

The use of Contextual Data in Higher Education Admissions

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University admissions spark fury

Social engineering, political correctness, class warfare - these cries of outrage greet any suggestion that university admissions should take account of a student's school or family background.

They were all trotted out again this week after the Business Secretary, Lord Mandelson, called for universities to look beyond raw exam results when selecting applicants. "Higher Ambitions", the government's vision for the future of universities, said "much more" needed to be done to ensure that entrance to university is fairer for all students, whatever their background.

It proposed that instead of relying on A-levels, universities should also take account of "contextual data", such as applicants' school or home neighbourhood.

This was translated by one newspaper into this headline: "Middle class students face university place struggle as Mandelson backs giving poorer students two-grade 'head start'". That was enough to trigger a flood of angry e-mails to the newspaper's website complaining about the "dumbing down" of universities.

But it was a gross over-simplification of what is actually being proposed. For a start the government made it quite plain that the universities themselves would always, in the end, decide admissions.

Mike Baker, Former BBC Education Correspondent



The admissions process at Oxford

- 15 October application deadline
- 17,000 applications
- 80% of applicants take a pre-interview test in November
 short-listing process in November (2 November 2011)
- 10,000 applicants called for interview in December
- 3,500 offers made for 3,200 places
- All decisions are made by academics in Colleges according to Departmental guidelines
- Undergraduate Admissions Office works in an advisory capacity on admissions policy



Why collect contextual data?

- Changes to the data collected by UCAS
- Work done at other institutions
- Internal pressure for centralised guidance
- Changes to our own application forms
 - some contextual information collected on Oxford Application Form (OAF) and special Oxford Access Scheme form, both now obsolete
- Development in conjunction with paperless admissions
 - copy forms no longer used; all applicant data held on web-based customisable system (ADSS)
 - users can print batches of applicants according to subject, college etc
 - system includes the contextual data we collect



What we decided to use initially...

Each applicant is flagged according to five individual criteria:

- 1. School GCSE profile (where student took these qualifications) if less than UK average achieving five A*-C grades
- 2. School/College A-level profile

 if less than national average of QCA points per qualification
- Postcode data

if in lowest two groups of ACORN data ('Moderate Means' or 'Hard-Pressed')

4. Participation in a Sutton Trust Summer School or the Oxford Young Ambassador scheme

if participated in either (or both)

5. Looked-after children

if identified as in care for three months or longer



This was subsequently revised to....

Each applicant is flagged according to four criteria:

- School GCSE profile (where student took these qualifications)
 if less than UK average achieving five A*-C grades (inc English & Maths)
 in Scotland, if HE participation rate is below national average
- 2. School/College A-level profile

 if less than national average of QCA points per qualification
- 3. Postcode data

if in lowest two groups of ACORN data ('Moderate Means' or 'Hard-Pressed')

4. Looked-after children

if identified as in care for three months or longer



... and how we decided to use it

- Individual flags are collected on ADSS
- An applicant receives an <u>overall flag</u> if they have ...
 - the care leaver flag
 - the postcode data flag AND one of the school performance flags
- An *overall flag* means the applicant is "strongly recommended for interview" ... provided that they:
 - are predicted the minimum entry requirement of AAA or equivalent
 - perform well in the appropriate pre-interview test
- If a tutor wishes not to interview a candidate fulfilling these criteria, they are obliged to provide clear justification to the subject coordinator



Example of ADSS-produced pdf

C700: Molecular and Cellular Biochemistry								
Title:	Miss	Application No.:						
Surname / Family Name:		Personal ID:						
First/Given Name(s):		Date Applied:	01-10-2008					
Address:		Application Source:	A					
	Syston	Fee Code:	02					
		Student Support Arrangements:	Leicester					
	Leicester	Domicile / APR:	Leicestershire					
Postcode	LE7 2EP	Residential Cat.:	UK Citizen/EU National					
Country:		Route B:	N					
Gender:	F	Criminal Convictions:	N					
Date of Birth:	12-02-1991	Disability/Special Needs:	0: No disability					
Age at 1st September:	18 years, 6 months	Country of Birth:	United Kingdom					
Mobile Number:		Nationality:	United Kingdom					
Home Number:		Entered UK:	·					
Email:		School:	Wreake Valley College					
In Care:	Unanswered	Last Education:	14676					

COURSE DETAILS									
Course	Campus	College	Short Name	Further Details?	Entry Point	Home	Entry Year		
C700		MAG	BIOC		1		2009		

