;denotes data available to UCAS members for 2013 entry, # available at point of applicant; &lt;available after decision is made)</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application for members who choose to access it</td>
<td>Qualify for free school meals, the child or the child's parent or carer must be receiving particular qualifying benefits&lt;sup&gt;63&lt;/sup&gt;</td>
<td>Tends to correlate with school/college level performance measures</td>
<td>School-level FSM information was found to be frequently reliant on head-teacher evaluation rather than accurate statistical data (Kounali et al., 2008).</td>
</tr>
<tr>
<td>Education Maintenance Allowance (EMA)</td>
<td>• # Percentage of students entitled to EMA by school/college (not England)</td>
<td>Gives an additional indicator of the percentage of economically disadvantaged students in the school</td>
<td>Not available for England domicile students.</td>
</tr>
<tr>
<td>School type</td>
<td>• A range of approaches are used to categorise school type (UCAS use groups of: Academy, Further Education, Grammar School, Independent School, Sixth Form College, State excluding Grammar, Other)</td>
<td>Fairly readily available</td>
<td>There are differences in the intake profiles by school type. Pupils who attend top performing comprehensive schools, selective state/grammar schools are more likely to be from higher socio-economic groups than is the average for the state sector. Finer grained measures are needed within the independent/state categories. One study found school type was unknown in a third of cases (O’Leary and Sloane, 2008)</td>
</tr>
<tr>
<td>Performance at Level 2 (GCSE or equivalent)</td>
<td>• # School performance average of students achieving 5A*-C GCSE including English or Welsh and mathematics in England, Wales and Northern Ireland • # Scottish Standard grade/SCQF level 4 or equivalent in Scotland • # School performance average QCDA point score for ‘best eight’ GCSEs in England and Wales • # Scottish Standard grade/SCQF 4 equivalent in Scotland</td>
<td>Results are accessible in the public domain (school/college performance tables)</td>
<td>The datasets are not directly comparable across the UK owing to different examination systems</td>
</tr>
<tr>
<td>Note: school performance data is no longer published for Wales but other data is available</td>
<td></td>
<td>Updated annually</td>
<td>Use of the data requires data cleaning to facilitate matching to applicants. Inconsistent reporting of qualification types hinders linking of relevant qualifications to the correct establishment, as does applicants failing to report complete attendance dates</td>
</tr>
</tbody>
</table>

<sup>63</sup>The institutional visits found that FSM was not generally used to contextualise applicants’ schools/colleges. Only in one instance did this measure form part of the multiple flags connected with applicants’ schooling.
### School/college level

<table>
<thead>
<tr>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| data service at point of application for members who choose to access it | # School performance average QDCA point score per A-level entry (or equivalent) in England and Wales  
# UCAS tariff point score per Scottish Highers entry in Scotland  
# School performance average of QCDA points per A-level student (or equivalent) in England and Wales  
# Average UCAS Tariff points for Scottish Highers per student in Scotland | Results are readily available and in the public domain (performance tables)  
Data is identifiable on an individual school/college basis | Inconsistencies in data entry  
• Year on year changes in performance may lead to a lack of consistency in the particular establishments which are included in the threshold over time  
• Available data at point of application needs to correspond to applicant attendance year at that establishment  
• There is a time lag in data from independent schools. Exclusions of IGCSE attainment by DFE can lead to some independent schools returning low performance |
| Performance at Level 3/SCQF Level 6/7 (A-level or equivalent) | UCAS average Tariff points (at school/college level) | Accessible through UCAS commissioned data  
Obtainable across schools and colleges in the UK through UCAS | Datasets are not directly comparable across the UK  
• Use of the data requires data cleaning to facilitate matching to applicants  
• Missing data is a significant issue because of changes in schools/colleges  
• Relies on a match being made to previous educational establishment which can be problematic due to inconsistencies in data entry  
• Results tend to be skewed for schools/colleges with non traditional qualifications  
• Available data at point of application may not correspond to applicant attendance year at that establishment |
| UCAS data on performance at school/college  
From UCAS (commissioned data) | Progression rates to higher education from school/college (percentage determined by cohort size)  
Progression from Year 11 to further education | Indication of school/college culture and underpinning support | Based on school/college data and may not reflect individual background experiences or their individual potential to succeed in HE  
Only routinely available for school progression to HE in Scotland via Scottish schools on-line |

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64 DFE intends to include established IGCSEs in the published figures in 2014. See http://media.education.gov.uk/assets/files/pdf/q/qualifications%20included%20in%20ks4%20performance%20tables%20in%202014.pdf

65 Discussed in Burgess, 2011
<table>
<thead>
<tr>
<th>School/college level</th>
<th>Description of data and sources</th>
<th>Example measure(s) used by HE providers (# and &lt;denotes data available to UCAS members for 2013 entry. # available at point of applicant; &lt;available after decision is made)</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sutton Trust (University chances by individual school report) (Sutton Trust, 2011) UCAS commissioned data (for Scotland) HE provider calculation of progression to their or other HE providers (e.g. using UCAS and DFE data)</td>
<td></td>
<td></td>
<td></td>
<td>• Assumes different HE provision is equivalent • The measure is not yet available via UCAS but in preparation for inclusion</td>
</tr>
</tbody>
</table>
Annex D: Widening participation performance indicators for higher education

The Higher Education Statistics Agency (HESA) produces comparative data on the performance of UK publicly funded higher education providers in widening participation of underrepresented groups (along with other measures), on behalf of the funding councils for higher education. The specification for the production of the indicators is determined by the Performance Indicators Steering Group (PISG). A review of the indicators used by the sector to measure and benchmark performance is being undertaken by the National Centre for Social Research and the Institute for Employment Studies for reporting in autumn 2013.

The indicators are designed to provide a consistent set of measures of performance. A sector average is calculated for each indicator, which is then adjusted to give an ‘adjusted sector benchmark’ for each higher education provider, to take account of the differences between providers (and in some cases region where the student comes from is also taken into account to give a ‘location-adjusted benchmark’). The adjusted sector average is an average for the sector weighted according to the subjects of study, qualifications on entry and age on entry of the providers’ students. As an average, there will inevitably be providers both above and below this ‘benchmark’ and it cannot therefore be used as a target. It is nonetheless useful as a means of seeing how well a provider is performing compared to the sector as a whole, and to compare student profiles.

The indicators for widening participation of underrepresented groups cover the proportion of entrants from:

- state schools or colleges
- specified age-adjusted socio-economic classes
- low participation neighbourhoods (LPN). The 2011-12 indicators use LPN data produced from the POLAR3 method. LPN data is not produced for Scotland due to the large number of higher education students in further education colleges.

