

Appendix 10 Algorithms likely to inform the 2006-07 widening participation allocations

Purpose

1. This appendix details the algorithms intended to be used in calculating the 2006-07 widening participation (WP) funding allocations (see Annex E).
2. This appendix is aimed at expert readers with in-depth knowledge of the data. Readers are advised to have a copy of the HESA Student Record Coding Manual 2004-05 to hand when using this appendix.

2004-05 HESA fields used in the widening participation derived statistics algorithms

3. Only certain fields, detailed in Table 16, were used to generate the WP allocation fields. The field numbers shown relate to the combined record format of the HESA record.
4. Throughout this appendix fields taken from the HESA return or derived for the WP allocations are shown in capitals using the names given in Tables 16 and 17 respectively.

Using the individualised file

5. When working through this appendix it is necessary to use the individualised file HHWP04XXXX.ind, where XXXX is the HESA identifier for the institution. Details of how to access this file are given in Annex G. This will show the allocation of students to cells within the tables and, where relevant, details of why they were excluded.

Table 16 HESA fields used to inform the widening participation allocations

Field number	Description	Name	Column in individualised file*
1	Record type indicator	RECID	B
2	HESA institution identifier	INSTID	A
4	Student identifier	HUSID	C
10	Date of birth	BIRTHDTE	AF
12	Country code of student's permanent address	DOMICILE	T
15	Disabled students allowance	DISALL	U
21	Highest qualification on entry	QUALENT2	AG
26	Date of commencement of programme	COMDATE	AE
41	General qualification aim of student	QUALAIM	S
64	Major source of funding	MSFUND	BH
70	Mode of study	MODE	BI
75	Postcode	POSTCODE	BJ
133	UCAS number	UCASNUM	AV
134 [†]	Institution's own identifier for student	OWNSTU	E
135 [†]	Institution's own programme of study identifier	OWNPSD	F

136	Student instance number	NUMHUS	D
138	Type of programme year	TYPEYR	AT
160	Tariff score for GCE AS level	GCEASTS	AH
162	Tariff score for VCE AS level	VCEASTS	AI
164	Tariff score for GCE A-level	GCEATS	AJ
166	Tariff score for VCE A-level	VCEATS	AK
168	Tariff score for key skills qualification	KSQTS	AL
170	Tariff score for 1-unit key skills award	UKSATS	AM
172	Tariff score for Scottish Advanced Higher	SAHTS	AN
174	Tariff score for Scottish Higher qualification	SHTS	AO
176	Tariff score for Scottish Intermediate 2 qualification	SI2TS	AP
178	Tariff score for Scottish Standard Grade credit	SSGCTS	AQ
180	Tariff score for Scottish Core Skills qualification	SCSTS	AR
183	Total tariff score	TOTALTS	AS

* The individualised data file HHWP04XXXX.ind, downloadable from the web (see Annex G).

† These fields are not used in the comparison but are included in the individualised file to allow easy identification of students.

Description of derived fields

6. This section contains details of the derived fields contained in the individualised data file. These fields are used in calculating the WP allocations.

Table 17 **Derived fields used to inform the WP allocation**

Field name	Description	Paragraph	Column in individualised file*
ADJTAR	Total tariff points after key skills removed	27	AD
AGEGRP	Age group	15	AZ
CASWARD	2001 census ward of the student's home postcode	22	BD
CRSELGTH [†]	Expected length of the course in years	53	W
DISALLOC	Flag indicating inclusion to inform disability allocation	12	J
DISPOP	Flag indicating inclusion in the disability allocation population	11	I
EDMQVIN	Educational attainment quintile of mature full-time student's census ward	24	BE
EDPOPM	Flag indicating inclusion in mature full-time widening access allocation population	18	AX
EDPOPPT	Flag indicating inclusion in part-time widening access allocation population	19	AY
EDPTQUIN	Educational attainment quintile of part-time student's census ward	25	BF

