



HEAT Group Profiles

This updated thematic paper examines HEAT member data, matched with other administrative datasets, in order to examine educational outcomes for outreach participants as they progress from Key Stage 4 examination through to possible Higher Education enrolment. The series of progression points through which they travel and the administrative data pertinent to each stage on their journey is illustrated in the 'HEAT Jigsaw', provided for reference in Figure 1 at the back of this document. This thematic paper has now been updated to show university application and acceptance data (UCAS), a key part of the jigsaw.¹

The HEAT Group Model

In order to better interrogate its matched data HEAT has developed the 'HEAT Groups', a student classification system designed to help members to better understand the profiles of students with whom they are engaging. Widening Participation (WP) students are not a homogenous group and therefore, the students recorded through HEAT as recipients of outreach activities often reflect a diverse range of social and economic characteristics. Through the HEAT Group system, we classify students who have participated in outreach into one of four groups (Groups 1 to 4), with two further subgroups (Groups 2a and 2b and 4a and 4b). Classifying participants of outreach in this way has allowed us to compare outcomes for students who are similar in terms of their likelihood of progressing to Higher Education (HE) as they progress through the HEAT Jigsaw. A diagram of the construction of the HEAT groups can be found in Figure 2 at the end of this document.

Two broad factors that influence progression to HE in England have been identified through close examination of the literature: prior academic attainment and socioeconomic background or disadvantage. The relationship between these factors is demonstrated in the upper section of Figure 2. HEAT Groups 2 and 4 have been split into two sub groups to reflect the diversity in prior attainment that exists within this group which, although labelled 'High Attainment', includes everyone who achieved at least five GCSEs at A*-C including English and Maths. Students are classified as 'disadvantaged' according to a basket of indicators. Disadvantage is not easy to define but we have aligned the available proxies with Bourdieu's capitals in order to avoid positivist notions that social reality can easily be quantified. A report justifying the selection of these indicators and their alignment with one of the forms of capital is provided in the full report on the HEAT Groups which is available on request.

Key Findings from the HEAT Jigsaw analysis

Below we summarise some of the key lessons that we can learn from HEAT's longitudinal tracking project. We focus on outcomes for the two HEAT Groups which are targets for WP: Group 1 and 2a and 2b (the disadvantaged groups). Data are compared with that of their non-disadvantaged peers with similar attainment levels (Group 3 and 4a and 4b respectively). This information may provide insight into how outreach may better support these different groups of target WP students.

¹ Please note: The linking of HEAT data with UCAS data was conducted differently from HEAT's linking with HESA. For a student to match with the data UCAS available to us, all personal details (first and last name, date of birth, postcode and gender) must have matched exactly. This resulted in an average match rate of 30%, far fewer than the 58% of participants HESA were able to match from the same sample. As a result, application rates are not provided in this report as they would certainly be an underestimation of the proportion of students who actually made an application to HE. However, using the HEAT Groups we can compare like with like in the following tables, giving us insight into the way that those Widening Participation (WP) students who **do** enter the UCAS system progress through their application, acceptance and enrolment journey to Higher Education.



HEAT Group 1 (High Disadvantage, Low Attainment)

Early, sustained intervention required to help support KS4 attainment.

Males in this group need extra attainment support at KS4 – disadvantaged males see the biggest attainment drop between KS2 and KS4.

This group are most likely to have engaged in pre-16 outreach. However, they are less likely than their high attaining peers (Group 2) to engage in multiple or intensive activities

Lower rates of transition to Post-16 education than non-disadvantaged peers.

FE College is an important Post-16 route for this group. Of those who do enter Level 3, 50% study A' levels and 45% BTEC or other vocational qualifications.

This group need extra attainment support at KS5 to make HE a viable option – of those who enter 3 A levels, only 21% achieve 3 passes.

This group need extra support with considering HE as a viable option. Progression to HE may take longer than for non-disadvantaged peers. Young progression rate rises +6 percentage points if progression is extended to 5 years (up to age 22 rather than the standard 19 years).

This group make proportionally fewer total applications to Top 30 universities than higher attaining students.

When they do apply they need support beyond the UCAS process through to enrolment – 17% of UF accepted applicants do not go on to actually enrol in HE.

HESA track data shows lower rates of HE progression when compared with non-disadvantaged peers with similarly low attainment (Group 3): 19% vs. 24%.



HEAT Group 2a (High Disadvantage, Highest Attainment)

KS2 and KS4 attainment similar to non-disadvantaged peers with similar prior attainment (Group 4a).

Although average points scores at KS4 are similar, smaller proportions of student in this group (at least 5A*-A) when compared with their non-disadvantaged peers (Group 4a).

