

1994 group >

Established to promote excellence in research and teaching. To enhance student and staff experience within our universities and to set the agenda for higher education.

**Research Report
January 2008**

New Foundations, Enduring Values

**Undergraduate Education,
Research-intensive Universities and the
Government's Reforms of 14-19 Education in
England**

**Findings from a research project funded by
the DCSF and the 1994 Group**

Contents

Foreword by Professor Steve Smith, Chair of the 1994 Group	1
Research team and acknowledgements	3
Executive summary	4
Context	8
New foundations: the government's reforms of 14-19 education in England	9
Enduring values: undergraduate education in research-intensive universities	10
The research project	11
Findings	14
Undergraduate education in research-intensive universities: contemporary pressures and future directions	14
<i>Current initiatives in undergraduate education</i>	14
<i>The employability of graduates</i>	
<i>Widening participation and attracting a diverse student population</i>	
<i>Securing an optimum profile of undergraduate recruitment</i>	
<i>The nature of the admissions process</i>	18
<i>The educational background of current undergraduates</i>	
<i>Supply and demand among well-qualified applicants</i>	
<i>The support needs of the first-year undergraduate</i>	22
The government's reforms of 14-19 education: the perspective of university senior managers	23
<i>GCE A-level: the new A* grade</i>	24
<i>The Extended Project</i>	25

Diplomas	25
<i>The potential match of Diploma content to current undergraduate courses</i>	
<i>Supply and demand among well-qualified applicants</i>	
<i>Diploma curricula and methods of assessment</i>	
<i>Diplomas and admissions policy</i>	
<i>Factors influencing the acceptance to undergraduate courses of applicants holding Diplomas</i>	
<i>Estimates of the number of Diploma-holders who might be recruited in 2010</i>	
Undergraduate admissions and the 14-19 reforms: patterns and prospects reported by admissions tutors	33
<i>Sample of respondents</i>	33
<i>Awareness of the government's reforms</i>	33
<i>Supply and demand among well-qualified applicants</i>	34
<i>The Extended Project</i>	35
<i>Changes to GCE A-levels</i>	41
<i>The A* grade</i>	
<i>Changes to module structures and assessment</i>	
<i>Diplomas</i>	44
<i>Implications of the introduction of Diplomas for undergraduate admissions</i>	
<i>The likelihood that departments will admit applicants with Diplomas from 2010</i>	
<i>The significance of the UCAS tariff in decisions concerning Diploma applicants</i>	
<i>The appropriateness of the mandatory Diploma content</i>	
<i>Entry requirements for Diploma applicants relating to Additional and Specialist Learning</i>	
Analysis and conclusions	58
Undergraduate admissions, research-intensive universities and the government's 14-19 reforms: what is at stake?	58
Key findings from the research and their significance	59

New patterns of undergraduate admissions?	63
<i>A-level course structure and the A* award</i>	63
<i>The Extended Project</i>	65
<i>Diplomas</i>	66
Successful implementation of the reforms during 2008-10: considerations for government and for research-intensive universities	68
<i>Considerations for government</i>	68
<i>Considerations for research-intensive universities</i>	71
References	73

Foreword

The 1994 Group welcomes the significant steps the government has taken to reform the 14-19 curriculum. The centre-piece of this package of reform is the launch in September 2008 of the 14-19 Diplomas, alongside the introduction of the Extended Project and changes to the structure and grading of GCE A-level courses.

How prepared, though, are universities for this potential revolution in the school and college curriculum? The answer is variable. Little work has yet been done to assess the effect on undergraduate admissions of the changes to A-levels. The level of involvement of higher education in the early-stage development of the Diplomas was less than desirable. It is forecast that in September 2008, 38,000 school students will enrol on one of the first five Diploma lines – and a proportion of them will be looking to gain entry to higher education in 2010. The fact that institutions did not receive the detailed content of the new qualifications until September 2007 has made it very difficult for them to begin to determine the likely quality of entrants. Only very recently, has the tariff to be awarded to Diplomas by the Universities and Colleges Admissions Service (UCAS) become clear. Without these two pieces of information it has been impossible for higher education institutions to answer questions from schools and colleges about the acceptability of Diploma applicants. Without clear answers, the potential for schools and colleges to persuade students of the highest quality to take this new qualification is significantly undermined.

In recognition of the importance of the government's curriculum reforms and as part of our strong commitment to the student experience, in January 2007, the 1994 Group launched a joint project with the DCSF to assess the impact of the changes to 14-19 education on our member institutions. This important report, the central output of this project, provides the empirical evidence needed to inform policy discussions and plan more detailed consideration of the reforms. Equally, the report provides to government a critical and informed assessment of how the reform package is likely to interact with, and influence, the dynamics of undergraduate admissions. By designing their fieldwork and analysis in a broad context, by reporting in telling detail the thinking of a wide range of senior staff and admissions tutors, and by undertaking fresh statistical modelling of likely admissions patterns the research team has produced a body of evidence that can prove influential in the thinking of all universities on these issues.

The Group's work on 14-19 reform is reflective of our member institutions' strong and shared belief in the role of universities within the wider community. All universities play a central part in the community in which they are situated. 1994 Group universities, located in the main outside of the major civic centres, play an even greater role than many. Our members are among the major employers in their communities and, along with their large student populations, provide lifeblood upon which their communities can prosper.

Alongside their economic contribution is recognition of the social responsibility of universities. 1994 Group institutions are not ivory towers. Our member institutions, drawing on their world-class research, teaching methods and knowledge of business interaction can support schools and colleges to improve standards and raise achievement rates. Some of the country's most distinguished teacher education departments are to be found in the 1994 Group.

Crucially, universities' public role supporting schools and colleges can alter the perception of the role of universities. The development of a successful partnership between schools, colleges, higher education, government and employers is central to the success of the 14-19 curriculum reforms. As part of this, real progress in widening participation among the undergraduate population should be our joint goal.

Steve Smith
Vice-Chancellor, University of Exeter
Chair, 1994 Group

Research team and acknowledgements

Research team

The team that conducted this research project is based at the School of Education and Lifelong Learning, University of Exeter.

Gill Haynes, Barbara Mason, Keith Mason and Caroline Wragg were responsible for conducting and analysing the interviews with senior managers in the 1994 Group universities.

Adam Crews was responsible for the analysis of the raw data from the questionnaire survey of admissions tutors.

William Richardson was responsible for analysing the results of the questionnaire and, as Project Director, for writing the final report.

Acknowledgements

The research team wishes to thank the following for providing advice and assistance during the course of the project:

- Paul Marshall, Executive Director of the 1994 Group, and Janice Kay, Chair of 1994 Group Student Experience Policy Group, for conceiving the proposal which led to the funding of this research;
- Vice-Chancellors of the 1994 Group Board who authorised the project design and its associated fieldwork;
- members of the Higher Engagement Project Board of the Department for Children, Schools and Families;
- those senior managers in the nineteen universities who agreed to be interviewed;
- the manager in each institution who helped with the distribution of the questionnaire;
- those departmental admissions tutors who agreed to respond to the questionnaire;
- Laura Bell who initiated background research for this project;
- Nicki Horsman who undertook early analysis of data on student supply and demand;
- Tina Isaacs and David MacKay of QCA, and Jeremy Pritchard of Edexcel, who provided data on A-level attainment; and
- Matthew Richardson of St John's College, Cambridge, who twice undertook statistical modelling in order to generate the data presented in paragraph 129.

Executive Summary

- (i) This report presents data arising from a research project co-funded during 2007 by the Department of Children, Schools and Families, and the 1994 Group, into the impact on research-intensive universities of three aspects of the government's current reforms to 14-19 education in England:
- changes to GCE A-level
 - the introduction of the Extended Project
 - the introduction of Diplomas
- (ii) Interviews were conducted with 57 senior managers, three each from the 19 member universities of the 1994 Group, and a questionnaire was distributed to a sample of departmental admissions tutors. The result is a body of empirical evidence that is the most detailed currently available on the attitudes of research-intensive universities in the UK to the government's 14-19 reforms. (*paragraphs 1-18, 73-77*)
- (iii) Senior staff responsible for undergraduate education in their university were asked about their current priorities. Three main themes emerged in their responses:
- the employability of students on graduation;
 - widening participation and attracting a diverse student population;
 - securing the profile of undergraduate recruitment best suited to the strengths and traditions of the university.
- Interviewees also described the educational background of their current undergraduate intake, patterns of supply and demand among well-qualified applicants and the support needs of the first-year undergraduate. (*paragraphs 19-47*)
- (iv) Senior staff were asked for their perspective on three aspects of the 14-19 reforms – the new A* grade in GCE A-level, the introduction of the Extended Project and the introduction of Diplomas – and the likely impact of each on undergraduate admissions. (*paragraphs 48-72*)
- (v) Of the questionnaires distributed to departmental admissions tutors, 54 completed questionnaires were received, a response rate of around 50%. As with the senior staff interviews, questions were posed as to the likely impact on undergraduate admissions and courses of three main aspects of the 14-19 reforms. (*paragraphs 82-115*)

- (vi) An important general finding of the study is the extent to which a supply of well qualified applicants varies across the subjects of the undergraduate curriculum offered by the research-intensive universities. In some areas there is very strong supply, with 20 or more strong applications per place. In other parts of the undergraduate curriculum, notably in some science and social science areas, there is an inadequate supply of appropriately qualified candidates. This holds true across a majority of UK research-intensive universities and is relevant to the ways in which our respondents saw all three reforms playing out in terms of impact on undergraduate admissions. (*paragraphs 25-30, 37-42, 57-58, 78-81, 136*)
- (vii) A second underlying theme was that, at the time of the research (June to November 2007), the reforms themselves were at an early stage of implementation and, thus, only provisional judgments could be formed about them. Despite this, and taking all of the evidence generated into account, the report draws clear conclusions.
- (viii) First, the study demonstrates that undergraduate education in research-intensive universities is neither static nor uniform. It is constantly evolving in response to social change, intellectual developments, interaction with a dynamic public policy environment and the distinctive character of the various institutions that provide it. (*paragraphs 116-20*)
- (ix) Second, the reforms are seen both by senior staff and admissions tutors neither to prejudice nor run counter to the future direction of undergraduate education being mapped in 1994 Group universities. The reforms also align with key challenges facing those responsible for undergraduate education: attracting a more diverse undergraduate population and enhancing the employability of students upon graduation. (*paragraph 121*)
- (x) Third, respondents had some concerns about aspects of the reforms at this stage in their development. These included:
- the impact of the new A* award at A-level on the social composition of the undergraduate population in research intensive universities
 - the balance to be struck between core and options work in the newly-structured A-level programme;
 - the reliability of assessment of students' work for the Extended Project, along with the potential for plagiarism;

- the ability of Diplomas overall to develop rigorous analytical skills in would-be undergraduates;
 - and, more specifically, the composition of the mandatory curriculum in the Engineering Diploma, and in the IT Diploma if seen as leading to undergraduate study in Computer Science. (*paragraph 123*)
- (xi) Fourth, despite these reservations, the report concludes that a majority of respondents considered that all three of the reforms had potential and promise at this stage of their development, and would have an impact on their universities. The key data supporting this conclusion are reported in paragraph 124. These data indicate that 1994 Group universities consider all three of the 14-19 reforms affecting higher education to be important and that almost all are starting to engage actively with all three. The range of this engagement is varied, reflecting patterns in the strength of student supply:
- the A* grade at A-level is relevant to some programmes in almost all of these universities. Many, while being conscious of the need to take Widening Participation considerations into account, expected to use the A* grade to assist admissions decisions for courses such as English, Drama, Law, History, Mathematics, Business Studies, Medicine, Dentistry, Psychology, Economics, and various aspects of Engineering;
 - the Extended Project is widely welcomed in principle and in prospect. A large majority of departmental admissions tutors expect to recognise it as a positive attribute when selecting among applicants with similar levels of achievement (both high fliers and those at the borderline). Tutors also welcome its potential to enhance study skills, to align with undergraduate modes of study and to provide additional diagnostic evidence when selecting among applicants;
 - almost all of the universities are starting to look actively at the prospect of admitting Diploma-based applicants, having identified undergraduate courses that, potentially, could offer progression from one or more of the first five Diplomas. 48% of admissions tutors in relevant undergraduate areas considered that it was 'very likely' that they would be admitting Diploma students to undergraduate courses from 2010, with a further 14% considering this to be quite likely or possible. Responses to this question were spread evenly across the various Diploma areas. Moreover, Diplomas relate strongly to existing areas of weak supply among well-qualified applicants to undergraduate

courses. In 2007, 29 of the 38 Russell Group and 1994 Group universities entered courses in Clearing that related to the content of one or more of the first five Diplomas. (*paragraphs 124-25, and paragraph 58*)

- (xii) Fifth, an important message from many of our respondents is that the reforms will need to live up to their promise. Central to this will be the quality of teaching offered to students in schools and colleges, and the rigour of the assessment associated with the new programmes of study. (*paragraph 126*)
- (xiii) The report ends with analysis of the likely impact of findings from the study on patterns of undergraduate admissions to research-intensive universities, and with discussion of considerations for government and for the universities when contributing to the next stage of the implementations of these reforms. The main conclusions drawn about impact on admissions are that:
- the award of the A* grade at A-level will allow research-intensive universities across the board to select with more discrimination among applicants. Statistical modelling undertaken for this study (*paragraphs 129- 31*) indicates the potential admissions patterns of those applicants who gain one or more grades at A*;
 - 1994 Group universities are likely to take a close interest in applicants who have taken an Extended Project, either as a mandatory part of their Diploma studies or alongside awards such as AS and A2 at A-level; and
 - it seems very likely that almost all 1994 Group universities will be in a position to accept applicants completing Diplomas onto undergraduate courses from 2010 and that, as such, the government's aim of establishing Diploma study as a route from school or college to higher education for a number of 'the most capable students preparing for the most demanding university courses' will be achieved. (*paragraphs 127-38*)
- (xvi) Nevertheless, much remains to be done during 2009 and 2010 to ensure successful implementation of the reforms 'on the ground'. The report closes by recommending that funding is forthcoming to allow research-intensive universities to engage in more detail with those local groups whose aim is to ensure that the 14-19 reforms result in a broadening of the route through which young people progress from school and college to higher education. (*paragraphs 139-46*)

Context

1. GCE A-levels have formed the backbone of advanced study in English schools and colleges since the Second World War. They were first awarded in 1951 at a time when 3% of young people gained admission to one of 12 universities in England.¹ Since then there has been very considerable expansion in the number of universities, the range of subjects studied by 16-19 year olds and in other forms of qualifications available to the age group as preparation for entry to higher education. In 2005, 39.4% of 18-19 year-olds entered first degree courses in UK higher education in one of 168 institutions.²
2. Nevertheless, as the higher education system has expanded, courses leading to the award of A-levels have remained dominant in England among students aiming for the most selective institutions and the most demanding courses. They also act as a filter. Currently just under 40% of the age group in England attempt A-levels, around 34% achieve 2 or more passes and 4% achieve A grades in 3 or more subjects.³
3. The dominance of these courses has, since the late-1950s, been accompanied by calls for their reform. At different times over the ensuing four decades critics have seen A-levels as: too rigid in the allocation of grades to pre-set proportions of candidates⁴; too narrow in pedagogic conception; and casting too powerful a cultural shadow over other, non-subject-based qualifications.
4. Various commissions and reviews recommended reforms between 1966 and 2004.⁵ In February 2005, the DfES White Paper *14-19 Education and Skills* (Cm 6476) proposed wide-scale changes in response to the recommendations of a working group which sat

¹ 4.5% of men and 1.8% of women: Committee on Higher Education (1963), p. 16 and Appendix I, p. 150.