Table D.1: Percentage of young full-time first degree entrants from underrepresented groups by Government Office region of domicile 2011-12

<table>
<thead>
<tr>
<th>Region of domicile(#4)</th>
<th>Percentage from low participation neighbourhoods (POLAR2)</th>
<th>Percentage from low participation neighbourhoods (POLAR3)</th>
<th>Percentage from NS-SEC classes 4, 5, 6 and 7</th>
<th>Percentage from state schools or colleges</th>
<th>Total young entrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total UK*</td>
<td>10.6%</td>
<td>10.2%</td>
<td>30.7%</td>
<td>88.9%</td>
<td>309970</td>
</tr>
<tr>
<td>North east</td>
<td>20.8%</td>
<td>19.8%</td>
<td>34.4%</td>
<td>90.9%</td>
<td>10650</td>
</tr>
<tr>
<td>North west</td>
<td>15.7%</td>
<td>14.4%</td>
<td>33.3%</td>
<td>93.0%</td>
<td>35485</td>
</tr>
<tr>
<td>Yorkshire and the Humber</td>
<td>17.1%</td>
<td>16.2%</td>
<td>33.2%</td>
<td>92.4%</td>
<td>22725</td>
</tr>
<tr>
<td>East Midlands</td>
<td>12.1%</td>
<td>13.5%</td>
<td>32.0%</td>
<td>91.0%</td>
<td>20305</td>
</tr>
<tr>
<td>West Midlands</td>
<td>13.4%</td>
<td>11.8%</td>
<td>35.0%</td>
<td>90.9%</td>
<td>26935</td>
</tr>
<tr>
<td>East of England</td>
<td>11.3%</td>
<td>9.7%</td>
<td>26.9%</td>
<td>88.1%</td>
<td>29375</td>
</tr>
<tr>
<td>London</td>
<td>3.9%</td>
<td>1.7%</td>
<td>34.0%</td>
<td>85.0%</td>
<td>49100</td>
</tr>
<tr>
<td>South east</td>
<td>7.5%</td>
<td>7.9%</td>
<td>23.8%</td>
<td>83.7%</td>
<td>45665</td>
</tr>
<tr>
<td>South west</td>
<td>9.0%</td>
<td>11.9%</td>
<td>27.6%</td>
<td>85.9%</td>
<td>24410</td>
</tr>
<tr>
<td>Wales</td>
<td>10.5%</td>
<td>13.6%</td>
<td>32.5%</td>
<td>95.2%</td>
<td>13035</td>
</tr>
<tr>
<td>Scotland</td>
<td>N/A</td>
<td>N/A</td>
<td>27.7%</td>
<td>87.8%</td>
<td>20830</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>6.3%</td>
<td>5.9%</td>
<td>36.0%</td>
<td>99.4%</td>
<td>11100</td>
</tr>
</tbody>
</table>

Numbers are rounded up or down to the nearest multiple of 5.

Note: POLAR3 (2011-12 publication onwards), POLAR2 (2006-07 publication onwards) and Super Profiles (prior to 2006-07 publication) low participation methods are not comparable.

* Total UK includes England region unknown.

© Higher Education Statistics Agency Limited 2013: http://www.hesa.ac.uk/content/view/2879/
Annex E: Published research into higher education potential – critical case studies

<table>
<thead>
<tr>
<th>Critical Case Study 1: Bristol</th>
<th>Critical Case Study 2: Oxford</th>
<th>Critical Case Study 3: A Welsh university</th>
<th>Critical Case Study 4: Cambridge</th>
<th>Critical Case Study 5 (sector level study)</th>
</tr>
</thead>
</table>

**COVERAGE**

The study pooled application data from three cohorts of students entering in 2002, 2003 or 2004.67 The study is based on 4,305 students admitted to undergraduate study over the three years. Only includes those applying with A-level qualifications and excludes applications to clinical subjects.68

Uses student database which tracks students from initial application through to graduation and into their first employment. There is strong coverage due to the use of transactional data which is a census of all those with A-level qualification into non-clinical subjects who were admitted over a three year cycle.

Captures only one year of data and self-selected applicants who took part in a purposefully administered study, with A-level and GCSE qualifications, admitted to Oxford, and whose degree results after 3-4 years were available. Representativeness checks were satisfactorily carried out on the Oxford data but transactional data is preferable.

The strength of the study is a rich dataset with good coverage as it uses transactional data (i.e. an administrative dataset).

(a) presumably, non UK applicants excluded. Unclear whether any distinction was made between applicants with A-levels and those with other qualifications. (b) the main reported study relies on subject groups large enough to draw inferences. The analysis was repeated for smaller subject groups and generally reflected the pattern of the larger study. (c) a worthwhile small-scale study evaluating the introduction of A* grades. Inevitably, some detailed subject-level and multivariate analysis is not possible.

The study covered 18 year old entrants with A-level qualifications to UK higher education.69 The student outcomes were recorded as ‘continuation/drop-out’, graduation, and degree class (where applicable).

**VARIABLES FOR THE ANALYSIS**

The variables in the analysis are divided into two categories and include educational achievement variables as well as measures of disadvantage and educational disadvantage.

The variables are divided into achievement and potential variables on the one hand and social background variables on the other hand.

Data is derived from the UCAS form and student records and measures achievement and progression as well as social background and area information.

(a) the key variables concern school type and degree class. (b) divided into attainment and potential indicators (including subjects studied at

Administrative data concerning student enrolment and outcomes.

---

67This work was underpinned by a PhD thesis (see Zimdars, 2007).
68During this time, admissions standards and policies did not change significantly.
69Over the three years, this number is approximately 4,700 admitted undergraduates.
69A subsequent study extended the analysis for 19 year olds with consistent results.
<table>
<thead>
<tr>
<th>Critical Case Study 1: Bristol</th>
<th>Critical Case Study 2: Oxford</th>
<th>Critical Case Study 3: A Welsh university</th>
<th>Critical Case Study 4: Cambridge</th>
<th>Critical Case Study 5 (sector level study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engages directly with a discourse of widening participation and contextualising achievement in admissions, explaining the framing of factors as educational disadvantage.</td>
<td>Aims to describe and evaluate the factors that predict degree performance, the background factors are thus not necessarily framed in terms of advantage or disadvantage.</td>
<td>The expected relationship between most of the predictor variables and outcomes (other than LPN) is not explored nor are the limitations in the data.</td>
<td>(a) bivariate analysis therefore multivariate factors e.g. ethnicity, Cambridge college, subject studied, and prior attainment are not included. (b) a sophisticated multivariate research design with significant depth to variables. (c) given the limitations of using one year of data across a wide range of subjects, this seems like a good first approach to the data.</td>
<td>The study evaluates whether lower offers should be made to those who have experienced educational disadvantage.</td>
</tr>
</tbody>
</table>

### CRITICAL ANALYSIS OF THE FRAMING OF VARIABLES

#### ACHIEVEMENT FACTORS

Students achieved summed A-level grades, expressed as a points score\(^{16}\); performance at the end of first year, expressed as an average percentage mark; performance at the end of their final year (third or fourth year depending on the length of the course), expressed as an average percentage mark; and final degree classification (first, upper second, lower second, etc.).