Similar post-16 transition and destination/choice outcomes when compared with non-disadvantaged peers (Group 4a).

This group need extra attainment support at KS5 to make HE a viable option – only 64% achieve 3 A levels compared with 73% of Group 4a.

This group need extra support with considering HE as a viable option. Despite achieving the highest level at KS4, HESA data shows they have lower rates of HE progression: 64% compared with 74% for non-disadvantaged peers (Group 4a).

HESA data suggests that engaging this group in multiple activities appears to contribute to higher HE progression (compared with a single HE talk).

This group may need support with HE choice. They make fewer UCAS applications to Top 30 Universities than their non-disadvantaged peers in Group 4a despite having high KS4 results: 41% vs 48%.

They may need support beyond accepting a UCAS offer to ensuring they enrol in HE. 10% of the Unconditional Firm accepted applicants in this data did not go on to enrol in HE. This is a higher attrition rate than for their non-disadvantaged peers in Group 4a: 8%

HESA enrolment data shows they are less likely to enter a 'Top 30' HEI when compared with Group 4a: 28% vs. 40%.



HEAT Group 2b (High Disadvantage, Medium-High Attainment)

KS2 and KS4 attainment similar to non-disadvantaged peers with similar prior attainment (Group 4b).



Lower rates of transition to post-16 education than non-disadvantaged peers (-3% compared with Group 4b).

Similar choices at post-16 to non-disadvantaged peers.

Similar KS5 attainment to non-disadvantaged peers.



This group had a higher proportion of applications to Top 30 Universities than their non-disadvantaged peers in Group 4b: 18% vs. 16%. They also had a slightly higher proportion of Unconditional Firm decisions at Top 30 Universities than Group 4b: 15% vs. 14%.

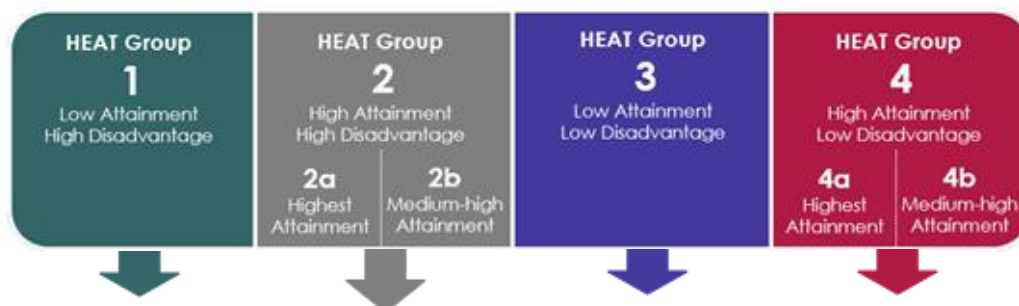
82% of UCAS applications from this group progressed to an Unconditional Firm decision. A higher % of their non-disadvantaged peers (Group 4b) progressed to an Unconditional Firm: 84%

They may need support beyond accepting a UCAS offer to ensuring they enrol in HE. 13% of the Unconditional Firm accepted applicants in this data did not go on to enrol in HE.

HESA data shows lower rates of HE progression: 35% compared with 40% for non-disadvantaged peers with similar attainment (Group 4b). No difference in proportions progressing to a 'Top 30' HEI when compared with Group 4b.

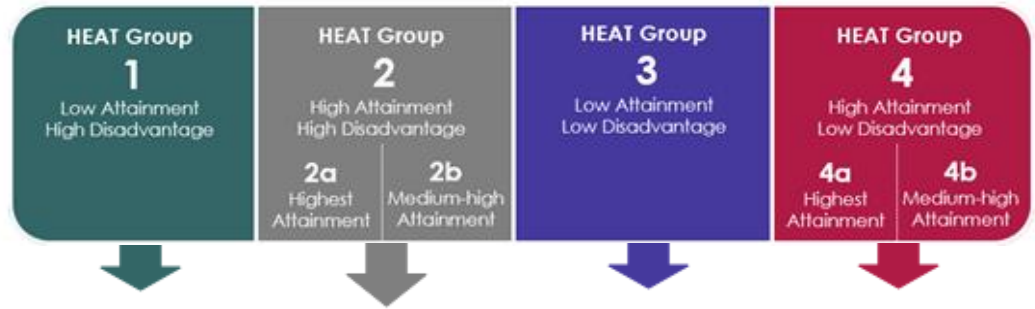
Data from the HEAT Jigsaw

The following figures provide the attainment and progression outcomes for each of the HEAT Groups. The outcomes for Groups 3 and 4 who, although classified as 'Low Disadvantage' may not be a target group for widening participation, are provided by way of comparison.