² DCSF (2007a): table 4.6; HESA (2007): Table Ob.

³ DCSF (2007c) Figure 1.

⁴ As a result of which, from 1984 marking moved from norm referencing to a form of 'soft criterion referencing', a process that has since seen a rapid escalation in the level of awards made to candidates, see House of Commons (2003), paragraphs 4-8.

⁵ The most prominent of these have been: Schools Council (1966), Schools Council (1973), Schools Council (1978), DES (1988), Finegold *et al.* (1990), Dearing (1996) and Working Group (2004).

during 2002-04. It is the impact of these proposed reforms on undergraduate admissions and study in research-intensive universities that is the subject of this report.

New foundations: the government's reforms of 14-19 education in England

5. 16-19 education has become a large and very complex area of public life over the last twenty years, stimulated by the significant expansion of the age group 'staying on' beyond compulsory schooling, brought about by the introduction of a criterion-referenced public examination at age 16, the GCSE.⁶ The government's reforms are a response to this complexity, in particular to the criticism that a more coherent and broadly-based framework of learning is required for young people between the ages of 14 and 19.
6. From the universities' perspective, the system to which the current reforms are directed is intricate and elaborate. Currently, a total of 2,975 separate qualifications are formally approved at 'level 3' by the government in England.⁷ In principle, attainment in any one of these is evidence of successful preparation by a candidate for entry to higher education. Of these awards, 378 are A-levels, 93 vocational A-levels and 17 advanced extension awards (for 'the most able A-level students').⁸
7. The government's proposed reforms of this intricate system are themselves complex, inevitably so given the ubiquity of credentials in modern society and the technical issues associated with their validity and reliability in the minds of the public and of user organisations. To inject clarity into the present research project, the three central reforms likely to affect admissions to higher education in research-intensive universities were selected for specific focus:
 - the reduction of the GCE A-level course from 6 to 4 units, along with the introduction of an award at A* grade;
 - the introduction of an Extended Project which can be undertaken by 16-19-year-olds across a range of courses; and
 - the introduction of Diplomas in various 'sectoral' areas of learning linked to occupations.⁹

⁶ McVicar and Rice (2001).

⁷ DCSF (2007b).

⁸ QCA (2007).

⁹ And, since this research was concluded, in 'broad subject' areas of study: see DCSF (2007c).

8. As we shall see, if these reforms are implemented successfully they will impact upon and influence undergraduate admissions and education at research-intensive universities. In turn, the involvement of these universities will influence the course of the reforms and public perception of their importance and success.

Enduring values: undergraduate education in the research-intensive universities

9. As noted earlier, higher education in the UK has expanded dramatically over the last fifty years. In England there were 12 universities in 1951 and 33 by 1969. In addition, 33 polytechnics were founded during 1969-91, accompanied by a dramatic contraction of other colleges of tertiary education. In 1992 tertiary education was removed entirely from local authority control resulting in the creation of a single sector which, by 2007, comprised 132 English universities and colleges of higher education.¹⁰
10. As higher education expanded and, formally at least, came to appear less differentiated, groupings of universities emerged to represent distinctive aspects of the enlarged sector. Since 1994, the research-intensive universities have been defined by two parallel bodies, the Russell Group (broadly, the ancient universities, along with and larger civic foundations of the period 1880-1914)¹¹ and the 1994 Group (broadly, the smaller traditional campus-based universities of mid-twentieth century foundation).¹²
11. The Russell Group and the 1994 Group together comprise 38 individual universities. Between them, they taught 386,000 undergraduate degree-level students in 2005/06 (35% of the UK total). These universities select from the highest achieving school and college leavers, and their graduates go on to secure jobs and develop careers in all of the leading areas of public and commercial life.

¹⁰ HEFCE (2007).

¹¹ Average undergraduate population per institution in 2005/06: 13,300. HESA (2007): Table Ob.

¹² Average undergraduate population per institution in 2005/06: 6,800. HESA (2007): Table Ob.

12. There is considerable variety of size and identity among these 38 institutions but they attract a broadly similar undergraduate population, a large majority of whom have achieved high grades at A-level and go on to study traditional undergraduate subjects. In terms of excellence, universities from both groups compete equally and share prestige. The *Times Good University Guide 2008* shows 1994 Group and Russell Group universities occupying in equal number 24 of the top 25 places.¹³ Due to their size and reputation, Russell Group universities account for 65% of UK Universities' research grant and contract income, and over 30% of all students studying in the United Kingdom from outside the EU. Meanwhile, the more compact campus universities of the 1994 Group have higher levels of satisfaction among students with the teaching they receive, a higher proportion of postgraduate students and academic staff with a higher success rate in applying for grants from research councils.¹⁴

The research project

13. During 2007 senior managers were interviewed and admissions tutors surveyed across all nineteen members of the 1994 Group of universities. Face-to-face interviews of an hour or more were held between June and November 2007 in each institution with: the Pro-Vice-Chancellor for Teaching and Learning (the senior academic manager with responsibility for the undergraduate curriculum); the Head of Student Admissions; and the Director of Planning.¹⁵ Following these interviews, an on-line questionnaire for admissions tutors at departmental level was circulated via Heads of Student Admissions. Individual universities were asked to identify those admissions tutors to whom the questionnaire was most relevant. 54 completed questionnaires were received, a response rate of approximately 50%.¹⁶

¹³ *The Times* (2007). Twelve 1994 Group and thirteen Russell Group institutions held places in the top 25, with one institution being a member of both groups. Of the national tables, *The Good University Guide* published by *The Times* is probably the most influential with parents, young people and employers concerned to identify traditional measures of quality.

¹⁴ Russell Group (2007); 1994 Group (2007), p. 22, 25, 14.

¹⁵ Job titles vary from institution to institution. Some senior managers chose to be interviewed together.

¹⁶ See below, note 36.

14. The aim of the research was three-fold, to:
 - a) develop a collective profile of how these highly successful universities view the future of their undergraduate education over the medium-term;
 - b) gauge the views of senior managers as to the likely influence of the government's current reforms to 14-19 education over undergraduate education in research-intensive universities; and
 - c) seek, at this early stage, the best judgments of admissions tutors as to the impact and relevance of the reforms for who they will admit to undergraduate courses from 2010 and how these courses may evolve.

15. Data informing the first two aims was generated via the interviews with senior managers and is reported in paragraphs 17-47 and 48-72, respectively. Data informing the third aim was generated via the completed questionnaires and is reported in paragraphs 73-115.

16. During the course of the research informal links were developed with a small number of staff in Russell Group universities also studying the impact of the government's reforms. It became clear as the research progressed that the priorities, concerns and perspectives of these staff were very similar to those of our research respondents in the 1994 Group universities.

1994 Group Universities

University of Bath;
 Birkbeck, University of London;
 Durham University;
 University of East Anglia;
 University of Essex;
 University of Exeter;
 Goldsmiths, University of London;
 Royal Holloway, University of London;
 Lancaster University;
 University of Leicester;
 Loughborough University;
 Queen Mary, University of London;
 University of Reading;
 University of St Andrews;
 School of Oriental and African Studies;
 University of Surrey;
 University of Sussex;
 University of Warwick;
 University of York

The nub of the three main reforms

- *GCE A-levels.* A reduction from 6 to 4 units across the two-year programme, with 'more open-ended questions requiring greater thought and more detailed written replies'. An A* grade to identify those candidates achieving 90%+ across 2 or more A2 units.
- *Extended Project.* A required element of the new Diplomas and an option for A level students. A 'dissertation-like exercise' involving 'independent research, thought and planning'.
- *Diplomas.* New qualifications focussed on learning relevant to 14 'sectoral' (i.e. occupational) areas and 3 'broad subject' areas. Diplomas comprise: mandatory elements, options courses, an Extended Project and skilled-based components. 'Broadly comparable in terms of average length of study to three GCE A-levels'.

Findings

Undergraduate education in research-intensive universities: contemporary pressures and future directions

17. In our interviews with senior managers in the nineteen 1994 Group Universities, the first half of each was devoted to questions about the future direction of undergraduate education in research-intensive universities in Britain. As a result, wide-ranging matters were discussed, enabling us to assess with a greater degree of confidence than would otherwise have been the case the significance of the government's 14-19 reforms for undergraduate education in these kinds of universities.
18. To give structure to this part of the interview, questions were grouped under three broad themes:
 - current initiatives in undergraduate education;
 - the nature of the admissions process;
 - curriculum and assessment in the first undergraduate year.

Current initiatives in undergraduate education

19. Within a context of dynamic public policy focused on undergraduate education, we sought to understand the main external pressures faced by senior managers in relation to undergraduate education, combined with their priorities for its development in their respective universities. As the interviews unfolded, and prompted by our questions, a number of clear themes emerged.

The employability of graduates

20. Enhancing the employability of students on graduation was high on the list of priorities of senior managers. With the exception of occupationally-specific courses such as Medicine and Law, most undergraduate programmes across the 1994 Group relate to traditional subject study with academic teaching staff encouraged to reflect on methods of teaching, learning and assessment in the context of students' employability after graduation.
21. Initiatives were reported to us designed to enhance the generic and transferable skills of students in each undergraduate year. The

ubiquity of these initiatives varies among institutions – they are embedded widely across some of the universities while being addressed departmentally in others. Underpinning this activity in some of these universities is a strong tradition of work placements or study abroad. Increasingly, this is complemented by encouraging students to consider volunteer work or summer employment related to their course of study, or developing their employment-related skills through specific modules or extra-curricular opportunities.

Widening participation and attracting a diverse student population

22. Also high on managers' agendas was a concern to reflect a broad social mix in the undergraduate population, while maintaining high standards of entry. The issues here are complex and, for 1994 Group universities, include patterns of access relating both to geography and social background. Traditionally, most of these universities have not recruited in their local geographical area, but this is a dynamic that many senior managers are actively seeking to change through support for various forms of local 'outreach' to schools and colleges. In respect of social background, older students and those from black and ethnic minorities have a strong foothold in some 1994 Group institutions, but managers across institutions in the Group reported that the population that has proved hardest to recruit is those living in families or areas where there is little tradition of young people going on to higher education.
23. All nineteen universities had specific initiatives taking place at the time of our visits to promote a broader social mix in the undergraduate population – for example, progression accords and student bursaries – and much of this work is seen by managers as an altruistic, long-term contribution to raising attainment and aspiration, rather than an instrumental response to specific student recruitment needs. However, these are not mutually exclusive goals. In one case, an institution had raised the UCAS tariff required by applicants for undergraduate entry, with widening participation in mind, and this had led to 5% increase in the enrolment of students from lower socio-economic groups.
24. Under this overall heading, the role of Foundation Degrees in research-intensive universities was highlighted in our interviews. While five of the universities neither had Foundation Degrees nor plans to introduce them, the remaining fourteen had involvement in foundation study through: (i) running such degrees (ten institutions –

in areas such as health studies, IT, government and children's early years); (ii) validating them on behalf of colleges of further education; or (iii) providing foundation year programmes ahead of enrolment to full Honours programmes. Such provision is linked strongly to the desire for greater levels of local recruitment of undergraduates, a commitment which is amplified when such provision is accessed by students through campuses established in recent years in areas where participation in higher education is low.

Securing an optimum profile of undergraduate recruitment

25. In a higher education environment in which each UK university is under pressure to define the goals it is best equipped to pursue, the make-up of the undergraduate population is an important dimension of this picture. Securing this profile of undergraduate recruits is another central task being addressed by the senior managers we interviewed.
26. Across the 1994 Group it became clear to us that it is a common goal of all senior managers to recruit students who will be able to cope with and benefit from demanding programmes of academic study. Beyond this, the various universities in the Group seek to recruit a body of students that reflects their specific traditions and areas of subject strength, especially where demand from well-qualified applicants is closely matched to high levels of staff expertise. To achieve this, the managers we interviewed pointed out that various influences come into play, for example: changes to the undergraduate curriculum that, in turn, reflect wider change in society; changing patterns in applications, including those from overseas; and changing ways in which the role of universities in providing undergraduate education is monitored and reported by government and the media.
27. At the time of interviews, most of the universities were reviewing their undergraduate subject mix and were introducing, or considering the introduction of further areas. Examples covered the full range of science, engineering, medicine, social science and humanities programmes. Linked to this, the managers interviewed were actively assessing how such curriculum innovation would impact on the social mix of undergraduates, as all of the universities were seeking to maintain or increase the diversity of their student population. A dimension of this question was the extent to which the overseas

undergraduate market may be expanded, and four of the universities in the study had specific plans to achieve increases of this kind.

28. In this context, interviewees adopted a range of stances towards securing additional numbers of UK undergraduates financed by the funding councils. Some institutions had, in recent years, secured additional numbers in order to establish new campuses and programmes. Others had acquired additional numbers through collaboration with partner institutions, for example in Lifelong Learning Networks, mostly aimed at widening participation through Access courses or foundation year programmes.
29. When it came to scrutiny of their activity by others, our interviewees said that they had to keep in mind and prioritise the various measures used, such as entry standards, other targets or metrics of performance set internally by senior management groups or governing bodies, and the criteria of quality built into the design of newspaper league tables. Having said this, the respective emphasis placed on these measures varied widely across the Group. For some, UCAS tariff scores/examination grades of successful applicants were a strong influence, especially where high levels could be achieved, while at the same time widening participation (including among overseas applicants). For others, the undergraduate social mix, coupled with an ability to recruit accurately to target numbers while maintaining agreed thresholds of quality, was the key concern.
30. A majority of interviewees were influenced by newspaper league tables, not least because, as they said, many of the underlying factors used to compile them provide useful data for institutional monitoring and target-setting. Even stronger across the group of managers interviewed was the shared goal of maintaining, through their efforts at institutional level, the position of 1994 Group universities as the grouping of UK higher education institutions combining employment of the most active, high-quality researchers (as measured by research council income per head of academic teaching staff) and the highest levels of student satisfaction concerning teaching (as measured through the national student survey).¹⁷

¹⁷ For the results of the 2007 survey, see *The Guardian* (2007). See also, 1994 Group (2007b).