ENTQUAL	Grouping of student's highest qualification on entry	28	AB
ENTRANT	Flag indicating students in their first year of programme of study	13	AC
ENTRYAGE	Student's age on commencement of programme of study	14	AA
EQGRP	Entry qualification risk group	29	Y
EQPOP	Flag indicating whether student is in the population for the full-time improving retention allocation	26	X
EQWEIGHT	Entry qualification weighting	30	Z
EXCLPC	Flag indicating whether postcode was mapped to census data	20	BB
FTE_TYPE [†]	Method used to return FTE for non-standard academic years	14-18	AU
HESCOL4 [†]	Flag indicating whether the student was included in Column 4	80	R
HESEXCL [†]	Reason for exclusion from the HESES population	68-69	H
HESESFTE [†]	FTE for the year of programme of study	49-50	Q
HESLEVEL [†]	Level of study	23	O
HESMODE [†]	Mode of study	22	N
HESTYPE [†]	Fundability status	23-25	P
HIGHQUAL	Flag indication whether student has not previously studied for their qualification aim	16	BA
LENGTH [†]	Flag indicating long or standard length years of programme of study	39	V
OUDSA	Open University DSA eligibility	10	M
PGDSA	Postgraduate DSA eligibility	9	I
PRIKEY	Unique programme of study identifier	7	G
UGDSA	Undergraduate DSA eligibility	8	K
WARD6_C	1991 census ward of the student's home postcode	21	BC
YNGPART	Flag indicating inclusion in young full-time widening access allocation population	17	AW
YNGQUIN	Young participation quintile of young full-time student's census ward	23	BG

* The individualised data file HHWP04XXXX.ind, downloadable from the web (see Annex G).

† The algorithms for deriving these fields are given in Appendix 1.

PRIKEY (Column G in individualised file HHWP04XXXX.ind)

7. This is a derived field which uniquely identifies HESA records.

UGDSA (Column K in individualised file HHWP04XXXX.ind)

8. This field indicates the Disabled Student's Allowance (DSA) eligibility status for undergraduates, including students on Postgraduate Certificates of Education (PGCEs) and excluding Open University students.

Value	Description	Definition
1	Undergraduate eligible for DSA	INSTID ≠ 0001 and DOMICILE = 2826, 5826, 6826, 7826, 8826 and (HESLEVEL = UGX or FD or QUALAIM = 12, 13) and (HESMODE = FTS or (HESMODE = SWOUT and MODE ≠ 23) or (HESMODE = PT and HESESFTE ≥ 50))
0	Undergraduate ineligible for DSA	Otherwise

PGDSA (Column I in individualised file HHWP04XXXX.ind)

9. This field indicates the DSA eligibility status for postgraduates, excluding students on PGCEs and Open University students.

Value	Description	Definition
1	Postgraduate eligible for DSA	INSTID ≠ 0001 and DOMICILE= 2826, 5826, 6826, 7826, 8826 and HESLEVEL = PGT, PGR and QUALAIM ≠ 12, 13 and MSFUND ≠ 21, 22, 23, 24, 25, 26, 27, 29 and ((HESMODE = FTS, SWOUT and CRSELGTH ≥ 1) or (HESMODE = PT and HESESFTE ≥ 50))
0	Postgraduate ineligible for DSA	Otherwise

OUDSA (Column M in individualised file HHWP04XXXX.ind)

10. This field indicates the DSA eligibility status for Open University students.

Value	Description	Definition
1	Open University students eligible for DSA	INSTID = 0001 and DOMICILE= 2826, 5826, 6826, 7826, 8826 and ((HESESFTE ≥ 50) or HESLEVEL = PGT and LENGTH = L and HESESFTE ≥ 33.3)
0	Open University students ineligible for DSA	Otherwise

DISPOP (Column I in individualised file HHWP04XXXX.ind)

11. This flag indicates whether the student was included in the denominator of the disability allocation proportions.

Value	Description	Definition
1	Included in the denominator of the disability allocation proportions	HESCOL4 = 1 and HESTYPE = HOMEF, HOMEIF, HOMENF and (UGDSA = 1 or PGDSA = 1 or OUDSA = 1) and HESEXCL=0
0	Not included in the denominator of the disability allocation proportions	Otherwise

DISALLOC (Column J in individualised file HHWP04XXXX.ind)

12. This flag indicates whether the student is likely to be included in the numerator of the disability allocation proportion calculations.

Value	Description	Definition
1	Included in the numerator of the disability allocation proportions	DISPOP = 1 and DISALL = 4
0	Not included in the numerator of the disability allocation proportions	Otherwise

ENTRANT (Column AC in individualised file HHWP04XXXX.ind)

13. This field identifies students in their first year of programme of study.

Value	Description	Definition
1	Entrant	((TYPEYR = 1 or (TYPEYR = 2, 3 and FTE_TYPE = 3)) and COMDATE ≥ 1 August 2004 and COMDATE ≤ 31 July 2005) or TYPEYR = 2, 4, 5 and FTE_TYPE = 2, 4 and COMDATE ≥ 1 August 2003 and COMDATE ≤ 31 July 2004)
0	Not an entrant	Otherwise

ENTRYAGE (Column AA in individualised file HHWP04XXXX.ind)

14. This field contains the student's age at the commencement of the programme of study. ENTRYAGE = (COMDATE – BIRTHDTE)/365.25 rounded down to the nearest whole number.