- **GCSEs mean score centred at zero**
  - calculated by scoring A* = 8, A = 7, B = 6, C = 5, D = 4, E = 3, F = 2, G = 1).
  - GCSE squared measure, the Alice Heim (AH) aptitude test;
  - the average proportion of firsts awarded in each subject, 2000–2007, as a control; separate models for arts and science subjects.

- **Predictor: UCAS Tariff score. Outcome variables include achievement in different years (above median year 1 mark, above median combined year 2 and 3 mark, first or upper second degree). Other outcomes included whether year 1 was repeated or re-sat, or the student withdrew.**

- **Predictor: UCAS Tariff score. Outcome variables include achievement in different years (above median year 1 mark, above median combined year 2 and 3 mark, first or upper second degree). Other outcomes included whether year 1 was repeated or re-sat, or the student withdrew.**

#### CRITICAL ANALYSIS OF THE ACHIEVEMENT VARIABLES

- **A-levels used as the main predictor, with scores appearing to have been capped at 360 points, equivalent to three As at A-level. This limits the analysis to a fairly narrow band of students.**

- **A-level results were not useful as students almost uniformly had at least 3 As at A-level. GCSE attainment was the most important predictor of final examination performance. The study tried different GCSE measures and found the same pattern of findings regardless of the measure used. While GCSE results were powerful across subjects, the study found that for arts subjects, scoring high on a cultural knowledge test improved prediction of who would gain a place, but this was not true for science subjects (Zimdars et al. 2009).**

- **The use of the UCAS Tariff score instead of GCSEs and A-levels allows for the inclusion of more applicants and their qualifications. At the same time, it would have been interesting to see whether having sat A-levels or GCSEs was in itself predictive of achievement at the HE provider.**

- **The study evaluates whether lower offers should be made to those who have experienced educational disadvantage.**

#### OTHER BACKGROUND FACTORS

- **Educational disadvantage factors:** Type of school attended\(^{17}\); academic performance of school attended (A-level score divided into). Other factors: Binary social class variable (at least one parent in professional occupation (yes/no)), binary parental education variable. Other Predictor variables are: Low participation neighbourhood identified through Communities First (CF) and POLAR2;

- **A-level score out of 30 where an A counts for 10, a B for 8 and a C for 6 points. A score of 20 could thus be achieved by AA, AB or BBC. Subject-level information or GCSE attainment was not available.**

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\(^{16}\)UCAS standard procedure: A-level Tariff points: A* Grade = 140; A Grade = 120; B Grade = 100; C Grade = 80; D Grade = 60; E Grade = 40. WBQ Core = 120

\(^{17}\)Four categories: independent, state grammar, state comprehensive, state other although for a binary classification (independent/state) is also deployed.
<table>
<thead>
<tr>
<th>Critical Case Study 1: High and low performing schools in Bristol</th>
<th>Critical Case Study 2: Oxford</th>
<th>Critical Case Study 3: A Welsh university</th>
<th>Critical Case Study 4: Cambridge</th>
<th>Critical Case Study 5 (sector level study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>high and low performing schools with the cut-off at 265 UCAS Tariff points; residence in a neighbourhood with low HE participation (POLAR, lowest two quintiles); socio-economic class of student’s household(^7); and binary variables for self-declared disability, being a mature student. Gender was a control variable only.</td>
<td>[at least one parent graduate (yes/no)] and binary ethnicity variable (white/non-white), binary school type (private/state school), binary gender (male/female).</td>
<td>year of entry, age at entry, gender, ethnicity (dichotomous), school socio-economic background, disability, and domicile.</td>
<td>(c) education sector classified into three categories (independent, maintained, other and overseas).</td>
<td>School-level data: School performance in four groups, school type (LEA, FEC, grant-maintained, independent), selectiveness of school, whether single sex girls’ school. HE provider level data: Average A-level points of entrants included in the model.</td>
</tr>
</tbody>
</table>

**CRITICAL ANALYSIS OF THE BACKGROUND VARIABLES**

- Choices mainly driven by data availability and sample size. Binary variables are used for robustness of findings while acknowledging the diversity within social classes and school types. The study includes additional individual-level (disability), school level (achievement) and area level information (POLAR) data.
- The small sample size makes more detailed breakdowns seem impossible. Includes parental education. The social class measure is derived from a survey with information on both parents (rather than information on head of household). There are more ‘known’ data and perhaps slightly higher trust in the accuracy of the reporting. 
- Analysis is restricted to the factors that are in the administrative data set, for example, social class is not analysed in a nuanced categorisation (due to potential unreliability of the data).
- (a) not applicable. (b) the public report clearly summarises more extensive work. An independent check increases trust in the findings. (c) as more years of data are available, it would be desirable to break the predictive power of A*s down by fine-tuned school types, including grammar schools and more detailed school performance measures as well as evaluating the ‘added value’ of A*s over simply using GCSE attainment.

**CRITICAL ANALYSIS OF THE ANALYTICAL STRATEGY**

- Descriptive statistics in a cross-tabulation of background factors and attainment factors and binary logistic regression analysis.
- Analytical strategy: descriptive analyses, multinomial regression analysis (but only upper second and first presented) and probability estimates.
- Descriptive, bivariate and multivariate (bivariate logistic regression) analyses.
- (a) bivariate analysis. (b) multivariate regression analysis. (c) two-way ANOVA, F-statistics, Hochberg GT2.
- Univariate, bivariate, and multivariate analyses including hierarchical modelling.

**ANALYTICAL STRATEGY**

- Uses binary logistic regression. Contains a detailed analysis of the intersection between different entry scores (based on A-level scores out of 360) and degree performance which is particularly useful as an evidence base for the use of school-type contextualised data in HE admission. The study acknowledges the limitations in terms of the underlying cell sizes in the analyses when trying to break the analysis down into small categories.
- Acknowledges that the predictors of gaining a first as opposed to an upper second and the predictors of gaining a lower second and below as opposed to an upper second and takes this into account by using a multinomial logistic regression model. The multinomial model seems to fit the data well. 
- A sound analytical strategy, it is not clear to what extent subject differences were taken into account. It would have been interesting to see further exploration of the Wales/rest of the UK dynamics that the article suggests is linked to the UCAS Tariffs signalling different things.
- Pooling data from several years is an analytical strength. (a) a multivariate design and inclusion of GCSE results might have been able to tease out further details on the relationship between school type and final performance. (b) a sound multivariate analyses was undertaken, it would be interesting to see the full regression models displayed and any hierarchical models explored. No area-level or individual social class indicators are used. (c) displaying any cross tabulations and multivariate analysis would have helped understanding the relationship between the variables when also controlling for other factors.

**KEY FINDINGS – SCHOOL TYPE**

\(^7\)This appears to be derived from UCAS data; 42% of students have unknown information here.
Those from state schools do better than those from private schools with the same A-level grades. Students from state schools were more likely to get a first-class degree and less likely to get a lower second or less than a student from an independent school.