The nature of the admissions process

31. The goals for undergraduate recruitment set by university senior managers and their governing bodies have an obvious bearing on the progress of that aspect of the government's 14-19 reforms. How these goals are secured is due, in large measure, to the nature and influence of the admissions process itself.
32. The interviews with Heads of Student Admissions confirmed that the admissions process is designed to secure management priorities, such as those outlined in the preceding paragraphs: supporting and developing the employability of graduates, widening participation and securing an optimum profile of undergraduate recruitment. However, against this general background, these staff emphasised their university's overriding commitment to recruiting students who would benefit from, and succeed on, the courses to which they were admitted. Thus, in a comment representative of the majority, they were looking for students 'who were most likely to succeed on the course, irrespective of background' while, at the same time, acting on the sustained efforts of their institutions to broaden the social mix of undergraduates. In addition, a key task for admissions teams is to publish entry requirements that will result in undergraduate recruitment at or very close to numbers agreed with the funding councils.
33. There is a mix of admissions procedures within the 1994 Group. Some universities have now centralised most of their admission procedures. Criteria for entry are set by central administrative staff and departmental tutors. Central administrative staff then make the decisions but consult with tutors in the departments where applications fall at or beyond these boundaries. Other institutions retain the traditional system of decision-making at departmental level, though much of the administration and verification is carried out by central administrative staff. If an overall trend was apparent, this was to greater centralisation of processes.
34. The interviews with Heads of Student Admissions were much taken up with the process of how these universities ensure that the sum of individual admissions decisions add up to a pattern of undergraduate recruitment that matches broader institutional goals, and much detail was supplied on internal process such as target-setting, task-group and committee work, and departmental briefings. In many of the universities visited, annual or twice-yearly briefings for tutors on key

issues informing admissions decisions were held, and it was at these that discussion of the government's 14-19 reforms would be a central issue for consideration.

The educational background of current undergraduates

35. In the context of the government's 14-19 reforms, interviewees were asked in general terms about the profile of undergraduates that their admissions process generated. A majority of institutions take high numbers of students with A-level or equivalent qualifications, although the proportions vary across the 1994 Group:

<i>Students admitted with A-levels</i>	<i>Number of 1994 Group institutions</i>
90%+ or 'the vast majority'	7
80-89%	6
70-79%	3
60-69%	2
'around 25%'	1

36. Evident from the interviews was that a large majority of non-A-level entrants were mature students (i.e. aged 21 or more). The proportion of students arriving with Access qualifications was low across most of the institutions, ranging from 2%-6% where figures were given, and with comments such as 'very few' and 'a small proportion' where they were not. With one exception, even smaller numbers were given for BTEC or other Level 3 qualifications. Where estimates were provided in interviews, the proportion of students from independent schools ranged from 'a few' to around 30% in two cases and 40% in a third; the average was in the region 10-15%.

Supply and demand among well-qualified applicants

37. The task of universities to recruit undergraduates to the target numbers set for them by the funding councils had already been mentioned (paragraph 32).¹⁸ However, this institution-level view

¹⁸ With the exception of certain subjects (e.g. Medicine, Education leading to teacher qualified status), the funding councils require merely that universities recruit accurately to a global number of undergraduates, regardless of specific subject mix.

obscures the single most important feature of undergraduate recruitment when related to the government's 14-19 reforms – that of the supply and demand of well-qualified applicants at the subject level.

38. There are complex issues here for university managers in terms of resources and staffing that have already touched on briefly in paragraphs 25-26 and are discussed further in the conclusions to this report. For the present, it is important to note the point made by all of our interviewees: the reality of undergraduate student recruitment is that there is very strong supply in some areas – the 'selecting' subjects – some with 20 or more applications per place, but that this is tempered by weak, indeed inadequate, supply in others – the 'recruiting' subjects.
39. Moreover, this pattern holds true across a large majority of the UK's research-intensive universities comprising the Russell Group and the 1994 Group,¹⁹ and has a particular bearing on national policies for strategically important subjects²⁰ and for the introduction and take-up of the 14-19 Diplomas.
40. In our interviews we were able to explore how this dynamic of supply and demand is manifest in 1994 Group universities. Four institutions defined themselves as predominantly 'selecting' and one as mainly 'recruiting'; the remaining 14 reported a mix of 'selecting' and 'recruiting' courses within the following overall pattern.

¹⁹ See paragraph 58.

²⁰ See HEFCE (2005) and paragraph 139.

Subjects described by managers as 'selecting'

Arts subjects in general
 Dentistry
 Design and fine art
 Drama
 English (and variations of it)
 History
 Law
 Management
 Media and Communications
 Medicine
 Modern Languages
 Politics
 Psychology

Subjects described by managers as 'recruiting'

Chemistry
 Computing /Computer Science
 Education
 Engineering – Mechanical, Electronic
 Most science subject except Medicine
 Physics

However, boundaries are not hard and fast. Applicant supply can vary in some subjects from year to year, while various subjects in the two columns above might be placed differently in individual universities.

41. Clearly, the pressures on admissions tutors vary depending on the placement of their areas of specialism on this 'selecting'-'recruiting' continuum, and this is a point to which we will return when the results of our survey of these staff are discussed later in this report.
42. While considering the question of overall supply and demand of potential undergraduates, we also took the opportunity to discuss with managers their views of the effect of a projected decline in the number of UK 18-year-olds from 2010. Managers from five of the universities expressed concern that demographic change of this kind would make undergraduate recruitment of undergraduates of high quality more difficult. In contrast, most interviewees expected few difficulties in this respect due to a combination of the strength of their current profile of applicants, confidence that in the coming years their reputation would continue to grow, and analysis which suggests that such a decline in population would be most apparent in parts of the population that, to date, are represented in small numbers in research-intensive universities.²¹ However, as was pointed out by a

²¹ See HEPI (2007).

number of interviewees, a dynamic of this kind would make the task of widening participation more challenging.²²

The support needs of the first-year undergraduate

43. In the final section of our interviews focussed on current initiatives in undergraduate education, we asked senior managers about developments in curriculum and assessment in the first undergraduate year. The aim here was to examine two questions. First, to what extent are such developments a response to the characteristics of traditional-age applicants (deficiencies or welcome attributes) arising from what has been learned in school or college? Second, when these developments in undergraduate education are placed next to the curriculum and assessment patterns implicit in the government's 14-19 reforms, is it likely that the experience of 16-21 year olds moving from school or college through undergraduate study in research-intensive universities will seem to them coherent? The first of these questions is discussed here; the second is addressed later in the report.²³
44. As the demands made on A-level students and others have changed over recent years, so the support required by undergraduates in their first year has grown. Managers from all of the universities but one identified difficulties of various kinds faced by undergraduates in their first year, though two other interviewees felt that such problems were minor. Two areas of need were identified. One might broadly be called appropriate levels of literacy and numeracy. Eleven institutions referred specifically to shortcomings in mathematical skills, particularly for students studying subjects with key mathematical components, such as Engineering and sciences, while six institutions described some students' difficulties with writing across a range of degree programmes, and two interviewees referred to an increase in the numbers of students with dyslexia and dyspraxia.

²² Since our interviews were conducted, projections from the National Office of Statistics (NOS, 2007a, table 2) suggest that earlier projections of decline in this age group will be mitigated by the effect of higher than expected inward migration. Despite this, the challenge for widening participation in the research-intensive universities identified by our interviews looks set to remain.

²³ See, for example, the comments of departmental admissions tutors in paragraph 93.

45. The other main area of difficulty was perceived to be undergraduates' need for more general support than in the past. Students appeared to lack basic study skills and experience of independent learning, and required regular and prompt feedback from their lecturers and tutors. This was attributed to changes in the school curriculum whereby young people had become used to a more compartmentalised approach, with high levels of support from teaching staff. Two interviewees indicated that this appeared particularly striking in relation to students from independent schools.
46. In response, some of the universities visited had concentrated on providing extra support within departments, while others had introduced cross-institutional provision. Among the specific examples cited of additional support for undergraduates developed in recent years were:
- new approaches to induction;
 - early diagnostic testing enabling extra help to be provided to those needing it;
 - peer mentoring, developed in collaboration with the Students' Union;
 - enhanced tutorial systems and the tailoring of programmes, including teaching and assessment, to the attributes and experience of students;
 - specific support for the development of study skills.²⁴
47. In a majority of the universities, it was expected that there would continue to be a need to diagnose and act upon the support that undergraduates need, with many current initiatives evolving and new innovations being required in future years.

The government's reforms of 14-19 education: the perspective of university senior managers

48. The second half of our interviews with senior managers was devoted to the government's 14-19 reforms. To give structure to this part of the interview, questions were grouped under three broad themes and these are now discussed in turn:
- changes to GCE A-level;
 - the Extended Project;
 - Diplomas.

²⁴ See also, 1994 Group (2007b).

49. Responses to these questions tended to be given at the level of institutional policy for the interviewee's university. Such responses can be compared with the views of admissions tutors at departmental level elicited from our questionnaire²⁵ and the two sets of views, taken together, are discussed in the conclusions section of the report.

GCE A-level: the new A* grade

50. Interviewees were asked first about their views on the introduction of the new A* grade in GCE A-level and what might shape their institution's attitude to it.²⁶ A majority welcomed the introduction of the A* grade, believing that it would help universities in general with differentiation among high achieving students applying for highly selective courses. Respondents from seventeen of the nineteen universities expected to use the new grade in admissions procedures straightaway, a common view being that the A* grade would have relevance, but for a minority of courses. At the same time, interviewees from three universities expressed concern that the use of the A* grade in their institution could have a negative effect on their efforts to widen participation if, by raising entry requirements for particular courses, a greater proportion of applicants from low participation neighbourhoods was excluded.
51. Interviewees from most institutions remarked that their detailed consideration about the use of the A* grade in admissions policies had either not yet begun or was at a very early stage. The subject departments which were mentioned as most likely to deploy the A* grade in entry requirements included: English, Drama, Law, History, Mathematics, Business Studies, Medicine, Dentistry, Psychology, Economics, and various Engineering courses. These were 'selecting' courses in the universities concerned, where the current offer was typically three grade As. Two institutions referred to an additional national test they asked applicants to take as an entry requirement, in these cases one for a course in Medicine and the other for a course in Law. In both cases, the institution implied they would probably continue to use this assessment even though the A* grade would be available.

²⁵ See paragraphs 82-115.

²⁶ In our questionnaire, departmental admissions tutors were asked for their view of the other main change to be made to A-levels from 2008, the reduction in number and increase in size of modules within course, see paragraphs 91-94.

The Extended Project

52. Details of the outline structure of the Extended Project were published halfway through our timetable of interviews. Consequently, the senior managers interviewed had only very preliminary things to say about this reform and its implications for undergraduate admissions.²⁷
53. Respondents saw the Extended Project as an additional qualification that would add to the profile of applicants. The UCAS tariff that it would attract, the take-up of the Extended Project among young people and an assessment of its validity (in the context of both A-levels and Diplomas) as a piece of work were considered to be aspects of this innovation that would need to be taken into account by research-intensive universities when determining its use in admissions procedures.²⁸

Diplomas

54. The senior manager interviews dwelt at greater length with consideration of Diplomas. The outline structure of these qualifications had been in the public domain for some months prior to our fieldwork and several important dimensions of the potential interaction between research-intensive universities and Diplomas were explored. These are discussed in turn in the following paragraphs.

The potential match of Diploma content to current undergraduate courses

55. The first five Diploma 'lines' become available to students in schools and colleges from September 2008 and will provide applicants to higher education in 2010. With this in mind, our first question relating to Diplomas was to establish the extent to which, in the eyes of senior managers, their content is aligned potentially to that of undergraduate

²⁷ Admissions tutors completed our questionnaire after the outline structure of the Extended Project had been published by the main awarding bodies. As a result, they had considerably more to say about the implications of its introduction for undergraduate entry to research-intensive universities, see paragraphs 82-86.

²⁸ For the mainly positive views of interviewees about the Extended Project in the specific context of the Diplomas, see paragraph 62.

courses in the universities of the 1994 Group.²⁹ Interviewees' perspectives on this question were as follows:

<i>Diploma 'line'</i>	<i>Potential match to existing undergraduate courses?</i>	
	<i>Yes</i>	<i>No</i>
Information Technology	17	2
Creative and Media	16	3
Engineering	14	5
Society, Health & Development	11	8
Construction & the Built Environment	3	16

Examples of undergraduate courses related to Diploma 'lines', and related comments

Information Technology:

Computer Science, Information Technology, Business, Computer Studies (Foundation Degree), Business (Foundation Degree).

'The Diploma is focused mainly on the production and distribution of information, with only a very limited match to 'traditional' Computer Science with its high mathematics content.'

Creative and Media:

Theatre Studies, Film Studies, Media Studies, Dance Studies, Drama and Music Studies, Acting.

'Diplomas may be too practical or applied for some of the more theoretically-orientated programmes (including English).'

Engineering:

A wide range of specific Engineering courses, including: Aeronautical, Automotive, Chemical, Civil, Computer Systems, Electronic and Mechanical.

²⁹ This question was also designed to assist Heads of Student Admissions to identify those departmental admissions tutors to whom they would subsequently send our questionnaire.

Society, Health & Development:

Health and Social Care, Social Work, Occupational Therapy, Midwifery and Nursing Studies.

Construction & the Built Environment:

Building Engineering, Construction Management, Civil Engineering.

There may be 'some potential match in Foundation Degrees but the lack of mathematics is problematic for progression to Engineering-related degrees'.

56. In addition to the overall views just reported, there was detailed comment on the question of the mathematics content in the Engineering Diploma. Of those managers identifying a potential match of undergraduate courses in their university to this Diploma, most mentioned that, for existing Engineering courses, an A-level in Mathematics (or equivalent) was stipulated as an entry requirement, and around half expressed concerns, following those first raised by the Engineering Council and the Engineering Professors' Council, that the mathematical content of the Diploma would be sufficiently rigorous to allow students to cope with this aspect of their undergraduate study of Engineering. In a small number of institutions this debate had been followed closely over the previous year or so and managers said that they were reassured that the mandatory mathematics content was now at an appropriate level, revisions having been made to the content of this element of the Diploma. One of these universities had on its staff an academic who, with others, had been recruited to the Mathematics Task Group of the Higher Education Academy's Engineering Subject Centre, established to revise the mathematics content of the Diploma. In general, it was evident from our fieldwork (both through the interviews with senior managers and the questionnaire to admissions tutors in Engineering departments³⁰) that the question of the mathematics content in the Engineering Diploma will continue to be a matter for debate during 2008 and is an area where further consultation and development by those promoting it will be necessary.³¹

³⁰ See paragraph 99.

³¹ One way in which this problem may be resolved is if there is widespread uptake of Mathematics units designed at the University of Loughborough to act as a bridge to undergraduate study for those not taking AS or A2 units in GCE A-level Mathematics. These 'Loughborough modules' are due to be promoted actively in the first half of 2008 as an aid to progression to higher education from Diploma study.

Supply and demand among well-qualified applicants

57. This central dynamic in the admission of applicants to undergraduate courses in research-intensive universities has already been discussed in general terms (paragraphs 37-42). However, there are specific questions of supply and demand likely to influence the flow of applicants with Diplomas to such courses. On the one hand, our interviews with senior managers in 1994 Group universities have established that, across the first five Diploma 'lines', there are highly selective undergraduate courses that are potentially well matched, for example: Social Work, English, Drama, Media and Communications, and some Engineering courses.
58. Meanwhile, background research undertaken during the course of our fieldwork also shows that a large majority of the UK's research-intensive universities entered Clearing in 2007 in areas of the undergraduate curriculum related to the first five Diploma 'lines'. This was true for 14 of the 20 Russell Group universities and 16 of the 19 1994 Group universities.³² As became evident from the responses of departmental admissions tutors to our questionnaire, reported below, this creates an incentive for those responsible for 'recruiting' courses to look closely at both the content and rigour of the Diploma programmes.