SCHOOL, COLLEGE AND UNIVERSITY EDUCATION				
Name	From	То		UCAS Code
Wreake Valley College	9 / 2002	6 / 2009	FT	14676

ACTIVITIE	ACTIVITIES IN PREPARATION FOR HIGHER EDUCATION								
Start Date	Duration	School Year	Location	Sponsor					
01-07-0008	5	12	University of Cambridge	Sutton Trust					
01-07-0008	31	12	Other	Other					

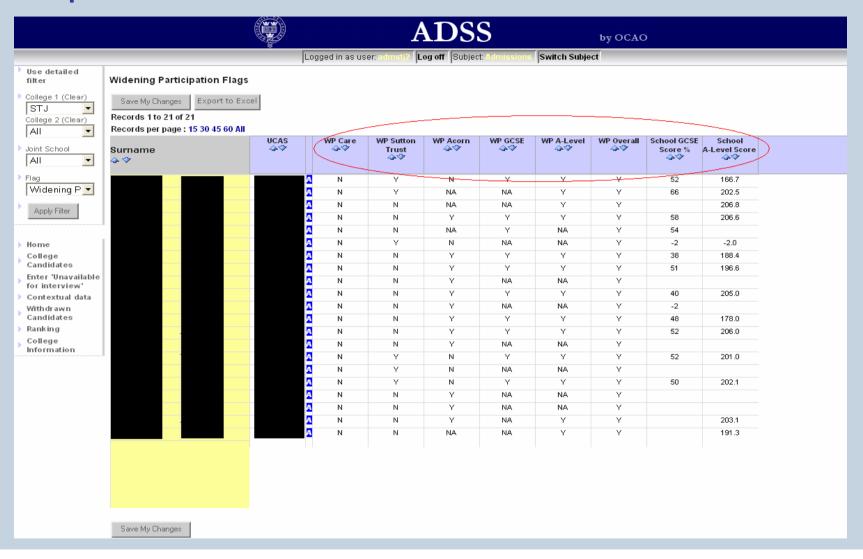
	CONTEXTUAL	DATA				
	Care	Sutton/OYA	GCSE	A-Level	ACORN	Overall
ζ	N	Y	Y	Y	N	Y
						_

Date	Body	Level/Qual	Subject	Grade	Result	Centre
8/2007	OCR	GCSE	Design & Technology: Graphic Products	A		25172
8/2007	Edexcel	GCSE	English Literature	A		25172
8/2007	AOA	GCSE	Mathematics B	A*		25172
8/2007	AOA	GCSE	Geography A	A*		25172
8/2007	Edexcel	GCSE	English A	A*		25172
8/2007	OCR	GCSE	French	A		25172
8/2007	AOA	GCSE	History B	В		25172
8/2007	AQA	GCSE	Humanities	A*		25172
8/2007	AQA	GCSEDA	Science	A*A*		25172
8/2007	WJEC	GCSESC	Religious Studies A	A*		25172
8/2007	AQA	GCSESC	Information & Communication Technology A	A*		25172
6/2008	OCR	A Sub (AS)	Physics:- Title: 2821 Grade: A Title: 2822 Grade: A Title: 2823	A		25172
6/2008	OCR	A Sub (AS)	Chemistry:- Title: 2811 Grade: A Title: 2812 Grade: A Title: 2813 Grade: A	A		25172
6/2008	OCR	A Sub (AS)	Biology:- Title: 2801 Grade: A Title: 2802 Grade: A Title: 2803/A Grade: B	A		25172
6/2008	Edexcel	A Sub (AS)	Geography B:- Title: 6471 Grade: C Title: 6473 Grade: A	A		25172
6/2008	AQA	A Sub (AS)	Mathematics :- Title: MPC1 Grade: A Title: MPC2 Grade: A Title: SS1B Grade: A	A		25172

QUALIF	QUALIFICATIONS NOT YET COMPLETED OR CERTIFIED							
Date	Body	Level/Qual	Subject	Predicted Grade	Centre			
6/2009	AQA	A	Mathematics	A	25172			
6/2009	OCR	A	Chemistry	A	25172			
6/2009	OCR	A	Physics	A	25172			
6/2009	OCR	A	Biology	A	25172			