AGEGRP (Column AZ in individualised file HHWP04XXXX.ind)

15. This field contains the student's age group using ENTRYAGE.

Value	Description	Definition
1	Less than 21 years of age	ENTRYAGE < 21
2	Greater than or equal to 21 and less than 25 years of age	Not above and ENTRYAGE < 25
3	Otherwise	Otherwise

HIGHQUAL (Column BA in individualised file HHWP04XXXX.ind)

16. This field identifies students that have not previously studied for their qualification aim, or a higher qualification aim.

Value	Description	Definition
1	Student has not previously studied for their qualification aim, or a higher qualification aim	(QUALENT2 = 21, 22 and QUALAIM = 18 to 43) or (QUALENT2 = 23 to 28, 31 and QUALAIM = 18 to 24) or (QUALENT2 = 30 and QUALAIM = 18 to 24, 28) or QUALENT2 = 29, 39 to 99
0	Student has previously studied for their qualification aim, or a higher qualification aim	Otherwise

YNGPART (Column AW in individualised file HHWP04XXXX.ind)

17. This flag indicates whether the student is included in the young, full-time widening access allocation population.

Value	Description	Definition
1	Included in young full-time widening access allocation population	EXCLPC=N and DOMICILE=2826, 5826, 6826, 7826, 8826 and HESTYPE = HOMEF and HESCOL4 = 1 and AGEGRP = 1 and ENTRANT = 1 and HESLEVEL = UGX or FD and HESMODE = FTS
0	Not included in the population	Otherwise

EDPOPM (Column AX in individualised file HHWP04XXXX.ind)

18. This flag indicates whether the student is included in the mature, full-time widening access allocation population.

Value	Description	Definition
1	Included in mature full-time widening access allocation population	EXCLPC=N and DOMICILE=2826, 5826, 6826 and HESTYPE = HOMEF and HESCOL4 = 1 and AGEGRP = 2, 3 and ENTRANT = 1 and HESLEVEL = UGX or FD and HESMODE = FTS
0	Not included in the population	Otherwise

EDPOPPT (Column AY in individualised file HHWP04XXXX.ind)

19. This flag indicates whether the student is included in the part-time widening access allocation population.

Value	Description	Definition
1	Included in the part-time widening access allocation population	EXCLPC=N and DOMICILE=2826, 5826, 6826 and HESTYPE = HOMEF and HESCOL4 = 1 and ENTRANT = 1 and HESLEVEL = UGX or FD and HESMODE = PT
0	Not included in the population	Otherwise

EXCLPC (Column BB in individualised file HHWP04XXXX.ind)

20. This flag indicates whether the student's home postcode (POSTCODE) has been excluded from the mapping to 1991 and 2001 census ward data. Postcodes that are recognised as schools, prisons, hospitals and similar public institutions are excluded from the mapping.

WARD6_C (Column BC in individualised file HHWP04XXXX.ind)

21. This field contains the 1991 census ward of the student's home postcode (POSTCODE).

CASWARD (Column BD in individualised file HHWP04XXXX.ind)

22. This field contains the 2001 census ward of the student's home postcode (POSTCODE).

YNGQUIN (Column BG in individualised file HHWP04XXXX.ind)

23. This field indicates the young participation quintile of the student's 1991 census ward (WARD6_C). This field is only populated for students in the young full-time widening access population (YNGPART = 1). Values are 1 to 5, with 5 being the quintile of highest participation.

EDMQUIN (Column BE in individualised file HHWP04XXXX.ind)

24. This field indicates the educational attainment quintile of the student's 2001 census ward (CASWARD) and is only populated for students in the mature full-time widening access population (EDPOPM = 1). Values are 1 to 5, with 5 being the quintile of highest educational achievement. Students with HIGHQUAL = 0 or (HIGHQUAL = 1 and QUALENT2 = 99) are set to 5.