Diploma curricula and methods of assessment

59. Although public information about the content of the Diplomas was incomplete at the time of many of the interviews, Pro-Vice-Chancellors were asked about the general suitability of the curricula and methods of assessment in Diplomas for successful progression by high-achieving students to undergraduate courses at their university. As such, the data in the following six paragraphs need to read in conjunction with that collected later in the study from admissions tutors at departmental level who had had the opportunity to examine the content of the mandatory units in more detail.³³ Conclusions drawn from both sets of data are set out in paragraphs 123-25.

³² This data is based on an analysis of courses listed by university on the first day of Clearing 2007 by UCAS subject heading. Source: *The Independent* (2007).

³³ See paragraphs 97-100 and 109-10.

60. Based on their general understanding of the likely content Diplomas prior to detailed syllabuses being available, Pro-Vice-Chancellors across the 19 institutions had mixed views about the suitability of the curricula of Diplomas. Overall, of those who made comments, and disregarding the Extended Project (where the overall view was enthusiastic), most interviewees thought it was likely that the Diploma curricula would not generally be suitable.³⁴ Among the main concerns was the view that students' specialised learning/knowledge or higher level skills would be inadequate. For example, one Pro-Vice-Chancellor welcomed the proposed critical analysis, problem-solving and creative ideas in research that had been described as components of the Creative and Media Diploma but thought that, in practice, this would constitute only a small part of the students' course. As already mentioned (paragraph 56), there were also concerns that the level and type of mathematics in the Engineering and Information Technology Diplomas would be insufficiently rigorous, some interviewees concluding from this that the Diploma curricula in these areas would be more suitable for progression to the Foundation Degrees offered by their partner institutions.
61. A minority of interviewees thought that students with a Diploma would be able to progress to undergraduate courses successfully, provided that they had chosen a university course that was broadly in line with the subject content of the Diploma. Typically, these institutions were able to identify undergraduate courses that included substantial amounts of applied rather than theoretical work, as the types of course that would attract Diploma students.
62. Across the institutions, the Extended Project was particularly welcomed. The general view was that as an independent piece of work, involving research-type skills, it would help prepare students for the type of teaching and learning that they would experience on undergraduate courses. However, there were concerns expressed about whether schools and colleges would be able to offer effective supervision to students working on their Extended Project, and whether they would have the necessary facilities and resources to ensure that higher-level skills of analysis and evaluation were integral to students' work.

³⁴ Conversely, approximately half of the departmental admissions tutors in relevant departments considered that the mandatory Diploma curriculum would form a sound basis for undergraduate study, see paragraph 109.

63. Of those who made comments, the overwhelming majority of interviewees thought that, despite their reservations about the curricula, the methods of assessment to be employed within the Diplomas were suitable with regard to successful progression onto undergraduate courses at their institution. Across the institutions, positive comments were made about the proposed use of a range of assessment methods, including the assessment of group work and presentation skills, less reliance on an end-of-year written examination, the movement from summative to formative assessment, and the overall reduction in the amount of assessment.
64. A small number of Pro-Vice-Chancellors spoke about recent developments at their institution to encourage departments to adopt enhanced formative assessment practices, which they saw as being similar to those of the Diploma. For some departments it was reported that problems in teaching and learning were linked to the speed with which students who were struggling with their course were identified by tutors.
65. Comments questioning the methods of assessment within the Diploma mainly centred on the Extended Project. Some Pro-Vice-Chancellors were concerned about the reliability of any internal assessment of the Extended Project, and queried whether schools and colleges would have the experience to recognise whether plagiarism, intended or not, had taken place.

Diplomas and admissions policy

66. Even though the first cohort of students with a Diploma would not be seeking entry to higher education until 2010, and the UCAS tariff that Diplomas would attract at various grades had yet to be announced, Pro-Vice-Chancellors and Heads of Student Admissions were asked to say what they thought their university's admissions policy was likely to be concerning applicants holding a Diploma.
67. All had yet to formulate a specific policy relating to Diplomas, although such developments were about to start in earnest in some universities. None said their institution would reject applicants with a Diploma as a matter of principle and a common view was that they would be included in existing general policies which, typically, include consideration of all applicants with level 3 qualifications at set levels. A majority of interviewees expected a statement from their university

about undergraduate admissions relating to Diploma-holders to appear in the prospectus in readiness for the 2010 cohort. Around half the universities represented said they were waiting for details of the UCAS tariff to be applied to the Diploma before beginning to form more specific policies;³⁵ others were waiting for more information about the content of Diplomas before assessing in detail how students holding the new awards might progress to the undergraduate courses on offer.

68. Some institutions expected their university to specify, as a condition of entry, the particular options courses that a Diploma student should undertake, such as an A-level in Mathematics for applicants to Engineering courses. Departmental admissions tutors responding to our questionnaire were able to provide further examples of specific entry requirements that may come to be applied to Diploma students applying to the courses in their departments (see paragraph 113).

Factors influencing the acceptance to undergraduate courses of applicants holding Diplomas

69. Pro-Vice-Chancellors and Heads of Student Admissions were asked to describe what factors were likely to be influential in their acceptance of applicants with a Diploma. Overwhelmingly, these related to the quality of the qualification and the related likelihood of success for students from that route on their undergraduate course. This was expressed in a variety of ways. Interviewees spoke about the Diploma needing to be 'robust', of 'high quality', 'rigorous', 'valid', 'sufficient in academic content' or 'equivalent to A-levels'. Such attributes, it was considered, would be necessary to ensure a supply of 'good students who can cope with their undergraduate courses', 'students demonstrating a level of quality comparable to those coming from more familiar routes' or 'those we can be confident will succeed here'.
70. Some senior managers said that they would probably be cautious in their approach to recruiting a first cohort of students holding Diplomas. This would enable them to examine carefully how such students performed on their courses in comparison to other groups. The implication was that these universities did not want to put

³⁵ For the tariff to be applied to Diplomas, announced in December 2007, see note 42, below.

themselves or their students in a potentially vulnerable position, where relatively large numbers were struggling or dropping out of courses. In addition, a clear message from this part of the interviews was that if institutions' initial experiences with Diploma students were generally negative then this would have implications for the recruitment of such students in subsequent years. For a minority of universities, the cost of such additional student support as might be required was also a consideration to be taken into account when recruiting Diploma-holders.

Estimates of the number of Diploma-holders who might be recruited in 2010

71. Pro-Vice-Chancellors and Heads of Student Admissions were asked in our interviews to provide an estimate of how many of the anticipated 10,000 Diploma-holders who qualified for entry to higher education in 2010 might be recruited to their institution. Interviewees from five of the institutions felt unable to provide any kind of estimate. Meanwhile, senior managers from the remaining 14 universities discussed possible patterns of student recruitment from Diplomas but, in doing so, pointed out that there could be no question, at this stage, of specific commitments being made. Many 'unknowns' in the design and development of Diplomas remained, and 2008 would see considerable further discussion within each university concerning specific policies at departmental and subject level for the consideration of Diploma applicants to undergraduate courses in 2010.
72. Despite such caveats, it seems likely from evidence generated through our interviews, through the questionnaire to admissions tutors, through informal discussions with staff across the research-intensive group of universities, and from media coverage of the issue, that Diploma-holders applying to 1994 Group (and Russell Group) universities will be accepted onto undergraduate courses from 2010. This point is discussed further in the conclusions to this report.

Undergraduate admissions and the 14-19 reforms: patterns and prospects reported by admissions tutors

Sample of respondents

73. As reported earlier, 54 completed questionnaires were received from tutors responsible for admissions of undergraduates to 1994 Group universities at department level. This represented a response rate of approximately 50% of those targeted by Heads of Student Admissions across the Group.³⁶ Responses were received from 13 member universities, varying from a single individual to up to nine tutors responsible for different courses. As a large majority of respondents considered that one or more of the first five Diplomas was relevant to one or more courses offered in their department, it is apparent the Heads of Student Admissions chose a sample of tutors aligned, in the main, to these broad subject areas. Nevertheless, the 54 departments concerned were very diverse in the areas of the undergraduate curriculum that they covered and the specific courses that they offered. A wide spectrum of humanities, social science and science subjects was represented in the sample, and, between them, these admissions tutors were responsible for student entry to over 180 separate undergraduate courses.
74. Among the respondents, 30 (56%) had autonomy in managing undergraduate admissions 'locally' within their own departments while, in almost all other cases, admissions activity was led by members of a central team of administrators at university level, in liaison with the local admissions tutor.

Awareness of the government's reforms

75. The survey was administered in October and November 2007, at which time the detailed specifications of the reforms (notably the mandatory learning elements of the Diplomas and the broad shape of

³⁶ On the basis that each university sent the questionnaire to around six admissions staff. In most cases these were staff in departments where the undergraduate curriculum was deemed closest to the 'sectoral' learning to be followed in the first five Diplomas: Construction and the Built Environment; Society, Health and Development; Engineering; Creative and Media; and Information Technology. Due to the make up of its student population (almost exclusively adult), it was agreed that Bickbeck, University of London, would not take part in the questionnaire survey.

the Extended Project) had been available publicly for less than eight weeks. Accordingly, admissions tutors were directed through the questionnaire to relevant web pages where they could brief themselves further about the impending changes. In this light, they were asked to provide their best professional judgment, at that stage, as to how future admissions patterns might be influenced by the government's 14-19 reforms.

76. During the course of the survey it became apparent that many universities hold annual briefings and workshops for admission – often in the period November to March – which, among other things, review changes to context of future admissions decisions in the short- to medium-term future. In our survey, 72% of respondents said they had already received information from the professional admissions team in their university on the planned changes to A-levels, 54% on the Extended Project and 50% on the Diplomas. Had the survey been undertaken even two months later, it is likely that these figures would have been significantly higher.
77. In this context, a majority of respondents also made the point that it was one thing to receive initial information but another to proceed to the point where there was sufficient information to make reliable judgments about impact on evolving admissions practices. It was, in effect, early days.

Supply and demand among well-qualified applicants

78. As with the interviews given by senior managers, a theme underpinning the responses of admissions tutors to the questionnaire was that of the supply and demand among undergraduate applicants of requisite quality. The point needs to be emphasised, once more, that, within highly successful universities, courses with a large number of highly qualified applications per place often co-exist with areas of recruitment for which there is an inadequate supply of suitably qualified candidates.
79. In our survey there were two universities from among the six most selective in the UK,³⁷ alongside others where entry requirements were at the low end of those specified by research-intensive universities.

³⁷ As measured by 'entry standards' in *The Good University Guide 2008* (*The Times*, 2007, p. 4).

Even so, because of the situation set out in paragraph 40, it makes less sense to analyse and depict admissions patterns at an institutional level when it is among the subject departments that the dynamics of student supply and demand are most important and varied.³⁸

80. As reported earlier (paragraph 35), most 1994 Group universities at present recruit overwhelmingly from among A-level candidates. Broadly speaking, our survey of admissions tutors revealed a picture of recruitment in the traditional single-Honours subjects (e.g. history, law, international relations, mathematics/statistics) where competition for places is keen and many of the 4% of the age group with 3 or more A-levels grade A are seeking admission. Reforms to A-level that might assist in discriminating among this elite are of interest to these admissions tutors, and views on this are reported in paragraphs 89-90, below. Meanwhile, recruitment in some areas of science, and in the social sciences, is much patchier in terms of the supply of high-achieving applicants with traditional qualifications, and here there is significant interest among admissions tutors in what the Diplomas might have to offer. Views on this are reported in paragraphs 97-113, below.
81. However, it is the results of the questionnaire survey concerning the Extended Project that are reported first as these transcend this binary pattern and, at this early stage of development, are exciting broad, all-round interest.

The Extended Project

82. Of the government's reforms it is the Extended Project that has the broadest appeal to admissions tutors at this stage, regardless of subject or current supply of suitable undergraduate applicants. Views were sought concerning two dimensions of this innovation: its use in the making of admissions decisions, and its broader significance as an educational reform for 16-19 year-olds.

³⁸ 70% of the tutors in our sample had responsibility for admissions to courses that went into Clearing in 2007, a figure in line with the broader data reported in paragraph 58 on Clearing among research-intensive universities in undergraduate areas related to the first five Diplomas.

83. The potential and perceived flexibility of the Extended Project in admissions decisions was revealed by the following responses:

<i>Where applicants have completed an Extended Project we are likely to use this:</i>	Yes	No
As equivalent in value to further subject study at A-level	32%	48%
As a specified element of the entry requirement of the course	37%	56%
For use in Clearing as part of the applicant's UCAS tariff profile	57%	17%
As a positive attribute when selecting among students with similar levels of achievement (both high fliers and those at the borderline)	72%	18%

It is notable that this pattern of responses was reflected among tutors admitting students across the range of formal entry requirements, from highly competitive programmes through to those where entry requirements are set at a lower level.

84. All of the respondents had things to say about the potential of the Extended Project, with a wide range of views expressed. Seven tutors (13%) said it was too soon to come to a view, while seven (13%) dismissed the Extended Project as of minor or no significance to their admissions processes (comprising respondents representing law, maths/statistics and chemistry). The scepticism of this minority arose from:

- a view that students should concentrate before university entry on 'a sound foundation in basic skills and knowledge' rather than developing specialist expertise;
- doubts expressed by more than one tutor that 'most schools or colleges [will] have the training, resources or contacts for Extended Projects to be of real value' to students;
- doubts as to the likely take-up among A-level students: 'an average 16-17 year old has better things to do with their summer';
- concern as to the rigour of the assessment of such projects when compared to examinations.

85. Representative responses from the remainder of admissions tutors (73%) were broadly welcoming of the Extended Project. In the selection that follows, responses are grouped into those that are unequivocally welcoming of this innovation (45%) and those that are welcoming, but with reservations (38%).

(a) *Reasons why admissions tutors welcome the Extended Project, with illustrative comments*

- Enhancement of study skills

‘The IB already has this - and it is to be commended in my opinion. It will help the sixth former prepare for university study.’
(Classics)

‘We will encourage it as it will allow students to prepare better for the independent study environment at the University.’
(Engineering)

‘This is especially important for Humanities subjects, and especially the selective ones. I can not see it being immediately a requirement but it could be taken into account and possibly balanced with or against the A* grade.’

‘It will provide another useful indicator of potential.’
(Engineering)

‘Excellent preparation for University work, as long as it extends to analysis and summary and is not just reporting.’ (Business)

- Additional diagnostic evidence for selecting among applicants

‘It will add to the material by which we can judge applicants. Particularly useful as it should signal the ability of a student to conduct research and write longer essays, both skills important at degree level.’ (Politics)

‘Within Geography, this Extended Project will be a useful addition but should be clearly differentiated from any dissertation-like project within the Geography A-level. I believe that this qualification will help our admission process.’

‘Could potentially indicate skills/aptitude required for the study of Law.’