Students from state schools were more likely to perform less well than whites and females from white background inequality (Lucas, 2001). Controlling for literature on effectively maintained predictors are influenced A in HE performance, although they influenced A in line with equivalent prior achievement to non-LPN students. LPN were a heterogeneous group from a range of schools (including independent schools), with somewhat diverse socio-economic backgrounds and broadly equivalent prior achievement to non-LPN students. LPN students were slightly less likely to have favourable degree results than the comparator group. POLAR2 area students had better outcomes than those identified only through Communities First (CF). Those identified through POLAR and CF had the poorest outcomes. This finding did not hold in multivariate analyses thus suggesting it is captured through other individual-level effects. The multivariate analyses show that females have higher performance. England domiciled students perform better than those domiciled elsewhere in UK including Wales, but this might partly be an artefact due to the UCAS Tariff.

### KEY FINDINGS – ATTAINMENT

- Better A-level scores (out of 360 = 3As), the greater the likelihood of a first-class degree, especially for those who attended state schools.
- The mean GCSE score is a predictor of achieving a first. Little evidence for an exponential effect of GCSE in the pooled sample. The mean GCSE score is a better predictor of final examination success for arts students than for scientists.
- Not applicable
- (b) AS UMS scores are the best predictor of university achievement, GCSEs (number of A*s) and subject specific test are also predictors. Those with very good GCSEs from schools with low performance do particularly well. Differences in predictors between arts and science subjects existed.
- (c) first year examination performance is predicted by the number of A*s, there are slightly different patterns for arts and sciences and having 4 A*s does not further improve prediction of performance over having 3 A*s.

### KEY FINDINGS – OTHER MEASURES

- Alice Heim (AH) scores add to the prediction of achievement over and above secondary school grades. Those with the highest AH scores are more likely to achieve a first than those with the highest average GCSE grades. AH scores predict equally well for private and state school students. AH scores measure something distinct from GCSEs. AH verbal ability score is predictive of firsts in sciences. The proportion of firsts within a subject is a significant control. There were no net significant effects of social class, graduate parents, and gender but might be small sample size.
- Students identified as disadvantaged through LPN were a heterogeneous group from a range of schools (including independent schools), with somewhat diverse socio-economic backgrounds and broadly equivalent prior achievement to non-LPN students. LPN students were slightly less likely to have favourable degree results than the comparator group. POLAR2 area students had better outcomes than those identified only through Communities First (CF). Those identified through POLAR and CF had the poorest outcomes. This finding did not hold in multivariate analyses thus suggesting it is captured through other individual-level effects. The multivariate analyses show that females have higher performance. England domiciled students perform better than those domiciled elsewhere in UK including Wales, but this might partly be an artefact due to the UCAS Tariff.
- Not applicable
- (b) gender was a predictor of achievements in all subjects other than mathematics and medicine/veterinary science.
- (c) not applicable.

- Students from independent schools do consistently less well than students from other schools and colleges when compared on a like for like basis. School type was a better predictor of HE outcomes than school performance. This effect cannot be firmly established for the HE providers with high entry grades and among the group of those with an entry tariff of 30.
<table>
<thead>
<tr>
<th>Critical Case Study 1: Bristol</th>
<th>Critical Case Study 2: Oxford</th>
<th>Critical Case Study 3: A Welsh university</th>
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</tr>
</thead>
<tbody>
<tr>
<td>The more nuanced subject-level analysis of the Bristol data is not included in this publication.</td>
<td>Finds a clear importance of subject-level differences (however crudely measured) and taking into account the number of firsts in a subject. There are no social class and ethnicity effects (at a subject level, the sample size was not large enough to robustly estimate those effects).</td>
<td>The study emphasises the heterogeneity of the LPN group, the narrower attainment grades of those studying at HE providers with high entry grades and the importance of thinking about individual-level variations that might be more important than area-level identifications.</td>
<td>Study (b) is a thorough and a solid piece of scholarship (not all findings are fully discussed in the public report). It would have been interesting to see the full school effects for a detailed picture of how schooling effects play out and to be able to evaluate the measures used in more detail. Given the richness of the dataset, further analysis with regards to school selectivity might be interesting; the data could also be used in conjunction with administrative area-level data, for example, LPN, or to match individual-level postcode data as a proxy for social class data. It is not clear whether school performance was in the models in other ways than the adjusted GCSE grades. (c) Trust in the findings will increase if the analysis can be repeated longitudinally with more A* students filtering through the system. Caveats in using the findings are acknowledged within the report.</td>
<td>The finding that school type is a more powerful predictor of HE outcomes than school performance is perhaps surprising and provides an important piece of evidence about the mechanisms at play. The study repeatedly acknowledges the limitations of the findings with regards to the HE providers with the highest entry grades and those with the highest recorded tariff score of 30. The study acknowledges the structure of higher education with independent school students overrepresented among HE providers with high entry grades and those from FECs underrepresented (p. 22). The study acknowledges that establishing the evidence base for lower offers is one approach and that in other countries the approach to differential offers is framed in public policy terms (p. 28, endnote 2).</td>
</tr>
</tbody>
</table>
Annex F: Approaches used to provide information on students’ attainment on entry to the higher education provider

<table>
<thead>
<tr>
<th>Potential on entry</th>
<th>Advantages</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted grades at Level 3/SQF 6/7 and equivalences*</td>
<td>Gives teachers'/tutors' evaluation of the potential and ability of individual students.</td>
<td>Grade predictions contain a degree of error and the relationship between predicted and achieved grades was particularly weak for the 2012 intake. This was due to the pattern of slight year on year increases in attainment over the last few not being carried through in to 2012. Qualifications with similar equivalence may perform differently in the models (see for example Taylor, 2013).</td>
</tr>
<tr>
<td>AS-level results (England)*</td>
<td>Grades can be available on application for state school/college applicants. AS is valuable for comparing applicants from different backgrounds who might otherwise be disadvantaged by lower grades from compulsory education perhaps caused by the greater variety of pre-16 curriculum policies including early entry, emphasis on 'equivalent' qualifications.</td>
<td>The likely future loss of AS in England will place a greater reliance on the use of GCSE results for state school applicants.</td>
</tr>
<tr>
<td>A Uniform Mark Scale, or UMS</td>
<td>UMS is a way of standardising the marking of papers across different examination boards, allowing someone to compare two marks marked by two different examination boards. Grades are then calculated using grade boundaries set at particular UMS scores.</td>
<td>The fine-tuned scores help differentiate students at the highest end of the ability spectrum, thus explaining low prevalence in use of UMS beyond HE providers with very high entry grades. The likely future changes to A-level from modular to linear and the loss of AS in England will mean UMS will no longer be available in England. Not available through UCAS and needs separate, self-declared collection from applicants.</td>
</tr>
<tr>
<td>Admissions tests (SPA defines an admissions test as a timed, unseen, written, paper-based or online test, usually taken in the academic year prior to admission in the summer/autumn term, or at interview.)</td>
<td>Tests include aptitude tests, essay writing exercises, critical thinking assessments, problem solving tests, subject specific tests, cognitive and non-cognitive tests. Tests may be devised by a HE provider or by a group/consortium of HE providers with one or more testing/awarding bodies. Tests may be used by one HE provider for one or more subjects or may be used by many HE providers for the same subject. The results of the test can be used by as one element in admissions decision-making.</td>
<td>The tests give additional information to the qualifications. Well-designed tests may measure potential for high achievement beyond the information captured in grades in qualifications. Not all tests undergo rigorous testing and validation before use in admissions decision making.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Give additional information about the applicant and can simulate the learning experience students might actually encounter later in the course. Interviews are a requirement for some professional courses, e.g. teaching and nursing.</td>
<td>The evidence for using multiple mini-interviews is stronger than the evidence for using single interviews (Eva et al., 2009). Unconscious interviewer bias may occur. There are training and resource implications for conducting interviews that add value and elicit potential rather than ability.</td>
</tr>
<tr>
<td>Auditions and portfolios</td>
<td>Give additional information about the</td>
<td>Bias may occur in construction of ‘potential’</td>
</tr>
</tbody>
</table>