EDPTQUIN (Column BF in individualised file HHWP04XXXX.ind)

25. This field indicates the educational attainment quintile of the student's 2001 census ward (CASWARD) and is only populated for students in the mature part-time widening access population (EDPOPPT = 1). Values are 1 to 5, with 5 being the quintile of highest educational achievement. Students with HIGHQUAL = 0 or (HIGHQUAL = 1 and QUALENT2 = 99) are set to 5.

EQPOP (Column X in individualised file HHWP04XXXX.ind)

26. This flag indicates whether the student was included in the calculation of the entry-qualification-based widening participation funding allocation.

Value	Description	Definition
1	Included in entry-qualification-based widening participation allocation	HESCOL4 = 1 and HESTYPE = HOMEF, HOMEIF and DOMICILE = 2826, 5826, 6826, 7826, 8826 and HESLEVEL = UGX or FD and HESMODE = FTS, SWOUT and ENTRANT = 1
0	Not included in entry-qualification-based widening participation allocation	Otherwise

ADJTAR (Column AD in individualised file HHWP04XXXX.ind)

27. This field contains the total number of tariff points for the student, after those awarded for key skills are removed. It is calculated as: ADJTAR = TOTALTS – KSQTS – UKSATS – SCSTS.

ENTQUAL (Column AB in individualised file HHWP04XXXX.ind)

28. This field contains the student's entry qualifications.

Value	Description	Definition
AASSCE	A-levels, Scottish Highers and vocational A-levels	QUALENT2 = 39, 40 and (GCEASTS ≠ 0, blank and GCEATS ≠ 0, blank and SAHTS ≠ 0, blank and SHTS ≠ 0, blank and SI2TS ≠ 0, blank and SSGCTS ≠ 0, blank and VCEATS + VCEASTS = 0)
ACCESS	Access course	QUALENT2 = 44, 45, 48
BACC	Baccalaureate	QUALENT2 = 47
BTEC	ONC or OND (including BTEC	QUALENT2 = 41

	and SCOTVEC equivalents)	
DEG	Degree and higher	QVALENT2 = 01 to 05, 10 to 15
FOU	Foundation course	QVALENT2 = 29, 43
NONE	No formal qualifications	QVALENT2 = 92, 93, 98
OHE	Other HE	QVALENT2 = 21 to 28, 30, 31
VCE_ONLY	Vocational A-levels only	QVALENT2 = 39, 40 and GCEASTS = 0, blank and GCEATS = 0, blank and SAHTS = 0, blank and SHTS = 0, blank and SI2TS = 0, blank and SSGCTS = 0, blank and VCEATS + VCEASTS > 0
OTHERS	Other qualifications	QVALENT2 = 55, 56, 97
UNKNOWN	Unknown qualifications	Otherwise

EQGRP (Column Y in individualised file HHWP04XXXX.ind)

29. This field holds the entry-qualification risk group the student was assigned to.

Value	Description	Definition
Y_L	Young, low risk	ENTRYAGE < 21 and (ENTQUAL = DEG, BACC, UNKNOWN or (ENTQUAL = AASSCE and (ADJTAR > 260 or (ADJTAR = 0 and UCASNUM ≠ 000000000))))
Y_M	Young, medium risk	ENTRYAGE < 21 and (ENTQUAL = OHE, FOU, VCE_ONLY or (ENTQUAL = AASSCE and (160 < ADJTAR ≤ 260 or (ADJTAR = 0 and UCASNUM = 000000000))))
Y_H	Young, high risk	ENTRYAGE < 21 and not above
M_L	Mature, low risk	ENTRYAGE ≥ 21 and (ENTQUAL = DEG, UNKNOWN or (ENTQUAL = AASSCE and (ADJTAR > 320 or (ADJTAR = 0 and UCASNUM ≠ 000000000))))
M_M	Mature, medium risk	ENTRYAGE ≥ 21 and (ENTQUAL = OHE, FOU, ACCESS, VCE_ONLY or (ENTQUAL = AASSCE and (ADJTAR ≤ 320 or (ADJTAR = 0 and UCASNUM = 000000000))))
M_H	Mature, high risk	ENTRYAGE ≥ 21 and not above

EQWEIGHT (Column Z in individualised file HHWP04XXXX.ind)

30. This field holds the weight for the full-time including retention allocation.

Value	Definition
0	EQGRP = Y_L, M_L
1	EQGRP = Y_M
1.5	EQGRP = Y_H, M_M
2.5	EQGRP = M_H