‘This will give us information concerning the independent learning skills of the students. We could weight the contribution of the project in the admissions process if we decided that we

preferred students with these skills. This might give us a more flexible tool for admission.’ (Mathematics)

‘It will be useful for us if we have to differentiate between similar students because it will show more of an ability in the skills required for university level education (e.g. independent learning, creativity and research skills).’ (Applied Social Science)

- Alignment with undergraduate modes of study

‘The Extended Project in either of its guises, part of or stand-alone from the Diploma, is certainly much more aligned with the learning styles we prefer. In fact we run a similar style module ourselves. The key implication of this for Engineering admissions would be that it will provide some potentially useful evidence of subject commitment and mature learning style for borderline, ‘widening participation’ or mature candidates. I doubt whether we'd be in a position now or in the future to reject candidates without this qualification but we could justify accepting candidates with lower scores on the basis of a good Extended Project.’

‘For research-led institutions like ours, we are likely to look positively on this and will seek to see evidence of students reflecting/referring to the research activity within the personal statement. Moreover, referees will undoubtedly reflect on this too. Given our own emphasis on research skills, this is welcomed.’ (Business and Management)

‘This could be largely positive for us. Students who perform well undertaking an Extended Project may well be suited to and interested in the opportunities we offer for similar long research projects, either as parts of courses or as individual components. The Extended Project will mean that we can do more to emphasise these options, as well as future postgraduate study opportunities, at Visit Days. Successful projects of this sort would lead students in the kinds of directions we would hope to encourage once they come to us, so we can integrate this into the admissions process.’ (Literature and Film)

(b) *Areas where admissions tutors welcome the Extended Project, but with reservations of four main kinds*

- Validity and reliability of assessment

‘The Extended Project is to be welcomed, in principle. This should provide a useful preparation for learning in our degree at UG level, and in particular later in our course for the Year 3 dissertation. I am, however, a little concerned at the variety of forms the Extended Project might take: “a design, performance, report or artefact”. I wonder how easy it will be to assess reliably the different types of Project so that the marks awarded to different types of Project are directly comparable.’
(Childhood and Youth Studies)

‘I am concerned that it will be very difficult to judge a student’s ability on the basis of such a project, unless we get some idea of what the project is about. On the other hand, it would give the student something useful to talk about in their personal statement rather than “I have always had a great passion for Computers...”.’

‘I will need to decide what I consider to be the relative academic demands of this component of pre-university qualifications in relation to more traditional methods of assessment. If it provides extra tariff points, then I may prioritise students who have undertaken the Extended Project.’ (Education)

‘It may be difficult to be sure of the standards from widely differing schools/colleges.’ (Computer Science)

- Potential burden on students and dilution/skewing of their knowledge base

‘We welcome the idea of the Extended Project but are not happy that this may be an extra burden for students to take on top of A/AS-levels.’ (History)

‘We will need to decide whether we still want a minimum of 3 A2s or whether to consider a stand-alone Extended Project as a third qualification. Does the Extended Project have an equivalent weighting to an A2? My concern would be that students can become too specialised at an early age and not have the broad introduction that 3 or 4 A2s provides. I would also be concerned that the advice given by teachers in schools

does not match the requirements for university entry.’
(Geography)

‘For courses where our typical offer is stated in UCAS tariff points we are likely to accept the Extended Project. However, [...] if the Extended Project detracts from core science teaching then it will not be considered of value.’ (Sciences)

‘Assuming unified assessment criteria across the country, the grade of an applicant in his/her Extended Project will signify the ability of the applicant. However, the technical content of the project may be insufficient for the course that the applicant may wish to study.’ (Engineering)

‘This has potential for us in courses for which we select rather than recruit. It will also help when distinguishing between candidates who have missed their offer, but may have other points of merit. However: we have some concern about yet another qualification being piled onto the current broader diet of A2 and AS, which we have supported.’ (Languages)

- Ability of applicants to communicate the achievements and benefits derived from project work

‘It could furnish very useful admissions information for us because of the way it floats free of subject boundaries: it could indicate both a student's capacity for interdisciplinary work (important for many of our programmes) and the direction of his or her particular interests. But only if s/he chose to write about it in the personal statement – without that, it wouldn't communicate very much.’ (Media/Humanities)

- Potential for plagiarism

‘I think this is a valuable development in preparing students for university study as long as there are processes in place to ensure it is independent work that is not open to the kind of abuse evident in GCSE coursework.’ (Geography)

‘Completing an Extended Project prior to university entrance will, hopefully, prepare students more adequately for independent work. Depending upon its execution, however, it may just make them better plagiarists.’ (Sociology)

86. Overall, the data from our survey shows a wide range of admissions tutors in research-intensive universities to be broadly welcoming of the Extended Project. Where this welcome is tempered by reservations, as in the preceding quotations, there remains time during the development of the Extended Project for awarding bodies, teachers and those with policy and design expertise to anticipate potential problems and address issues which threaten to undermine the enthusiasm and confidence of research-intensive universities in this new award.

Changes to GCE A-levels

87. As reported in paragraph 35, senior managers from a large majority of 1994 Group universities estimate that they recruit 80% or more of their undergraduates from among applicants who have studied A-levels or equivalent subject-based courses. Reflecting this pattern, 50% of tutors in our sample described the entry requirements of their courses solely in terms of grades required at A-level.³⁹ In their responses concerning changes to A-levels, admissions tutors were asked to focus on the implication of two key aspects for undergraduate admissions, namely that:
- the highest performing candidates at A-level (marks of 90%+ across A2 units) will receive an A* grade; and
 - most subjects will reduce from 6 to 4 units across AS-A2, and there will be 'more open-ended questions requiring greater thought and more detailed written replies'.
88. Of the responses received, 8% were unsure that they could predict the impact at this stage and 35% saw no specific implications for their departments arising from the changes. However, 57% of tutors considered that the changes would have an impact on their admissions practices.

The A* grade

89. One third of our sample expected the new A* grade to have little or no impact on undergraduate admissions to their departments. This was either because (in a small number of cases) admission was as much

³⁹ 26% described the entry requirements of their courses solely in terms of UCAS tariff points while 9% described them in both A level grades and tariff points.

based on audition/performance as it was on formal examination grades, or because (in the great majority of cases) it is considered that the A* band – estimated to comprise around 5%-6% of all current grades awarded – will be too narrow to provide a clear target for recruitment, especially in ‘recruiting’ areas of the undergraduate curriculum where there is already an inadequate supply of suitably qualified applicants.⁴⁰

90. However, over half of the sample did expect the introduction of the A* to have an impact, either positively in terms of helping tutors to differentiate more clearly among the most able students, or more negatively in terms of the new award creating a dynamic that might make it more difficult for research-intensive universities to maintain a balanced intake between applicants from different backgrounds, such as those from private and state-funded school and colleges. A further dynamic anticipated by several tutors was that the A* grade might ‘cream off’ the highest-attaining students to two or three elite institutions.

Changes to module structures and assessment

91. 37% of our sample of tutors had things to say about the proposed changes to the structure and assessment of GCE A-level courses. A minority of these responses raised concerns about the proposals and the following specific points were raised:
- that it would be undesirable if a reduction in units led to a narrowing of applicants’ knowledge-base in their subject through specialisation too early (a potential problem also identified in a couple of responses concerning the Extended Project); (History)
 - that some candidates would benefit more from ‘concentrating on standard questions’; (Mathematics)
 - that mathematics and physics courses should be left as they are to avoid further erosion of the subject content covered in the course.
92. A majority of those commenting on this aspect of A-level change were cautiously welcoming. The following are illustrative comments of recurring themes among the responses.

⁴⁰ For a detailed assessment of this point, see paragraphs 128-32.

‘The change from ‘bitty’, restrictive questions is very welcome, since open-ended questions/projects are much more in tune with the style adopted by universities in their teaching and assessment methods.’ (Engineering)

‘If the change to the unit structure and assessment style leads students to be better able to write essays and think critically, this can only be a good thing.’ (Geography)

‘I am happy to hear that students are being encouraged to think more at an earlier stage, which can only help in terms of preparation for a university course.’ (Law)

‘I would hope that the changes to questions might lead to the recruitment of students with higher levels of literacy and comprehension.’ (Sociology)

‘Hopefully the new open-ended exams will provide a more accurate reflection of students’ ability to perform at university level.’ (Psychology)

‘The move to more open questions and greater demands on candidates’ writing skills will strengthen the A-level as a criterion from our point of view: these are the things we need people to be able to do.’ (Sciences)

‘We hope that the 4 unit structure and reduction in coursework content will encourage more synoptic learning and a (slightly) less mechanistic, assessment-focussed approach to learning, though we doubt it goes nearly far enough.’ (Law)

93. In addition, several respondents reflected on the relationship between curriculum change of this kind for 16-19 year-olds and its relation to the undergraduate curriculum:

‘Any syllabus change will need to be considered in line with our first year teaching programme.’ (Sciences)

‘The reducing of 6 to 4 units will be of benefit to the student as it will hopefully provide the student with questioning and critical thinking attributes which are required at University... This will have a position implication for our course areas.’
(Media/Humanities)

‘We may need to adjust our curricula to adapt to students with different skills.’ (Mathematics)

‘We have found of late that incoming students have been lacking experience of tackling open-ended questions and projects – not necessarily the ability but certainly the experience. We have had to change fundamentally how we teach our first year. Specifically we have had to move away from the traditional style of introduction of fundamental, theoretical questions to the application of fundamentals into real world problems... [Yet] the most significant advantage of the former method is that it presents greater academic challenge to the students and is much more similar to the type of challenge awaiting them in jobs after graduation.’ (Engineering)

94. In summary, admissions tutors in this sample (biased toward subjects aligned to the first five Diplomas) were divided between a substantial group (34%) in ‘recruiting’ areas of the undergraduate curriculum where the A* grade is seen as too narrow a group of applicants to target specifically, and a majority (58%) for whom the new grade was seen as likely to make a difference, mainly in terms of assisting in discrimination among the most able candidates but also, potentially, through altering the balance between successful applicants who have been state- and privately educated. Of the 37% who commented on the syllabus changes proposed, a majority was cautiously welcoming of the changes noting that they will, in turn, influence the design of the undergraduate curriculum.

Diplomas

95. The largest section of the admissions tutor questionnaire was concerned with the biggest of the government’s innovations in 14-19 education, the Diplomas. As previously reported, in determining which tutors might respond to the survey Heads of Student Admissions in the 1994 Group universities had, in the main, selected those whose undergraduate areas were aligned potentially to content of one or more of the first five Diplomas. Consequently, 78% of the sample (42 individuals) identified one or more of the Diplomas as relevant to their undergraduate area(s), as follows:

<i>Diploma 'line'</i>	<i>No. of respondents in sample identifying this Diploma as relevant to their UG course(s)</i>
Creative and Media	16
Engineering	12
ICT	7
Society, Health and Development	5
Construction and Built Environment	4

96. The 42 tutors in this sub-sample were asked for their views on the significance for undergraduate admissions of five aspects of the introduction of Diplomas. These are now described in turn, mainly at the level of the entire sub-sample, although where striking patterns of responses relating to specific Diplomas are evident, these are reported.

Implications of the introduction of Diplomas for undergraduate admissions

97. Before looking in detail at what Diplomas might mean for entry to specific courses, tutors were asked about their overall views of the new qualification and its potential implications for undergraduate admissions. At this general level, respondents had comments to make about the educational aspects of Diploma design, its potential impact in their broad area of the undergraduate curriculum and the steps they would need to take to become fully familiar with the implications of the introduction of Diplomas for undergraduate admissions.
98. Among the educational considerations mentioned was the need to determine whether Diploma-holders will have gained the necessary intellectual skills to succeed as undergraduates – especially, in the words of a representative comment, ‘in terms of analytical and abstract approaches to the subject’ (Humanities). In this context, several respondents – especially in the humanities and social sciences – noted what they described as the ‘vocational’ orientation of Diplomas.⁴¹ ‘Our degrees are very theoretical’, said one, ‘and I would worry about how the students would cope with this having previously

⁴¹ After our questionnaire had been circulated to admissions tutors the government announced that the first 14 ‘sectoral’ Diplomas would be joined, from 2011, by three ‘broad subject’ Diplomas: in Languages, Science and Humanities (DCSF, 2007c)

engaged in more practical studies' (Social Studies). A second tutor noted that the first five Diplomas 'seem designed to bring the priorities of business into the mainstream, post-16 curriculum. If this is successful, then there will be interesting tensions between their language and that of our own recruitment – which often invokes critical distance and personal autonomy' (Media Studies / Humanities). In contrast, a third tutor considered that study for a Diploma 'will indicate to us the serious nature of the applicant towards the subject area' (Social Work); while a tutor from Sociology considered that, if successfully implemented, the orientation of Diplomas toward 'vocational training rather than academic learning' could have long-term influence over student and employer expectations of undergraduate education.

99. Tutors from a range of subjects areas had points to make about the impact of Diplomas more specifically on areas of the undergraduate curriculum. The following are representative and resonate with comments made in our interviews with senior managers:
- a hope that the Engineering Diploma will result in a large increase in applicants to related degree courses, linked to a fear that the Diploma will recruit extensively from the pool of students who would previously have gone down the BTEC route, rather than from the wider pool of potential students;
 - as with vocational GCE A-levels and BTEC National Diplomas, that it is the depth of maths and physics which should determine the acceptability of qualification for undergraduate entry and that, if this is lacking, extra teaching in the first undergraduate year would have to be considered (Engineering);
 - that, on the other hand, Diploma students studying Engineering 'may well have strong skills in other areas, for example, independent learning skills and, possibly, more mature attitudes towards learning', and that this could have a bearing on both admissions and pedagogy in undergraduate teaching;
 - that the IT Diploma is not an adequate preparation for degree study in Computer Science;
 - that, when considering progression from Diplomas to general subject areas, for example Geography, it may be difficult to determine levels of prior knowledge.

100. This last point was linked to the responses of number of tutors who noted the need, as one put it, to ‘grapple’ with Diplomas as a new type of qualification and one unlike the traditional subject study of A-level students entering research-intensive universities. Issues raised under this heading included the need to:
- understand the broader remit of single-subject qualifications;
 - understand the cross-over of subject material with existing degree programmes;
 - verify claims made concerning the ‘relative academic standard’ of Diplomas compared, for example, to A-levels (‘we would need to assess this qualification in detail and make sure that the learning outcomes match an equivalent set of 3 A2 units’);
 - receive much more information than that currently available in order to make such judgments with confidence.

The likelihood that departments will admit applicants with Diplomas to undergraduate courses from 2010

101. The departmental admissions tutors surveyed identified, between them, 56 courses for which they were responsible where there appeared to be a clear link to the content of one or more of the first five Diplomas. They were asked about the likelihood of their admitting Diploma-holders onto these course and the responses were as follows.

Likelihood of accepting applicants from Diplomas to undergraduate courses where there is a clear link in content

Very likely	48%
Likely / quite likely	5%
Possible	9%
Not likely	2%
Not at all likely	36%

102. Admissions tutors were asked next to provide their reason for coming to this initial judgment, and any other comments they wished to make in relation to this question. Characteristic replies are now reported.