Note: 
*51.7% of all predictions were accurate in the 2009 UCAS application cycle (BIS, 2011d) 
*See DFE, 2013b for discussion of use of AS-levels and GCSEs in predicting degree outcomes. 
*See Glossary for full explanation of A-level UMS boundaries. 
*The type of test used depends predominantly on the course and the attributes deemed appropriate for the professional, vocational or academic discipline. Many are designed to enable a correlation to be made between test results and degree success; i.e. they are designed to be predictive as well as to test aptitude; whether evidence can be presented to support this will require long term study and analysis. See www.spa.ac.uk/resources/admissions-tests
<table>
<thead>
<tr>
<th>Potential on entry</th>
<th>Advantages</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. auditions for voice, instrument and performance, manual dexterity tests (e.g. for dentistry), portfolio assessment for art and design</td>
<td>applicant especially where talent is more important that academic qualifications.</td>
<td>(Burke and McManus, 2011). There are training and resource implications for conducting auditions and portfolio assessment.</td>
</tr>
<tr>
<td>Scottish Highers/Advanced Highers</td>
<td>Advanced Higher and A-levels are good predictors of performance at Scottish HE providers; Highers have a less straightforward connection with degree results.</td>
<td>Advanced Highers are better predictors of high performance in higher education; however, access to taking Advanced Higher is related to schooling context and thus an endogenous measure.</td>
</tr>
<tr>
<td>GCSE results*</td>
<td>Results are available at time of HE applications but are self-declared on the UCAS application.</td>
<td>Some students’ progress on a steeper trajectory during their A-level and this would not be captured in their earlier results. GCSE curriculum decisions e.g. re-sits, early entry are unclear and vary by school/college.</td>
</tr>
<tr>
<td>UCAS Tariff score</td>
<td>Depends on the number and type of qualifications an applicant has and in relation to the scoring system which UCAS has applied to that type of qualification. Not all qualifications used for entry to HE are in the UCAS Tariff.</td>
<td>HE providers with high entry grades are usually only interested in high grades in certain A-levels (or equivalent qualifications) at A* or A and do not use the UCAS Tariff. For HE providers with lower entry grades, the UCAS Tariff can provide an accountable way of accrediting a wider range of qualifications and other experiences of learning, but offers need to be clear and easy to understand in terms of what is and is not included in any offer.</td>
</tr>
</tbody>
</table>

*School level measures are covered in Annex C.

** Decisions need to be made in terms of weight given to academic qualifications over and above 3 A-levels and 8 GCSEs (or equivalent) since not all schools/colleges offer these.
### Annex G: Approaches used to defining outcome measures

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Advantages</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree classification</td>
<td>Routinely collected and recorded and usually relatively easy to access for research purposes.</td>
<td>Only comparable within a HE provider or with similar HE providers. Differences exist in how equivalencies awarded between faculties and subjects. Differences in approach between subject areas/courses which makes comparison across different groups difficult. Differential degree outcomes are not recorded for some courses (notably medical qualifications which are unclassified). Can be a crude measure for many of the HE providers with high entry grades that use contextualised admissions where the vast majority of students gain at least an upper second. Does not take account of students who did not complete their degree.</td>
</tr>
<tr>
<td>Degree raw score</td>
<td>This measure is more nuanced than degree class and particularly useful for picking up the spread of attainment within upper second degrees at HE providers with high entry. Allows for direct comparisons (could include second and third year marks).</td>
<td>Availability within the institution depends on having recording systems for this in place. Does not take account of students who did not complete their degree.</td>
</tr>
<tr>
<td>Completion of programme of study</td>
<td>Routinely collected data. Available at an earlier stage prior to degree completion.</td>
<td>In many of the HE providers with high entry grades that use contextualised admissions, drop-out is below 5%. The small numbers involved make analysis of degree completion of limited usefulness as an outcome measure (although completion may be more useful, and relevant, as an outcome measure at HE providers with lower entry grades).</td>
</tr>
<tr>
<td>On programme marks</td>
<td>Available at an earlier stage prior to degree completion.</td>
<td>Availability depends on having recording systems in student records for this in place. Also, there are arguments that any ‘catch up’ effect of students admitted through contextualised admissions may only be apparent towards the end of degree programmes.</td>
</tr>
<tr>
<td>Life outcomes</td>
<td>In US studies, outcomes of HE experiences have been measured more broadly in terms of civic engagement and contributing to the community after graduation. The benefits of higher education in terms of improving access to employment opportunities across generations, including access to professional occupations, are increasingly under the spotlight as part of the social mobility agenda.</td>
<td>There is a time-lag regarding when data becomes available. There are measurement issues and data capture issues. Differences between groups may be hard to interpret given the range of factors involved.</td>
</tr>
<tr>
<td>Employment</td>
<td>Short term outcome measures are available through graduate surveys including the HESA Destination of Leavers from HE survey and get a fairly high response. However response rates and reliability tail off over time.</td>
<td>Employment outcomes may be limited as an indication of higher education potential given the impact of labour market factors including potential selection bias. Employment data for several years after graduation is difficult to obtain.</td>
</tr>
</tbody>
</table>

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77 At least one UK HE provider included in the research indicated that degree grades alone were not their main test for whether contextualised admissions worked; another HE provider monitored employment rates and salaries as part of its contextualised admissions tracking and monitoring.