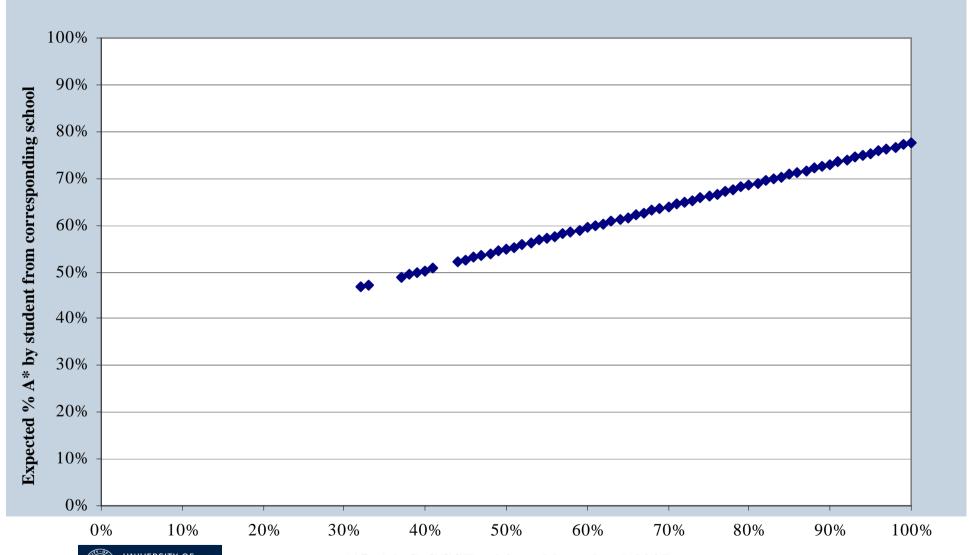


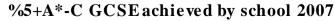
Example of ADSS web view





Additional contextual aspect for Medicine expected proportion of A*





Impact modelling and validation

- We analysed 2008 entry data to see the predicted impact:
 - 14,109 applicants; 411 (5.7%) would have been overall flagged
 - 177 of the 411 (43.1%) had not been short-listed for interview
- 2009 entry applicants what actually happened:
 - 15,277 applicants; 510 (6.4%) were overall flagged
 - 165 of the 510 (32.4%) had not been short-listed for interview

			Reject After				
Ucas Cycle	Score	Deselect	Interview	Missed Offer	Placed	Withdrew	Grand Total
	4	7	9	1	5	0	22
	3	48	91	1	34	2	176
2009	2	34	38	4	7	3	86
2009	1	55	72	3	17	7	154
	Totals	144	210	9	63	12	438
	%	32.9%	47.9%	16.4%)	2.7%	
2008	%	43.1%	37.2%	16.3%)	3.4%	



Data sources: positives and negatives

- Looked-after child status
 - ☑ self-identified by applicant on UCAS application, but doubled checked by Oxford
- Postcode
 - ☑ ACORN classification of postcodes checked against home address
- GCSE and A-level school and college profiles

DCSF data (for GCSE year, e.g. 2007 for 2009 entry)

- Data incomplete for schools offering IGCSE
- UCAS school code & DCSF school code do not always match
- ✓ No input at all required from the applicant (or tutors!)
- ☑ No applicants disadvantaged supernumerary exercise
- http://www.ox.ac.uk/admissions/undergraduate_courses/finding_out_more/contextual_data.html



Overall conclusion on Oxford's approach

- System designed to have low impact
- Use of many criteria allows better evaluation
- Contextual data informs short-listing, not offer-making
- Other institutions may feel a different approach is more appropriate for their applicant pool



Approaches by other universities

Educational Background 'Hard data'

Progression rates to higher education (percentage determined by cohort size) from school/college School performance - Average (mean) school GCSE performance for 5 A*-C GCSE (including English/Welsh and Mathematics)*

Average (mean) school 'Best Eight' GCSE performance

Progression from Year 11 to further education

Average (mean) of QCA points per qualification (per entry and per student)*

* Require national average

Socio-Economic Background 'Soft data'

In receipt of (or entitled to) free school meal (school rates and individual)
In receipt of (or entitled to) an Educational Maintenance Allowance (including levels)
Lives in a low progression to higher education neighbourhood
Socio-economic class IIIM-VII
Have been in care for greater than six months



Approaches by other universities

Manchester - see next slide

Newcastle - Considers average school achievement, whether applicants have been in care and postcode data (since 2004). Allows lower grade offers to be made "if in [the tutor's] judgment the typical entry requirement would not be appropriate because of the particular circumstances of an applicant".

Nottingham - Considers average school achievement and whether or not applicants have been into care. Allows lower grade offers to be made flexibly depending on a student's background.

Oxford - Considers average school achievement, whether or not applicants have been in care and postcode data when selecting candidates to interview.

Queen's Belfast - Does not use contextual data when considering applications.