- (a) *It is very likely that applicants studying for Diplomas will be admitted to related undergraduate courses*

‘Dependent upon grades attained, the likelihood of admitting applicants with Diplomas is high.’ (Social Work)

‘Of course we would accept applicants with the Diploma. It would be very surprising if we were not to do so, since we currently accept students offering a whole range of qualifications, including AVCE.’ (Management)

‘We already recruit students with a variety of qualifications (A-levels, BTEC Nationals, Access course Computing, etc.) The new Diplomas fit in nicely.’ (Computing)

‘The programme maps rather well onto foundation type programmes that we link with already for most of our degree courses.’ (Engineering)

‘It is unlikely that many of our applicants will present a Diploma. We will view this in a similar way to the established BTEC diplomas. The Diplomas may not be acceptable for courses with specific subject requirements, but will probably be suitable for entry to courses with more general entry requirements.’ (Science)

‘These courses are meant to be equivalent/similar to A-levels. We see no reason why they should not be acceptable as means of entry to engineering and Computer Science courses’.

‘From the information I have seen to date, the full Diploma (at a high attainment level and when taken with additional mathematics) should gain entry onto our Engineering degree programmes.’

‘The Engineering Diploma provides a very clear correlation with Manufacturing-related degree programmes, and are suitable for Mech. programmes, although there is obviously less emphasis on engineering science compared to a Physics A-Level. However, careful use of Additional and Specialist Learning should help to reinforce these areas.’

‘We do not anticipate a large number of applicants coming through this stream, but we will treat them on the basis of their UCAS tariff points.’ (Psychology)

‘Applicants to [our part-practice courses] tend to offer more practice-based qualifications, at A-level, e.g. Drama or

Performance Arts, and to be pursuing other performance-based graded qualifications at the same time, e.g. dance or music. The more able students may find the [Creative and Media] Diploma structure more attractive than the 3 A-level route'. (Drama)

'[The Society, Health and Development Diploma could be] a programme that allows students to pursue detailed study of the areas listed, while developing their capacity for independent study and managing an extended piece of work is likely to result in students who are: (a) engaged with the range of issues that we consider in our schemes; and (b) equipped rather better for study than are many of the current cohorts'. (Human Sciences)

- (b) *It is not at all likely that Diploma-holding applicants will be admitted to related undergraduate courses*

'On the basis of the available evidence, it seems unlikely that the [Creative and Media] Diploma will provide the highly specialised training in the analysis of literary texts that we require.' (English)

'[The Society, Health and Development Diploma] is not directed towards the kind of media programme that we offer.' (Sociology)

'No currently-proposed Diploma has the right focus; advanced mathematics, which is primary for us, would be secondary in a Diploma.' (Mathematics tutor identifying the Construction and Built Environment Diploma as of possible relevance)

'At present, I would prioritise students with traditional A-level qualifications.' (Education Studies: tutor identifying the Society, Health and Development Diploma as of possible relevance)

'Both the Diplomas look too vocational, with little emphasis on cognitive learning. Most of the skills gained appear to be transferable and not subject specific. We would like to see a combination of these skills.' (Geography tutor identifying the Construction & Built Environment, and Society, Health & Development Diplomas as of possible relevance)

'We look to the content of specific A-levels for a reasonable match, in knowledge and practices, between an applicant's school experience and our courses. The Creative and Media Diploma specifications don't offer that; rather, they suggest a

battery of skills. Many of these skills we would, of course, like our students to have, but they don't have any very specific bearing on our degree programmes. So it's rather like a 'third' A-level in Latin or Statistics: we would take it as general evidence of energy and mental ability, and value it as a background to relevant A-levels.' (Media Studies / Humanities)

'Students interested in studying Law are more likely to do A-levels especially when Law A-level is offered. Current applications reflect this. If students have the required UCAS tariff they will be considered.' (tutor identifying the Society, Health and Development Diploma as of possible relevance)

'None of our courses seem to link with the Creative and Media Diploma and I would be unhappy to admit students just on the strength of their Diploma. The Diploma seems to be focusing on a much more vocational and general career within the field of 'media' rather than any particular focus on theatre history/theatre writing/theatre making. I don't feel, therefore, that the Diploma alone should be the sole qualification. Aspects of it might have some relevance but I don't feel it would adequately prepare students for the courses we provide.'

103. As the range of these responses suggests, there was no clear pattern of likelihood that students would be admitted to an undergraduate course related to specific Diploma areas. Across the sample of admissions tutors, a majority thought it was likely that such students would be admitted to their courses but some tutors representative of each Diploma area saw little likelihood of admitting Diploma-holders. Responses to this question also served to emphasise a relatively imprecise 'match' in many cases between Diploma lines and seemingly relevant undergraduate course areas.
104. Many respondents, including those considering it very likely that such students would gain places on undergraduate degrees, had caveats or unanswered questions at this stage in the development of Diplomas. The resolution / clarification of these during 2008 and early 2009 will be important to securing a progression route from Diplomas to degree study at research-intensive universities. The most cited of such caveats were the following:

- the need to see the UCAS tariff awarded to Diplomas;⁴²
- the need for students to have undertaken an appropriate Extended Project, along with relevant Additional and Specialist Learning;
- the sufficiency, in practice, of the mathematics elements in the Engineering Diploma;
- the need to know much more detail about the kinds of learning that Diploma students will have encountered.

105. Finally, under this heading, a few tutors discussed the question of what might be termed more generalised progression from Diplomas to undergraduate study, for example where the high-achieving applicant wishes to branch out from their studies to the age of 18/19, into a new area. Two such responses to the questionnaire illustrate the point:

‘We admit students with a wide range of qualifications - some of which are not particularly good preparations - but we judge each student on his/her merits.’ (Computer Science)

‘If we were convinced that these Diplomas were equivalent to A-levels and that candidates met our other criteria for critical engagement with and commitment to our discipline, they would be likely to be admitted to our Politics and Politics and International Studies Degrees... Very well qualified candidates who demonstrate sufficient levels of commitment to and critical engagement with our degrees would, I expect, be made offers, just as currently students taking A-levels outside social science and humanities subjects are made offers if they meet our requirements for excellence.’

The significance of the UCAS tariff in decisions concerning Diploma applicants

106. Departmental admissions tutors were asked in our questionnaire to indicate their view of the importance in admissions decision of the UCAS tariff points that will be awarded to the Diplomas. Their responses were as follows.

⁴² In December 2007 it was announced that the highest-achieving Diploma students will be able to gain 420 points within the framework of the Diploma at Level 3, including options courses. This is equivalent to the range of study undertaken by high-achieving A-level students who currently enter research-intensive universities, namely four awards as AS level and three at A2. See also paragraphs 106-08, below.

In admissions decisions in your department, how significant will be the UCAS tariff attached to Diplomas:

A very important consideration	43%
A fairly important consideration	20%
A minor consideration	20%
Of no consideration at all	15%
No response	2%

107. In those cases – a majority – where it was considered that the UCAS tariff would be of importance, this was for three main reasons:

- because the numerical value of applicants' qualifications feeds directly into newspaper league tables, and this metric is used by many managers in research-intensive universities to judge the quality of an individual programme at departmental level;
- the tariff is seen as a reliable proxy for 'the standard of education that the applicant has achieved';
- through a concern to be fair and consistent to applicants applying for a course who have a wide variety of educational backgrounds:
'the new Diplomas will take time to bed down and their true relative value to A-levels to be known. A reliable tariff for comparison between different qualifications is, of course, essential for purposes of fairness between applicants and for discrimination of potential and ability amongst applicants by the Universities.'

108. In those cases – a minority – where it was considered that the UCAS tariff would be of little or no importance, this was for two main reasons:

- the tariff is not seen as a reliable proxy for the achievements of applicants:
'the UCAS Tariff in the end has an averaging effect on all qualifications, and there is the assumption that UCAS is able to appropriately apply correct tariffs to new qualifications. The UCAS Tariff hides detail, and it is the detail of the qualifications which is of interest and is informative'.
- tariff points are not used in the admissions process: 'we specify grades rather than an overall tariff because we think

this a better predictor of success on our degree courses than the overall tariff’.

The appropriateness of the mandatory Diploma content

109. Admissions tutors asked next whether they considered the mandatory elements of Diploma study to be a sound preparation for undergraduate education in their department. For those who had identified a Diploma of relevance to the courses for which they had admissions responsibilities, the responses were as follows.

Is it your view at this stage that Diploma students who achieve high grades in the mandatory units of the Diploma will find this a sound basis for succeeding as UG Honours students in your department?

	Reponses	
Yes	20	48%
Possibly/probably	3	7%
No	11	26%
Don't yet know	6	14%
No response	2	5%

110. As with responses to the question concerning the likelihood of Diploma-holders being admitted to undergraduate programmes (see paragraph 104), those responding positively to the mandatory elements of the Diploma study as a basis of undergraduate education also had caveats or unanswered questions at this stage needing resolution or clarification during 2008 and early 2009. Such caveats are illustrated in the following responses.

‘It depends entirely on the extent of teaching of key subjects in the Engineering Diploma and the quality of that teaching. Much of what is required in Engineering at HE level is analytical rather than hands-on [and] experience-based, and the specification for the Engineering Diploma is less than clear as to how rigorous these aspects of the teaching and assessment will be’.

‘Yes - provided excellent achievement in the maths and scientific principles components.’ (Engineering)

‘Yes, generally speaking. But they must also have done well in the Additional and Specialist Learning units (and in our case additional mathematics).’ (Engineering)

‘Yes, though obviously we won't know whether this is the case until we have had a cohort pass through. I would certainly be happy to take a small number to start with to see how they get on’. (Childhood and Youth Studies)

‘I think this is very difficult to assess until we have more detail of the content of the relevant Diploma, clarity on the criteria by which they will be assessed, and confidence in the application of those assessment criteria.’ (Human Sciences)

‘Assuming that external and internal examination standards maintain rigour and reward excellence where appropriate’. (Engineering)

‘In general, it is very difficult to predict what constitutes a sound basis for success at university level – students with impeccable academic backgrounds can flounder and the least promising student with the bare minimum of non-standard qualifications can flourish.’ (Psychology)

111. The main reasons given by the minority who considered that the mandatory elements of the Diploma study were not a sound basis for undergraduate education were:
- the course content is insufficiently demanding or specialised in its analytical training;
 - the subjects covered do not match entry requirements;
 - the unit specifications are too vague for academic staff to be confident that a sufficient grounding in the skills of academic analysis will have been achieved.

Entry requirements for Diploma applicants relating to Additional and Specialist Learning

112. In a final question on Diplomas, admissions tutors were asked if they were likely to specify achievement by Diploma-holders in particular kinds of options courses as a requirement of undergraduate entry. For those who had identified a Diploma of relevance to the courses for which they had admissions responsibilities, the responses were as follows.

Is your department likely to specify combinations of study by Diploma applicants as an entry requirement (e.g. mandatory Diploma units combined with particular AS, A2 or IB units)?

	Reponses	
Yes	22	52%
No	17	40%
Don't yet know	2	5%
No response	1	2%

113. A range of examples of the kinds of options that might be required of Diplomas holders were provided by respondents.

Creative and Media Diploma mandatory elements, plus:

‘For languages, linguistics and literature programmes, any A-level or IB HL component in a foreign language and/or other Humanities subjects.’ (Languages, Linguistics and Film)

‘For film programmes, good grades in English, Media or Theatre Studies.’ (Languages, Linguistics and Film)

‘A particular A-level, or at least, an A-level in a relevant subject.’ (Media Studies / Humanities)

‘If applying to Literature or Film degrees, study of an appropriate AS, A2 or IB essay-writing subject would be highly desirable: e.g. English, Film, History.’ (Literature and Film)

‘Applicants at present are not ruled-out by their A-level choices, but we do indicate a preference for a B grade in one of a range of related subjects.’ (Film and Theatre Studies)

Engineering Diploma mandatory elements, plus:

‘A2 in Maths, Physics, Psychology, Chemistry, Economics or Accounting.’ (Computer Science)

‘A-level Mathematics or Pure Mathematics or equivalent.’ (Mathematics)

‘A-level or IB HL in Biology, Chemistry, Mathematics or Physics.’ (Faculty of Science)

‘For all of our MEng/BEng programmes we will require ‘additional mathematics’, the level of this material being in-line with the ongoing work being carried out by the Engineering

Subject Centre of the Higher Education Academy.’
(Engineering)

‘Mathematics A2 or the specific Level 3 units being developed by the awarding bodies in Higher Maths Mechanical Devices would be specified.’ (Engineering)

Information Technology Diploma mandatory elements, plus:

‘Some modules from A2 or IB maths and physics.’
(Engineering)

‘For Electronic Engineering degrees ONLY we require A2 level mathematics or equivalent. Therefore, whatever the student has studied, we insist on mathematics for these degrees. (e.g. IB Maths or Higher Maths, but not maths studies; BTEC Mathematics Level III, etc).’ (Computing and Electronic Systems)

Society, Health and Development mandatory elements, plus:

‘A grade in a relevant A-level subject, e.g. Humanities for entry to e.g. History or a B for entry to Sociology.’ (Humanities / Social Sciences)

‘Any modules linked to care, sociology, psychology, maybe.’
(Social Work)

‘For the LLB Law with French Degree we would expect applicants to have studied A-level, or A-level equivalent, French.’ (Law)

Construction and Built Environment Diploma mandatory elements, plus:

‘An A2 award, as well as GCSE Maths grade B and English grade C.’ (Business Studies: this tutor would consider applicants holding any of the five Diplomas)

‘AS/A2 units in a relevant subject such as: Geography; Sociology; Environmental Science; World Development; or similar subjects from the International Baccalaureate.’
(Geography: this tutor would consider applicants holding any of the five Diplomas)

114. It was clear that a number of admissions tutors responding to this question had yet to grasp how Additional and Specialist Learning will fit into the structure of Diploma awards. Meanwhile, others indicated

that the question of specifying the nature of such achievement by applicants as part of entry requirement to undergraduate courses was likely to be highly significant, but that it had yet to be thought through systematically in their university. This is an area that will need significant development during 2008 if high-achieving Diploma candidates facing options choices in the autumn of 2009 are to make informed choices in relation to progression to research-intensive universities.

115. Even then, it is likely that the 'Diploma route' will be seen by admissions staff as experimental. As one put it:

'I imagine that at least for the first couple of years we really would need to look at the UCAS form and detail, where the candidate would need to explicitly state why they have chosen to do the Diploma, and how that relates to their chosen subject of study at university'.

Analysis and conclusions

Undergraduate admissions, research-intensive universities and the government's 14-19 reforms: what is at stake?

116. Undergraduate education in the research-intensive universities of the UK is constantly evolving in response to social change, intellectual developments and its interaction with a dynamic public policy environment. Neither is it uniform for, while research-intensive institutions comprise a clear-cut component of UK higher education, they offer a diverse culture for undergraduate study. The portfolio of undergraduate courses available in different universities varies; so, too, do the size, character and internal organization of the various universities.
117. The senior managers responsible for undergraduate education in these institutions face many common challenges. Some of these challenges require an accommodation with changing cultural attitudes in wider society. Consequently, the range of courses on offer is influenced by trends in the relative popularity of one subject of study over another among well-qualified applicants. Other challenges arise from the need to respond effectively to priorities in public policy. This facet of the management role was clearly illustrated by the concern of 1994 Group universities at the time our interviews to attract a more diverse student population and enhance the employability of their students upon graduation.
118. In addition to these common challenges, managers in research-intensive universities are also concerned to secure an optimum profile of undergraduate recruitment to suit the character and goals of their particular institution. They are joined in this task by academic subject specialists in the various departments. For these staff the priority is to ensure that their particular subject holds its own within the institution, an interest represented in our research through the questionnaire responses of admissions tutors. As has been shown in this study, the ability of both groups to secure an appropriate annual undergraduate intake, at institution and subject level, respectively, is strongly influenced by patterns of supply and demand among well-qualified applicants.