78 Overall figures and further information at [http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1899&Itemid=239](http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=1899&Itemid=239)
## Annex H: Points of use for contextual data

| Initial sift | To assess potential as part of holistic assessment  
|             | To give applicants further consideration at short listing stage prior to interview or testing  
|             | To identify applicants who do not meet standard academic criteria but who could be called for interview or otherwise considered for an offer  
| Interview   | To take account of an applicant’s range of experiences and family background, and levels of support received, in relation to their performance at interview  
| Other selection methods, e.g. admissions tests, written work | To identify latent potential by taking into account an applicant’s background in respect of opportunities to achieve particular levels of knowledge/ability  
| Other selection methods, e.g. portfolios, auditions | To identify potential by taking into account an applicant’s background in respect of opportunities to achieve particular levels of knowledge/ability  
| Gathered field | To identify applicants with contextual data flags who may fall below a threshold in a gathered field but have the potential to succeed (for example identified at interview)  
| Offer | To make an offer rather than a reject  
|       | To make a differential offer, which may be lower than the standard offer  
|       | To make a differential offer at the bottom end of the standard offer threshold  
|       | To make a ‘standard’ offer to those with lower predicted grades than would usually qualify to receive the offer (referred to as an ‘aspirational’ offer)  
| Confirmation | To consider applicants with contextual flags or other contextual information whose qualification results are borderline ‘near misses’ and accept them  
| Rationale for rejection | To provide clear and robust reason for rejection at all stages of the application process for institutional purposes  
|       | To inform feedback to applicants  
|       | To improve information, advice and guidance for the future  

Source: Based on Bridger et al., 2012, p. 19

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79. The rationale is to give students who might not otherwise have received an offer the chance of a place whilst maintaining a focus on academic excellence.
Annex I: Useful practices to support data reliability

The data issues are complex, requiring additional work by higher education providers to obtain the most robust and useful data, and providers need a policy or process to enable them to deal with issues consistently and fairly (such as how to deal with missing data). The following were identified during provider interviews and suggest useful practice in applying contextual data in admissions:

- **Use of multiple datasets**: especially helpful and important where there are inconsistencies as a result of data coming from different sources such as across the devolved administrations for schools and colleges, or not being collected in a standard way across sectors.

- **Use of multiple indicators**: has been suggested as useful to address the complexity of educational disadvantage and to deal with data reliability issues, however the approach needs to be transparent and use of multiple factors may add complexity. It will also be important to assess the extent to which use of multiple indicators ‘double counts’ the same factors impacting on learners, in which case a single indicator would be fairer.

- **Standardising data**: this is a helpful approach where there are inconsistencies in the data between geographical areas or over time periods (for example as qualification equivalencies change).

- **Data relevant to target groups**: One higher education provider working with 16-18 schools and colleges compensated for year on year changes in schools data by allowing the Level 3 data to sustain for two years. This was to ensure that eligibility for contextual data flagging was likely to be the same when learners apply who may have received information about the policy at the time of previous outreach activity to publicise it at age 16.

- **Checking individual responses for self-declared information**: For example, following up on care leavers and applicants who are flagged as having extenuating circumstances in order to be clear whether there are inaccuracies in the application and if individuals warrant additional consideration. These numbers are usually relatively small and are thus not too resource intensive to follow up.

- **Using ranked data**, for example performance records, to make decisions about who to interview or make offers to on the basis of where individuals sit in relation to the spread of applicants.

- **Using additional indicators for marginal decisions**: For example, a further trigger might be the use of Level 2/SCQF Level 5 performance measures in addition to Level 3/SCQF Level 6/7 when a decision needs to be made between applicants who are matched in other ways.

- **Dealing with missing data**, such as gaps in school and college performance data due to changes in schools and colleges and differences in data availability between regions. The default presumption was that where data was missing applicants would not be included in the contextualised admissions group. In some cases admissions officers consulted other information to assess school factors (e.g. websites).
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## Glossary

| ABB+ | ABB+: Applicants attaining ABB and above (or others on the HEFCE exemptions list) are exempt from the HEFCE student number controls (SNC). High grades in A-levels or in other qualifications on the HEFCE exemption list are used in the SNC for England for applicants entering higher education in the academic year 2013-14. AAB+: For 2012-13 entry exemption was set at AAB and above. |
| AAB+ | |

| Access Agreement | Agreement required from any higher education provider with HEFCE student numbers (received directly) that plans to charge fees above £6,000 p.a. in England, setting out the fees and the access measures that will be put in place including financial support, outreach and retention work. |

| ACORN | A Classification Of Residential Neighbourhoods (ACORN) dataset, which provides a geo-demographic segmentation of the UK population according to neighbourhoods, postcodes, or consumer households. ACORN has 5 categories, 17 groups and 56 types. The classification was developed by Consolidated Analysis Centres Incorporated (CACI). |

| Alice Heim (AH) scores | Scores on the Alice Heim Group Ability Test developed in the Cambridge Psychological Laboratories. The version of the test used in the Oxford Admissions Study had been designed specifically to test for potential and aptitude among high achieving students. |

| Applicant | Potential student who has made an application for a place on a higher education course. For full-time study, applications to UK higher education providers are usually made through the UCAS system. |

| ASCL | Trade union and professional association for leaders of secondary schools and colleges in the UK. |

| BIS | Department for Business, Innovation and Skills (England), responsible for government policies to support business growth and higher skills across the economy. The BIS portfolio includes responsibility for higher education, further education and apprenticeships. |

| BTEC | Qualifications offered by the awarding organisation Edexcel. BTEC Level 3 national qualifications are work-related qualifications designed to incorporate vocational learning into school and college curricula and meet the needs of employers as well as allowing progression to higher education. |

| Bursaries | Financial support from higher education providers for students from low income households or for students who meet other specific criteria defined by the provider. Bursaries are grants to individual students which are not repayable. |

| Clearing | Point in the UCAS application cycle when any unfilled places on higher education courses are made available to applicants who are still seeking a place. |

| CF | Communities First, a Welsh Government community focused programme which supports the most disadvantaged people in the most deprived areas of Wales with the aim of contributing to alleviating persistent poverty. Communities First Clusters are focused around areas (on average, some 10-15,000 people) which are among the 10% most deprived in Wales according to the Welsh Index of Multiple Deprivation (WIMD) 2011. |

| Conditional offer | An offer made by a higher education provider to an applicant dependent on them achieving specified requirements (usually related to attainment of |
grades in qualifications).

**Confirmation**
Point in the UCAS application cycle when higher education providers are able to confirm the conditional offers they have made to applicants, usually when the results in public examinations are published.

**Degree course (undergraduate)**
Higher education course where the resulting award is a first degree, usually a foundation, degree or bachelor’s degree.

**EMA**
The Education Maintenance Allowance aimed to support students to stay in education at age 16. 16-19 year olds from economically disadvantaged backgrounds were paid allowances in return for staying in education. This policy was abolished in England in 2010 but continues in the other UK administrations.

**FE**
Further education refers to a wide range of provision for post-16 and older learners including vocational, leisure and access to higher education courses. Further education is commonly provided by colleges, but also found in institutes of education, schools/colleges and in the workplace.