Sheffield - Admissions tutors "may give special consideration" to students from under-represented groups.

Southampton - Does not use contextual data when considering applications.

UCL - Considers average school achievement when selecting candidates to interview.

Warwick - Considers contextual information raised in the statement/reference, including "existing academic achievements and the context within which they have been achieved".



Some variation in practice – but suitable

University of Manchester

Collating contextual information to supplement undergraduate applications for 2011 entry onwards. This will apply to UK applicants under the age of 21 only. No decisions will be made on the basis of this information alone and all undergraduate applicants must meet our standard academic criteria. Four pieces of contextual information are supplemented to academic Schools where available:

The educational context of the applicant's school or college where they undertook GCSE or equivalent level through performance data;

The performance of the applicant's school or college at A-level or equivalent level; In both instances a candidate will be flagged if their educational establishment performs below the national average across multiple years (where data is available);

The postcode that an applicant gives as their home address, assessed using ACORN information. ACORN is a system that associates specific geodemographic profiles to individual UK postcodes. It is widely recognised and used by public and private sector organisations to assist in the effective targeting of policies, services and communications. Where a candidate's postcode falls into an ACORN group underrepresented in leading research-intensive universities, they will be flagged;

Whether a candidate has been looked after/in care for more than three months - this is determined from the UCAS application;

An overall flag is only produced if a candidate meets at least one of the educational indicators plus the geo-demographic indicator.

They also receive an overall flag if they have been in care for more than 3 months.

Where applicants are predicted to achieve our standard academic entry criteria, contextual data is considered alongside information on the UCAS form to provide a fuller picture of the applicant. Where candidates with an overall flag meet standard academic entry criteria, they are recommended for further consideration by admissions tutors.

This further consideration does not result in either an automatic offer or a lower offer to candidates but can include, among other things: Additional examination of the personal statement:

Making available information about an applicant's background to interviewers;

Further consideration during confirmation of final results.

You can also look up contextual flags by postcode using our geo-demographic indicator.

http://www.manchester.ac.uk/undergraduate/howtoapply/generalentryrequirements/#contextual



Some variation in practice – but suitable

University of Edinburgh

- * uses contextual data in admissions
- The Colleges of Humanities & Social Science and Science & Engineering and the Royal (Dick) School of Veterinary Studies consider the academic attainment of applicants in the context of the performance of their school or college.
- * makes differential offers

The Colleges of Humanities & Social Science and Science & Engineering make differential offers. This means that entry requirements are expressed as a range (e.g. ABB-AAA). All offers are made within the range. An offer made to an applicant who has faced educational disadvantage - as identified by the contextual data used in admissions or by participation in one of the University's widening participation projects - may state conditions at the lower end of the range than those of offers made to applicants who have not faced such disadvantage.



Some variation in practice – media effect?

University of Durham

University points formula penalises students at best schools

troduced by Durh. In October 2008 and is a piece of information made at about school poton varice at GCSE that has been provided by the CSF), the Worlds. Assembly and the Northern Ireland Assembly. The ing to arm of the information provided about the control of the information provided about

Welsh Assembly and the Norther helan sembly. The posusement applicants' GCSE grades with mounte based on the a englicant apped GC calculate a standardised GC E score for an applicant a lows: Each A* at GCSE scores 0.6 runs; the scores are older to the A scores to give applicant studied is given a lodifier score. This is assed on the average cap means only the best 8 base results for each student are used.

Durham University admissions system 'discriminates against middle class pupils from good schools'

In addition to the contextual information provided to us by UCAS, which includes the educational journey since age 11, an indicator of whether the applicant has spent time in care, and contextual information contained in the personal statement and reference, the University will also provide our selectors with the following contextual information when assessing applications from September 2010 onwards:

if an applicant is from a neighbourhood where progression to Higher Education is low; if an applicant has participated in a significant outreach activity organised by the University e.g. a Summer School; and replacing the GCSE Standardisation Measurement Score (the Modifier), with an indicator of whether the average school performance where the applicant took their GCSEs is above or below the national average.



Conclusions

• The use of contextual data is not necessarily hard to agree with from a Social Mobility context....

..... the harder question is what to use

..... and to what extent

- Difficulties in consistency between nations (Wales and NI)
- Difficulties in consistency between GCSE/IGCSE and IB/GCE
- Better quality data... linking UCAS with Exam boards with DCSF
- •http://www.bristol.ac.uk/academicregistry/raa/wpur-office/seminar/programme/uob-tony.ppt



Any questions and comments?

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