119. When all of these considerations are added together, the process of admitting undergraduates to the most prestigious UK universities becomes the nexus at which important trends converge: evolving attitudes in society about the importance of different spheres of knowledge; the effects of specific institutional interventions, such as the government's reform of 14-19 education; and the aspiration and reputation of individual universities. The resulting pattern of undergraduate study in research-intensive universities – organisational, demographic and cultural – is an important feature of English society, and influential in social and economic affairs.
120. Within this general context, the likely effects of the current 14-19 reforms on undergraduate admissions to research-intensive universities are of considerable interest. First, will the reforms assist those universities offering the most intellectually demanding courses to identify applicants with the highest potential in traditional subject studies? Second, will the reforms provide a foundation from which the scope of undergraduate education in leading universities can broaden academically and become more socially inclusive? Third, will they increase the supply of well-qualified applicants in those undergraduate subject areas that currently struggle to recruit? Fourth, are there new forms of project-based course structures and assessment that can contribute equally to each of these imperatives?

Key findings from the research and their significance

121. Although our research was undertaken at an early stage in the implementation of the 14-19 reforms, it provides some answers to these questions. On the broadest canvas, by interviewing at some length a range of senior managers in nineteen universities, we have established that the impending changes to 14-19 education are seen neither to prejudice, nor run counter to, the future direction of undergraduate education being mapped in 1994 Group universities (and in those Russell Group universities where we have had informal communication) – with the exception of a concern that the award of the A* grade at A-level could retard efforts to make the undergraduate population in research-intensive universities more socially inclusive. With this caveat, the reforms appear at this stage to pass the 'no detriment' test posed by one Vice-Chancellor and, in the round, are seen as aligned to key challenges facing those responsible for undergraduate education noted in paragraph 117: attracting a more

diverse undergraduate population and enhancing the employability of students upon graduation. Similarly, among admissions tutors, there was no sense that the reforms are seen as a potential hindrance to the realisation of key goals at subject level, with the exception of a small minority who view the effect of government intervention in 14-19 education over recent years as having been a dilution of academic standards.⁴³

122. Alongside such views, our respondents all stressed, in various ways, the importance of the principle of self-determination for their university when ‘engaging’ with the government’s reforms. In this context, many were also mindful that the impending changes are designed to secure a wide range of objectives in 14-19 education, including an increase in ‘staying-on’ in full-time education among 17 year-olds, and higher levels of formal attainment among those entering the labour market at 18+. As a result, they are aimed only partially at enhancing higher education and, within this, directed to only some of the priorities of the research-intensive institutions within the university sector. If specific reforms appear likely to be helpful immediately, most notably the changes to A-level courses and awards, our respondents also viewed the relevance of others, such as the introduction of Diplomas, as needing to be assessed against the goals of each university as set out by its senior management group and governing Council.
123. Moreover, all respondents emphasised that they were being asked to exercise judgment at an early stage of the implementation process, when much information about the detailed operation of the 16-19 reforms was not yet available.⁴⁴ Even so, aspects of the reforms were sufficiently clear for a range of concerns about their development thus far to be raised jointly by senior managers and departmental admissions tutors. These included: the impact of the new A* award at A-level on the social composition of the undergraduate population in research intensive universities; the balance to be struck between core and options work in the newly-structured A-level programme; the reliability of assessment of students’ work for the Extended Project, along with the potential for plagiarism; the ability of Diplomas overall

⁴³ Like a number of senior managers, some admissions tutors were concerned that the award of the A* grade at A-level had the potential to make the undergraduate population more socially exclusive. See below, paragraph 123.

⁴⁴ As reiterated at various points in this report, this was the first time that a majority of respondents had examined the nature of the impending reforms in any detail.

to develop rigorous analytical skills in would-be undergraduates; and, more specifically, the composition of the mandatory curriculum in the Engineering Diploma, and in the IT Diploma if seen as leading to undergraduate study in Computer Science.⁴⁵

124. Despite these reservations, it is the overall conclusion of this report that a majority both of senior managers and departmental admissions tutors participating in the study considered that all three of the reforms under scrutiny – changes to A-levels, the introduction of the Extended Project and the introduction of Diplomas – had potential and promise at this stage of their development, and would have an impact on their universities. The key data supporting this conclusion may be summarised, as follows:

- senior managers in all of the 1994 Group universities welcomed the introduction of A* grade at A-level to assist in differentiation among their highest-attaining applicants for undergraduate places;
- a great majority expected to use it for this purpose straightaway in courses such as English, Drama, Law, History, Mathematics, Business Studies, Medicine, Dentistry, Psychology, Economics and Engineering;
- the Extended Project was widely welcomed in principle by senior managers, especially in the context of the Diplomas;
- senior managers in all nineteen universities identified undergraduate courses that, potentially, could offer progression from the content of one or more of the first five Diplomas, and a majority identified a potential match of one or more of their undergraduate courses to four of these five Diplomas;
- despite concerns about aspects of the curriculum content of some of the new Diplomas, including the majority view of managers that the mandatory Diploma curriculum, in general, may not be well suited as preparation for undergraduate study, no institution intended to reject, as a matter of principal, applicants who have studied for a Diploma. Furthermore, the range of assessment methods proposed for Diplomas, and their relevance for assessment at undergraduate level, was widely welcomed by managers;
- of the 37% of admissions tutors who commented on the syllabus changes proposed to A-levels, a majority were

⁴⁵ See paragraphs 50, 55-56, 60, 65, 69, 84, 85(b), 91, 98, 99, 102(b), 104, 110.

- cautiously welcoming of the changes, noting that they will, in turn, influence the design of the undergraduate curriculum;
 - a large majority (72%) of departmental admissions tutors envisaged a highly graded Extended Project being recognised as a positive attribute when selecting among students with similar levels of achievement (both high fliers and those at the borderline). 45% unequivocally welcomed its introduction and considered that it would enhance study skills, provide additional diagnostic evidence for selecting among applicants and align well with undergraduate modes of study. A further 38% welcomed the introduction of the Extended Project but had questions about its development thus far;
 - 48% of admissions tutors in relevant undergraduate areas considered that it was 'very likely' that they would be admitting Diploma students to undergraduate courses from 2010, with a further 14% considering this to be quite likely or possible. Responses to this question were spread evenly across the various Diploma areas;
 - of those who had formed a view at this stage, 58% of admissions tutors in relevant undergraduate areas considered that Diploma students who achieved high grades in the mandatory units of a relevant Diploma would find this a sound basis for succeeding as an undergraduate student in their department;
 - 52% of these admissions tutors thought it likely that their departments would specify combinations of study undertaken by Diploma applicants as an entry requirement.
125. These data indicate that 1994 Group universities consider all three of the 14-19 reforms affecting higher education to be important and that almost all are starting to engage actively with all three. The range of this engagement is varied, reflecting patterns in the strength of student supply.:
- the A* grade at A-level is seen as relevant to some programmes in almost all of these universities;
 - the Extended Project is widely welcomed in principle and in prospect;
 - almost all of the universities are starting to look actively at the prospect of admitting Diploma-based applicants.

126. However, an important message from many of our respondents is that the reforms will need to live up to their promise. Central to this will be the quality of teaching offered to students in schools and colleges, and the rigour of the assessment associated with the new programmes of study. In this light, a number of senior managers and admissions tutors commented that the reforms would take some time to 'bed down', and that if they are to be instrumental in consolidating new pathways to undergraduate study at leading universities, this will be dependent on the analytical qualities possessed by students at 18+ who attain high grades in 2010 and the years immediately following, and how they fare as undergraduates.

New patterns of undergraduate admissions?

127. Such findings lead next to a consideration of the conclusions that can be drawn about how each of the main reforms may contribute to new patterns of undergraduate admissions to research-intensive universities. To consider this, each of the three main reforms is now examined in turn.

A-level course structure and the A* award

128. While broadly welcomed by our questionnaire respondents on educational grounds,⁴⁶ the changes to the structure of A-level modules are unlikely, of themselves, to alter patterns of recruitment among applicants to undergraduate courses, given the established dominance of the A-level route as preparation of young people for admittance to research-intensive universities.
129. The award of the A* grade at A-level raises more detailed questions concerning future patterns of undergraduate admissions. Respondents to our study were unanimous in welcoming a new discriminator at the top end of the academic ability spectrum. However, as several pointed out, a key question will be the effect of setting the A* 'bar' at the level announced: 90%+ across 2 or more A2 units. Among a year-group cohort of around 660,000 18 year-olds in 2010,⁴⁷ it appears likely that around 29,000 students will attain at least

⁴⁶ See paragraphs 92-4.

⁴⁷ NOS (2007b), table 4.

one A*, with around 11,000 gaining two such awards and 3,500 gaining three A*s.⁴⁸

130. At present, just two universities – Oxford and Cambridge – take one third of all candidates who achieve three A-levels at grade A, selecting among these by interview and supplementary tests.⁴⁹ Under the new arrangements, a rather larger number of candidates look set to gain a single A* award than currently gain three grade As;⁵⁰ nevertheless, two new discriminators will come into play. First, it will be possible to identify the much smaller number of candidates who secure two or, particularly, three A*s; on the model used here, a group representing numerically around half of the places available at Oxford and Cambridge each year will gain three A*s. Second, a premium will be enjoyed by those who secure two As* and one or more other grades at A.
131. Assuming that a large majority of those with three A*s and many with two A*s enter Oxbridge, much of the effect of the introduction of the A* award looks set to be the competition among the remaining 36 research-intensive universities that are members of the Russell Group and 1994 Group, to recruit among roughly 42,000 students with one or more A*s, a group that represents numerically around 35% of

⁴⁸ These projections are based on: the profile of grades awarded to candidates aged 16-18 in England in 2005/06 (DfES, 2007, table 2); details of grades awarded to all UK candidates in 2005/06 (JCQ, 2007, p. 6); and the estimate of the Qualifications and Curriculum Authority that 5.6% of examination results across all grades would be awarded an A* under the new arrangements. The resulting figures correlate closely with those calculated in a study by Edexcel for the QCA, based on a recalibration of candidates' scripts for 2005/06 (information supplied to the research team by QCA and Edexcel). The projections modelled for our study assume that candidates take three A2 subjects at A-level, and that their marks across subjects have a multivariate normal distribution, with constant pairwise covariance. The covariance is inferred from the percentage of examinations awarded an A grade (24.9%) and the percentage of candidates gaining 3 A grades (10.7%). This distribution is then used to calculate the percentage of students receiving 1, 2 and 3A* grades, where the grade boundary chosen matches those underlying the 5.6% figure for GCE grades that it is predicted will, in future, secure an A*. This model does not account for the number of students taking four or more subjects at A2 and who will typically have a higher probability of gaining a given number of A*s.

⁴⁹ IPPR (2007); SPA (2007).

⁵⁰ Around 32,000 of all candidates, compared to the 26,200 who gained 3 grade As in 2005/06.

those who enter these 36 universities each year.⁵¹ When the data on Clearing reported in paragraph 58, and the analysis of ‘selecting’ and ‘recruiting’ subject areas reported in paragraph 40, are also taken into account, a picture of greater refinement emerges. This suggests a pattern of admission to undergraduate courses among the highest-attaining GCE students in which:

- research-intensive universities across the board are able to select with more discrimination among students applying to the most selective courses;
- almost all students seeking places outside Oxford and Cambridge who attain an A* grade in their target undergraduate subject, along with a second A* and one other grade at A, are likely to enter their first-choice university;
- all those securing an A* and applying for a course in a ‘recruiting’ subject area are likely to gain a place at their first-choice institution; and
- other students who have either straight As, or an A* and a mix of As and Bs, will be in competition with each other for a majority of the remaining places.

132. Finally, it remains to be seen how large a proportion of candidates achieving A* grades are from independent schools. If, as seems likely, this is a large proportion,⁵² a question will arise as to whether the introduction of the A* award has had the effect of assisting research-intensive universities in widening access for undergraduate applicants from a range of backgrounds.

The Extended Project

133. Our study indicates that 1994 Group universities are likely to take a close interest in applicants who have taken an Extended Project, either as a mandatory part of their Diploma studies or alongside awards such as AS and A2 at A-level. The formal aims of the Extended Project were attractive to most of our respondents in our study. At the same time, a minority noted a number of challenges ahead for the effective implementation of the Extended Project,⁵³ but if these are overcome it seems very likely that, across these and similar research-intensive institutions, a high grade in this award will

⁵¹ UCAS 2007

⁵² i.e., a result that mirrors the stratification reported in Sutton Trust (2007).

⁵³ See paragraph 85(b).

be seen as a positive attribute when selecting among applicants with similar levels of overall achievement.

Diplomas

134. The introduction of the Diploma is the most ambitious of the government's 14-19 reforms and our study shows that, during the latter half of 2007, staff in 1994 Group universities were at a preliminary stage in assessing their importance and potential impact for undergraduate admissions.
135. For this reason, institutions were not yet in a position to state formally the entry requirements they might specify in relation to applicants holding or completing Diplomas. Nevertheless, the data reported in paragraph 113 provides a range of examples of the approach to this question that may be taken by subject departments within research-intensive universities.
136. As noted in several places in this report, the issue of supply and demand among applicants well qualified to undertake undergraduate study across the various subject areas is central to understanding the potential impact of Diplomas on admissions patterns. With 29 of the 38 Russell Group and 1994 Group institutions entering Clearing in 2007 in course areas related to the five Diploma 'lines', and with the UCAS tariff for the highest achieving Diploma students now set at the same level as those securing similar grades in four AS and three A2 awards, there is a strong incentive in three-quarters of these leading universities for both senior managers and departmental admissions staff to look closely at applicants studying for a Diploma.
137. As with the Extended Project, there are challenges to be met in the course of implementation during 2008-10 if Diplomas are to be seen as relevant to the admissions practices of research-intensive universities.⁵⁴ At the time of our research the new awards remained at an early stage of development and faced many unresolved questions, most notably the extent of their uptake among 16 year-olds in 2008 and 2009, and the analytical rigour which will characterise

⁵⁴ And not just where there is a content match between a Diploma 'line' and an undergraduate course, but for those Diploma-based applicants who seek to broaden their academic experience at undergraduate level. See paragraphs 105 and 113.

them in practice.⁵⁵ For this reason, individual universities were not in a position formally to furnish us with estimates of the numbers of such applicants that may come to be admitted in the first cohort. However, assuming the various hurdles to ensure successful implementation are surmounted, and taking into account the data generated through our interviews and questionnaires, it seems very likely that almost all 1994 Group universities will be in a position to accept applicants completing Diplomas onto undergraduate courses from 2010 and, moreover, that these applicants will form a small group of young people who, across the country, progress to undergraduate study in core subjects at these institutions. The numbers likely to be admitted are difficult to estimate but, to begin with, may well be similar to those currently recruited from BTEC and equivalent programmes. Where the flow of such students admitted is larger, this will probably be because the university concerned has developed activities that, as one of their effects, have secured a broadening of the social background of the undergraduate population. Examples of such developments are the establishment of: foundation degrees; a separate campus in a community where there is little tradition of access to higher education; and undergraduate programmes that have a strong practice component (either in the arts and professions, or via a paid placement year).