**Buttle UK (formerly Frank Buttle Trust)**
A charity that supports and raises awareness of the educational needs of children in care and care leavers. It provides grants annually for school fees, child support and students and trainees, and also monitors and issues a Quality Mark that can be awarded to further and higher education providers that meet certain criteria in the support they offer care leavers (the criteria includes highlighting a designated person to assist the needs of care leavers, a Care Leavers’ Bursary, 365 day a year offer of accommodation, workshops in finance and self-management and pastoral care).

**FSM**
Free School Meals are paid for by government to low income pupils up to age 16 who qualify on the basis of receiving particular benefits.

**FYPSEC**
The Full-time Young Participation by Socio-Economic Class measure is used to show young higher education participation in England by lower socio-economic groups and those on FSM (BIS, 2011e).

**GCE A/AS**
General Certificate of Education Advanced and Advanced Subsidiary level qualifications (attainment of two or more Advanced level passes/four or more AS-levels equates to Level 3 on the National Qualifications Framework).

**GCSE**
General Certificate of Secondary Education (learners who attain five or more A*-C Grades at GCSE have reached the Level 2 threshold).

**GNVQ**
General National Vocational Qualification (GNVQ Advanced qualification is at Level 3).

**Graduate**
Higher education leaver who has achieved a bachelor degree or higher degree.

**HE**
Higher education is education leading to qualifications (or credits) above Level 3 on the NQF including degree courses, postgraduate courses and Higher National Diplomas. Higher education is offered by universities, colleges of higher education, and a number of further education colleges and private providers.

**HEAT**
Higher Education Access Tracker service was formed following the end of Aimhigher providing systematic tracking, and contextual and other data to a group of 20 higher education providers mainly located in the south Midlands, south and south east England.

**Firm choice**
An applicant’s declared first choice (if the offer is unconditional these applicants are assumed to have accepted the place).

**Funding council**
The funding councils distribute public money for higher education to universities and colleges, and ensure that this money is used to deliver the greatest benefit to students and the wider public. In England this is HEFCE, in Scotland the SFC, in Wales HEFCW, and in Northern Ireland DELNI.
<table>
<thead>
<tr>
<th>HE provider</th>
<th>A university, college of higher education, private higher education provider or further education college offering higher education courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEIPR</td>
<td>The Higher Education Initial Participation Rate provides the participation rates for first-time participants aged under 30. In England, the calculation is based on 17-30 year old English domiciled first-time participants at UK higher education providers, and English, Welsh and Scottish further education colleges. Published since 2004, the HEIPR is the data usually cited for participation rates in higher education in England (BIS, 2012a).</td>
</tr>
<tr>
<td>HESA</td>
<td>The Higher Education Statistics Agency collects, analyses and reports on higher education statistics for universities and colleges in the UK.</td>
</tr>
<tr>
<td>IAG</td>
<td>Information, advice and guidance is a broad term describing the support needed by young people and adults to help them make decisions about their future, which includes careers education and advice and information about progression options in and beyond education.</td>
</tr>
<tr>
<td>Indices of Deprivation (ID)</td>
<td>Indices of Deprivation (formerly IMD in England, Index of Multiple Deprivation) combines a number of indicators, covering a range of economic, social and housing issues, into a deprivation score for each small area in England allowing for each area to be ranked relative to one another according to the level of deprivation. The Indices of Deprivation are calculated for small areas called Lower Layer Super Output Areas, which equate to between 1,000 and 3,000 population (average of around 1,500).</td>
</tr>
<tr>
<td>Insurance choice</td>
<td>An applicant’s confirmed second choice (in case the conditions of the firm choice are not met). This choice is usually a lower grade offer but not necessarily.</td>
</tr>
<tr>
<td>Level 2</td>
<td>Equivalent to five GCSEs at grades A*-C/BTEC First Diploma or OCR National Certificate Level 2/Level 2 NVQ/Intermediate GNVQ.</td>
</tr>
<tr>
<td>Level 3</td>
<td>Equivalent to two or more advanced level passes/four or more AS levels/NVQ Level 3 and GNVQ advanced.</td>
</tr>
<tr>
<td>LPN</td>
<td>Low (higher education) Participation Neighbourhood, derived from POLAR data available on the HEFCE website that covers the whole of the UK and representing the lowest participation quintile. See more detail under POLAR below.</td>
</tr>
<tr>
<td>Mature student</td>
<td>Aged 21 or over on entry to higher education</td>
</tr>
<tr>
<td>MOSAIC</td>
<td>Classification system developed by Experian which classifies the UK population into 15 main socio-economic groups encompassing 67 different types.</td>
</tr>
<tr>
<td>NQF</td>
<td>The National Qualifications Framework sets out the level at which a qualification can be recognised in England.</td>
</tr>
<tr>
<td>NSP</td>
<td>The National Scholarship Programme provides financial benefit of at least £3,000 (pro-rata for part-time students) to new entrants in 2013-14 and 2014-15 who are residents in England or EU nationals whose household income is not more than £25,000p.a. Higher education providers are responsible for setting criteria, publicising their NSP award schemes, and making individual awards to students which include a match funded element. The NSP is designed to complement existing institutional bursaries and other widening participation activities. Following the spending review in June 2013, the government announced that the NSP will cease as an undergraduate programme from 2015-16 (allocations to higher education providers for undergraduates will continue in 2013-14 and 2014-15).</td>
</tr>
<tr>
<td>NS-SEC</td>
<td>The National Statistics Socio Economic Classification is an occupationally based classification system with rules to provide coverage of the whole adult</td>
</tr>
</tbody>
</table>
population, and calculated by coding the job of the head of household or main earner to the unit groups of the Standard Occupational Classification (SOC) 2010 and details of employment status. NS-SEC is often used by national organisations and agencies to classify the socio-economic background of students including in the performance indicators for higher education.