138. As such, and assuming that Diplomas both avoid besetting weaknesses in their development and recruit to target in the early years,⁵⁶ this report concludes that the government's aim of establishing Diploma study as a route from school or college to higher education for a number of 'the most capable students preparing for the most demanding university courses' is likely to be achieved, albeit on an small scale.

⁵⁵ As one admissions tutor in our survey said succinctly: 'There is no question of not wanting to recruit Diploma candidates onto our programmes, the real question is will we be able to'. See also the various caveats listed by our respondents in paragraphs 98-99 and 104.

⁵⁶ The current target for the uptake of Diplomas among 16 year-olds in September 2008 is 10,000 students (1.5% of the age group).

Successful implementation of the reforms during 2008-10: considerations for government and for research-intensive universities

139. In this final section of the report, we are now in a position to summarise the implications of our findings for the successful implementation of these 14-19 reforms in the crucial period 2008-09, from the point of view both of government and the research-intensive universities.

Considerations for government

140. For over 15 years, members of the government have been wrestling with various policy options for the reforms of 14-19 education.⁵⁷ In 2003 the challenge was described as that of overcoming ‘two central weaknesses’ in this sphere of English public policy, dating to at least the 1880s: ‘First a weak vocational offer. Second a narrow academic track – narrow in who was on it, and also narrow in what was studied’.⁵⁸ The government’s reforms are positioned to address both weakness by creating a bridge between them, especially through the Extended Project and Diplomas. Given that these weaknesses have such a long history, and the reforms designed to address them are being introduced, relatively speaking, at breakneck speed, great care will be needed in their continuing implementation to ensure success.

141. For those aspects of the reforms aimed, on the one hand, at securing a new, high prestige route from school or college to university and, on the other, at strengthening the traditional A-level route, there are a number of immediate actions based on findings reported in this study that need consideration by the government. These include resolving uncertain elements and addressing potential weaknesses, as follows.

(a) Implementation of the introduction of Diplomas

The ‘engagement’ of research-intensive universities in the design and method of teaching the mandatory Diploma units has, so far, been ad hoc and small-scale. Given the goodwill expressed by the respondents in our study toward Diplomas as a whole, and noting also the concerns expressed about the suitability of how they may turn out in practice, there is an opportunity during 2008 to encourage academic staff from these

⁵⁷ See, for example, Finegold *et al.*, (1990).

⁵⁸ Milliband, 2003: 3.

and other research-intensive universities to become involved in the schemes of work to be developed by teachers who will teach Diploma students in schools and colleges within, say, 50 miles of their campus.⁵⁹ Given, also, that our respondents in the 1994 Group universities regard such engagement largely as altruistic, and seeing as such engagement has considerable potential to support effective implementation of this aspect of the 14-19 reforms, it would appear appropriate to fund the work of this kind that academic staff might undertake. Benefits arising from the stimulation of such activity include:

- a strengthening of the likelihood that Diploma learning and attainment will be of a kind that admissions tutors in research-intensive universities can regard as a suitable as a preparation for undergraduate study;
- the development, relatively quickly, of a deeper understanding among key professional groups, especially teachers and guidance advisors (for whom access to such knowledge is urgent), of the kinds of Diploma study that are likely to be welcomed by admissions tutors at research-intensive universities;
- a strengthening of those local networks and progression routes that will increase the likelihood of Diploma students, including those studying in communities with low historic participation in higher education, being admitted to undergraduate study in leading universities.

Such activity seems especially important at the outset of Diploma implementation, before the curriculum of Diplomas is determined by others and becomes fixed. The first two years are particularly important in the development of 16-19 Diplomas. For that period they are free from the constraints that may emerge in 2012 if the analytical content and assessment rigour of Diplomas undertaken by 14-16 year-olds turn out, in practice, to be insufficiently ambitious to serve as an induction in the study skills required of those who might later seek entry to leading universities.

Meanwhile, the recent announcement of the introduction of 'general subject' Diplomas in science, humanities and languages from 2011

⁵⁹ Similar expert advice in respect of assisting the awarding bodies centrally with model syllabuses and specimen assessment instruments would be equally desirable.

requires activity, of the kind outlined above, if these Diplomas are to become reputable with leading universities. It is suggested that such engagement by subject specialists from research-intensive universities be structured on a systematic basis as one outcome of the government's forthcoming consultation on the form of these new Diplomas. Benefits arising from the stimulation of such activity include:

- a strengthening of the likelihood that Diploma learning and attainment will be seen by admissions tutors in research-intensive universities as a suitable as a preparation for undergraduate study;
- a lessening of the likelihood that in 2013 the research-intensive universities reject the 'broad subject' Diplomas as unsuitable preparation and, in the process, damage severely the reputation of the entire suite of 14 'sectoral' Diplomas.

(b) Implementation of the introduction of the Extended Project

Given the general enthusiasm of our respondents for the Extended Project, and the specific caveats expressed about aspects of how it may develop as an award in practice,⁶⁰ the opportunity exists for a similar form of funded 'engagement' by subject specialists in research-intensive universities as that set out above, relating to Diploma implementation. Similar benefits arising from the stimulation of such activity apply.

(c) Implementation of the changes to A-level

Thus far, the introduction of the A* grade has stolen much of the limelight in regard to A-level reform. However, the commitment in the 2005 White Paper to introduce 'increased stretch and challenge' in A-level examination papers is equally important.⁶¹ At a time when specialised admissions tests for university entry to strongly 'selecting' courses are burgeoning alongside rivals to A-level such as the International Baccalaureate and the Cambridge Pre-U,⁶² the introduction of more demanding A-level papers is an innovation which, in the long run, is likely to do just as much, if not more, than the A* grade to secure the reputation and utility of the award with research-intensive universities. Similar opportunities for the

⁶⁰ See paragraphs 84, 85(b) and 86

⁶¹ DfES (2005), paragraph 8.15.

⁶² SPA (2007)

engagement of specialised academic staff exist in this area of work as those outlined above for Diplomas and the Extended Project, and similar benefits are likely to arise.

142. Securing such a contribution from the leading universities has importance for the medium- as well as the shorter-term, as the government's 14-19 reforms have the potential to contribute significantly to the safeguarding of strategically important subjects such as science, technology, engineering and mathematics. A combination of more stretching A-level papers and the development of respected Diplomas in science, humanities and languages, supported by the Extended Project, would make less likely a scenario in which the uptake of such subjects at undergraduate level decreases in volume and in institutional diversity, due to a weak supply of appropriately qualified applicants and concomitant management decisions to retrench in universities well placed to offer rigorous courses.

Considerations for research-intensive universities

143. The logic of the management choices that face those responsible for undergraduate education in research-intensive universities in the UK has been discussed at some length in a number of sections of this report. So, too, have the sometimes contrary objectives that motivate the decision-making of admissions tutors and their colleagues at departmental level, whose priority is to protect their subject specialism when it comes to the allocation of undergraduate student numbers within their institution.
144. One advantage of the design of the present research is that it has been possible to test the extent to which these two forces are opposed or united in response to the government's 14-19 reforms. As a result, it can be concluded that senior managers and admissions tutors in 1994 Group universities view the opportunities and uncertainties contained in implementation of the reforms in a broadly similar way, with the only likely flash-point being where departmental interests lead tutors in 'recruiting' departments to seek admission of Diploma students with entry qualifications below the university-wide average or target, only to be barred from so doing by those senior managers who act as the sponsors and monitors of such institutional performance measures. However, here, as elsewhere, there is no single approach to such matters among the research-intensive universities and this diversity underscores how difficult it can be for

teachers and guidance advisors to offer advice with confidence to young people who have an eye to university entry when choosing among courses at 16+.⁶³

145. Nevertheless, our evidence shows that staff responsible for undergraduate admissions are especially concerned about the fairness and openness of the processes they supervise, and seek only to admit applicants they believe can thrive on the undergraduate programmes offered. A similar sense of professionalism underpins the growing sophistication of the support for study skills that students, once admitted, can access.⁶⁴ Consequently, when it comes to applications for undergraduate places in 2010, it can be anticipated that 1994 Group universities will be concerned to balance the cost and effort required to assess thoroughly the attributes and potential of applicants attaining high grades in the various new qualifications that will be in operation by that date, with a desire not only to be judicious and fair in admissions, but also to seek out young people of high ability who possess a suitable grounding for successful undergraduate study, regardless of educational background.
146. What measures, taken now, would assist them in this task? In paragraph 137 a number of suggestions were made for consideration by the government as to how to secure more systematic engagement with the 14-19 reforms on the part of the research-intensive universities and why such activity would be desirable. If suitably incentivised, the challenge for those leading these universities is actively to support the more systematic engagement of their academic staff in the crucial phase of implementation that lies ahead in 2008 and 2009 – and to do so in a manner that enhances educational opportunity in England, strengthens broadly-based undergraduate education within their universities, ensures maintenance of the proper undergraduate standards expected of leading institutions, and safeguards the autonomy and self-determination of universities as a distinguishing feature of democratic society.

⁶³ For an illustration of this diversity, see paragraph 113.

⁶⁴ See paragraphs 43-47.

References

Committee on Higher Education (1963). *Higher Education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins, 1961-63* [Robbins Report]. London: HMSO.

Dearing, R. (1996). *Review of Qualifications for 16-19 Year Olds. Full report*. London : School Curriculum and Assessment Authority.

DES (1988). *Advancing A Levels: Report of the Committee Chaired by Professor Higginson* [The Higginson Report]. London: Department for Education and Science.

DCSF (2007a). *DCSF: Education and Training Statistics for the United Kingdom 2007 (Internet only)* [online]. Available at:
<http://www.dfes.gov.uk/rsgateway/DB/VOL/v000761/index.shtml>.

DCSF (2007b). *Section 96 Qualifications [all types at level 3]* [online]. Available at:
http://www.dfes.gov.uk/section96/search/search_results.cfm.

DCSF (2007c). *Expanding the 14-19 Diploma Programme* [online]. Available at:
<http://www.dfes.gov.uk/pns/pnattach/20070195/1.htm>.

DfES (2007). *GCE/VCE A/AS and Equivalent Examination results in England, 2005/06 (Revised)* [SFR 02/2007] [online]. Available at:
<http://www.dfes.gov.uk/rsgateway/DB/SFR/s000703/SFR02-2007-rev.pdf>.

DFES (2005). *14-19 Education and Skills* (Cm 6476). London: The Stationary Office.

Finegold, D., Keep, E., Miliband, D., Raffe, D., Spours, K., and Young, M. (1990). *A British Baccalaureate: Overcoming Divisions Between Education and Training*. London: Institute for Public Policy Research.

HEFCE (2007). *HEFCE - A Brief History* [online]. Available at:
<http://www.hefce.ac.uk/aboutus/history>.

HEFCE (2005). *Strategically Important and Vulnerable Subjects: Final Report of the Advisory Group* [online]. Available at:
http://www.hefce.ac.uk/pubs/hefce/2005/05_24/05_24.doc.

HEPI (2007). *Demand for Higher Education to 2020 and Beyond* [report by Bahram Bekhradnia] [online]. Available at:
<http://www.hepi.ac.uk/downloads/31HEDemandto2020andbeyondfull.pdf>.

HESA (2007). *Table 0b. All students by institution and level of study 2004/05, revised April 2006* [online]. Available at:

http://www.hesa.ac.uk/dox/dataTables/studentsAndQualifiers/download/Table_0b_0405.xls.

House of Commons (2003). *Select Committee on Education and Skills. Third Report: A Level Standards. Report, together with Proceedings of Committee, Minutes of Evidence and Appendices* [HC 153], 14 April [online]. Available at:

<http://www.parliament.the-stationery-office.com/pa/cm200203/cmselect/cmmeduski/153/153.pdf>.

IPPR (2007). Oxbridge unlikely to meet access targets until 2016 [Press release, 15 October] [online]. Available at:

<http://www.ippr.org/pressreleases/archive.asp?id=2897>.

JCQ (2007). *Results 2007* [online]. Available at:

<http://www.jcq.org.uk/attachments/published/392/A%20AS%20and%20AEA%20Results%202007.pdf>.

McVicar, D. and Rice, P. (2001) Participation in Further Education in England and Wales: An Analysis of Post-War Trends. *Oxford Economic Papers*, 53, pp. 47-66.

Miliband, D. (2003) *Excellence and Opportunity From 14-19*. [Speech by David Miliband to the AOC/NAHT/SHA Conference, London, 21 January] [online]. Available at:

<http://www.dfes.gov.uk/speeches/media/documents/14-19Final.doc>.

NOS (2007a). UK population set to increase to 65 million over the next 10 years [News release: 23 October] [online]. Available at:

<http://www.statistics.gov.uk/pdfdir/pproj1007.pdf>

NOS (2007b). *Table 4. Mid-2006 Population Estimates: England; Estimated Resident Population by Single Year of Age and Sex* [online]. Available at:

Available at:

<http://www.statistics.gov.uk/statbase/Expodata/Spreadsheets/D9660.xls>

QCA (2007). *14-19 Learning: Key Features of Main Qualification Groups* [online]. Available at:

http://www.qca.org.uk/14-19/qualifications/index_key-features.htm.

Russell Group (2007). *The Russell Group* [online]. Available at:

<http://www.russellgroup.ac.uk/>.

Schools Council (1966). *Sixth Form Curriculum and Examinations*. London: HMSO.

Schools Council (1973). *16-19: Growth and Response, 2. Examination Structure* [Working Paper 46]. London: Evans/Methuen Educational.

Schools Council (1978). *Examinations at 18+: The N and F Studies*. London: Evans/Methuen Educational.

SPA (2007). *Admissions Tests* [online]. Available at: <http://www.spa.ac.uk/htm/tests.htm>.

Sutton Trust (2007). *University Admissions by Individual Schools* [online]. Available at: <http://image.guardian.co.uk/sys-files/Education/documents/2007/09/20/Strust.pdf>.

The Guardian (2007). *National Student Survey, 2007. Student Satisfaction (Full and Part-time Students)* [online]. Available at: <http://education.guardian.co.uk/students/tables/0,,2167510,00.html>.

The Independent (2007). *Official UCAS Clearing listings*. Supplement, 16 August, 112pp.

The Times (2007). *The Good University Guide 2008*. Supplement, 16 August, 28pp.

UCAS (2007). *Applications (Choices) and Accepted Applicants to each UCAS Member University and College 2006* [online]. Available at: http://www.ucas.ac.uk/about_us/stat_services/stats_online/data_tables/abushei/abushei2006/.

Working Group (2004). *14-19 Curriculum and Qualifications Reform: Final Report of the Working Group on 14-19 Reform* [The Tomlinson Group on 14-19 Reform]. London: Department for Education and Skills.

1994 Group (n.d.[2007]a). *The 1994 Group: An In-Depth View of the Group*. London: The 1994 Group.

1994 Group (2007b). *Enhancing the Student Experience: Policy Statement*. London: The 1994 Group.