<table>
<thead>
<tr>
<th>NVQ</th>
<th>A National Vocational Qualification is a 'competence-based' qualification based on national standards for various occupations.</th>
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</thead>
<tbody>
<tr>
<td>OAC</td>
<td>Output Area Classification, a joint project to provide free data in the public domain between the Office for National Statistics and other agencies, which profiles the population using key results from the Census of Population to indicate the characteristics of local areas. OAC is a National Statistic and is Crown copyright, but supply is under straightforward and unrestrictive terms and conditions and the data is available without charge from several sources geared to particular user communities. Census Output Areas focus on population of 125 households. Detailed classifications have been developed and applied to population clusters, using seven ‘super groups’ and it is also possible to drill down into a more fine grain of the classification.</td>
</tr>
<tr>
<td>OFFA</td>
<td>The Office for Fair Access is a public body that helps safeguard and promote fair access to higher education in England, including approving and monitoring Access Agreements.</td>
</tr>
<tr>
<td>Outcome Agreement</td>
<td>In Scotland, Outcome Agreements are annual agreements which set out what higher education providers plan to deliver in return for their funding from the Scottish Funding Council. There is a particular focus on the contribution that Scottish providers will make towards improving people’s life chances through opportunities for all and widening access.</td>
</tr>
<tr>
<td>Part time higher education</td>
<td>HESA defines part-time students as those recorded as studying part-time or full-time on courses lasting less than 24 weeks. UCAS provides an information service for part-time courses, but applicants apply directly to the provider.</td>
</tr>
<tr>
<td>Personal Statement</td>
<td>Part of the UCAS application where the applicant can write freely about themselves and their interest in the subject.</td>
</tr>
<tr>
<td>POLAR</td>
<td>Higher education participation area classification (Participation of Local Areas), which is a classification of small areas including the participation of young people in higher education for geographical areas representing the chances of young people entering higher education by where they live. This is UK wide and available on the HEFCE website. From 2006-07 onwards LPN was calculated using the higher education participation rates of people aged 18 between 2000 and 2004 who entered a higher education course at a UK provider or British further education college, aged 18 or 19, between academic years 2000-01 and 2005-06 (POLAR2). The latest release (POLAR3) is based on the higher education participation rates of people who were aged 18 between 2005 and 2009 and entered a higher education course in a UK provider or English or Scottish further education college, aged 18 or 19, between academic years 2005-06 and 2010-11. HEFCE uses the POLAR classification as part of calculating widening participation funding allocations (POLAR3 will be used for the 2013-14 allocations onwards). With the POLAR3 classification HEFCE has also published a separate classification based on the proportion of higher education-qualified adults in an area (also used in the funding method for widening participation). HESA uses POLAR to measure institutional performance.</td>
</tr>
<tr>
<td>QAA</td>
<td>Quality Assurance Agency for Higher Education, established in 1997, funded by higher education provider subscriptions and contracts with higher...</td>
</tr>
</tbody>
</table>
education funding bodies and government departments, to safeguard standards and improve the quality of UK higher education. Offers advice, guidance and support to help providers provide the best possible student experience. Conducts reviews of providers and publishes reports and good practice guidelines.

| SCQF | Scottish Credit and Qualifications Framework, sets out the level at which a qualification can be recognised in Scotland. |
| SIV | Strategically Important and Vulnerable subject. The funding councils may intervene where the scale of teaching and research is at risk and the subject is strategically important. |
| SNC | Student Number Control refers to the systems that UK administrations have devised to manage the funding of student places in higher education. In England, the HEFCE student number control is the limit set by HEFCE on the number of funded student places granted to each higher education provider. Since 2012, in addition to core allocations of funded places for each provider, funding has been set aside for student places which are exempt from student number control. These places relate to students in specific categories, including those who achieve grades ABB+ at A-level or equivalent. In Scotland, the Scottish Funding Council amended institutional student number controls in 2012 such that limits are set for students who live in Scotland and the EU. There are no limits for those who live in the rest of the UK. In Wales, for 2013 entry, HEFCW student number control includes core numbers for each provider plus additional allocations based on institutional performance and for courses that charge lower tuition fees. In Northern Ireland, DELNI amended institutional student number controls in 2012 such that limits are set for students who live in Northern Ireland and the EU. There are no limits for those who live in the rest of the UK. Full details of the allocation of student numbers are available on the relevant funding council websites. |
| STEM | Science, Technology, Engineering and Mathematics subjects. STEM subjects are designated as strategically important to UK education and the economy. |
| Student Loans Company (SLC) | The Student Loans Company is a non-profit-making government-owned organisation set up in 1989 as part of the government’s financial support package for students to provide loans and grants to students in universities and colleges in the UK. |
| SOA | Super Output Area, a geographical unit of around 1,500 residents providing statistical profiling at neighbourhood level including in official statistics for levels of social and economic disadvantage for individuals resident in such areas. |
| ULN | Unique Learner Number is a reference number allocated to UK learners over the age of 14 and linked to individual Personal Learning Records |
| UMS | The Uniform Mark Scale is a way of standardising the marking of papers across different awarding organisations for AS and A-level examinations thus facilitating comparability across subjects and overtime. Grades are then calculated using grade boundaries set at particular UMS scores. From 2008 onward, many subjects moved from 600 to 400 UMS for A-level and from 300 to 200 UMS for AS-level. There are also subjects, such as Japanese and Chinese, with 200 UMS available for the A-level and 100 for the AS. Some A-levels (e.g. mathematics and single sciences) retain the 600 UMS mark system. |
Raw marks awarded in an exam are converted to UMS marks according to the difficulty of the exam paper and the performance of candidates. For example, one year a candidate may need 62 raw marks to get an A grade (80%), but another year 62 marks may only be equivalent to a B grade (70%). This means that it is possible for candidates to achieve full UMS marks in an exam, even if they didn’t receive full marks in the actual exam. An A* grade was added in 2008 as a replacement for the advanced extension awards (AEA). The A* grade is only obtainable in the A2 level. For all subjects this requires a student to obtain 80% of all the UMS available in addition to 90% of the UMS available in the A2 modules. However, this is different in A-level maths. To obtain an A* in A-level maths one must obtain 80% of the available UMS in the whole A-level and at least 90% (180 UMS marks) across the two required A2 modules C3 and C4. These criteria are applicable to different exam boards.

A-level UMS boundaries are as follows: A* requires 80% of available UMS + 90% of available UMS in A2 modules; A requires 80% of available UMS; B requires 70% of available UMS; C requires 60% of available UMS; D requires 50% of available UMS; E requires 40% of available UMS; U if less than 40% of available UMS.

UCAS is the application service for universities and colleges that deals with applications to most full-time courses at most higher education providers in the UK, providing a centralised application point for students. It is funded by its members, the higher education providers in the UK, and by the applicants’ fee.

The UCAS Tariff is a means of allocating points to compare a number of post-16 qualifications used for entry to higher education. It was developed to help learners consider application choices and to provide information to universities and colleges about a wide range of qualifications.

Vocational education and training, which is learning directly related to work or employment and which prepares learners for particular careers, occupations or trades and may involve an element of work experience.

Policies or initiatives designed to ensure that all those who have the potential to benefit from higher education have the opportunity to do so. Sometimes linked to widening participation, access to higher education includes concern for those who are already on track to enter higher education but may need support to apply to higher education providers with the highest entry grades.

Referring to policies and activities designed to ensure that higher education participation includes more people from currently underrepresented groups, especially those from low socio-economic backgrounds, young people in care, disabled people, vocational learners and adult learners.

Widening Participation Strategic Assessment, requested by HEFCE from English higher education providers. An institutional statement that outlines overarching commitment to widening participation and sets out what a provider is doing to widen participation and how this is being embedded in the institution.

Widening Participation Strategic Statements, which are being introduced for 2013-14 as part of the plans for integrating the WPSAs required by HEFCE with OFFA Access Agreements.

Aged 20 and under on entry.