Outcome	WP Target Groups			Non-disadvantaged comparison groups		
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Key Stage 2 Attainment Band (year 6)						
<i>Source: HEAT data and Department for Education National Pupil Database</i>						
High or Medium KS2 Band	56%	97%	91%	61%	98%	92%
High or Medium KS2 Band (boys)	60%	97%	92%	62%	98%	92%
Key Stage 4 Attainment (year 11)						
<i>Source: HEAT data and Department for Education National Pupil Database</i>						
Achieved 5 A*-C at GCSE (incl. E&M)	0%	100%	100%	0%	100%	100%
Achieved 5 A*-A at GCSE	0.2%	31%	0%	1%	48%	0%
Average GCSE capped point score	289	401	331	297	411	332
Transition to Level 3 study (post-16)						
<i>Source: HEAT data, Department for Education National Pupil Database, Education and Skills Agency Individual Learner Records.</i>						
Found in Level 3 Study	67%	91%	83%	73%	94%	86%
Destination and qualification routes of those in Level 3 study						
<i>Source: HEAT data, Department for Education National Pupil Database, Education and Skills Agency Individual Learner Records.</i>						
Studying Level 3 in School or 6 th form	38%	64%	47%	36%	68%	49%
Studying Level 3 in FE College	58%	35%	50%	60%	30%	48%
Studying A levels	53%	87%	68%	55%	91%	69%
Studying BTEC or Vocational qual. (at L3)	45%	13%	31%	43%	9%	30%
Studying an Apprenticeship (at L3)	5%	2%	4%	6%	2%	5%



Outcome **WP Target Groups** **Non-disadvantaged comparison groups**

Level 3 Attainment (year 13+)
Source: HEAT data, Department for Education National Pupil Database, Education and Skills Agency Individual Learner Records.

Achieved 3 A level passes	21%	64%	34%	26%	73%	34%
Achieved AAA+ at A level	0.2%	9%	0.2%	0.9%	20%	0.1%

Proportion of UCAS applicants who progress to Unconditional Firm (UF) (UCAS) by outreach engagement
Source: HEAT data, UCAS

Multiple activities including Summer School	85%	91%	80%	79%	95%	88%
Multiple activities including Campus Visit	80%	90%	87%	74%	91%	82%
Multiple/other activities	76%	91%	82%	79%	95%	88%
Single HE Information Talk only	69%	84%	76%	76%	91%	84%

Proportion of UF applicants (UCAS) who enrol in HE(HESA) by engagement
Source: HEAT data, UCAS

Multiple activities including Summer School	86%	90%	91%	86%	91%	93%
Multiple activities including Campus Visit	81%	87%	85%	83%	89%	85%
Multiple/other activities	83%	91%	87%	84%	93%	87%
Single HE Information Talk only	87%	92%	90%	83%	92%	86%

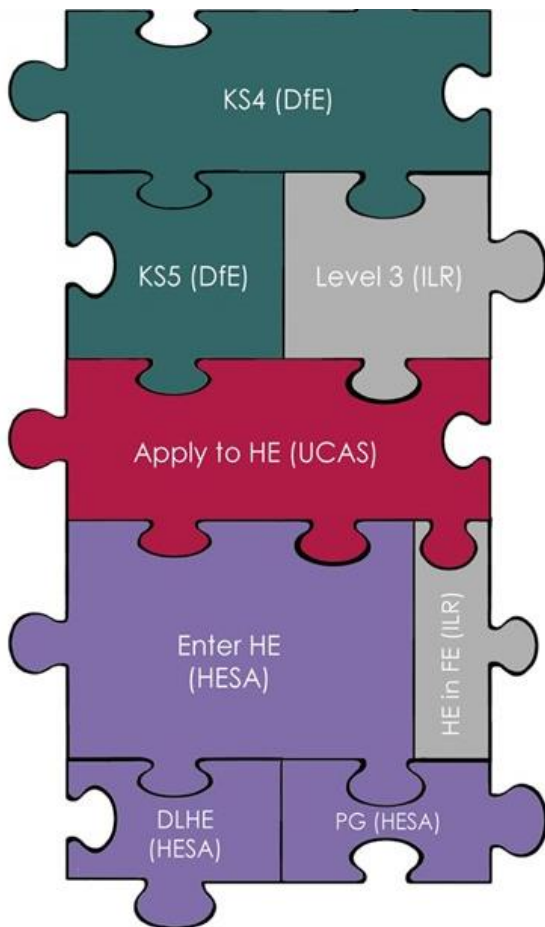
Proportion of all Applications to HE by HEI type
Source: HEAT data, UCAS

Top 30 University	16%	41%	18%	17%	48%	16%
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Percentage of UF accepted applicants
Source: HEAT data, UCAS

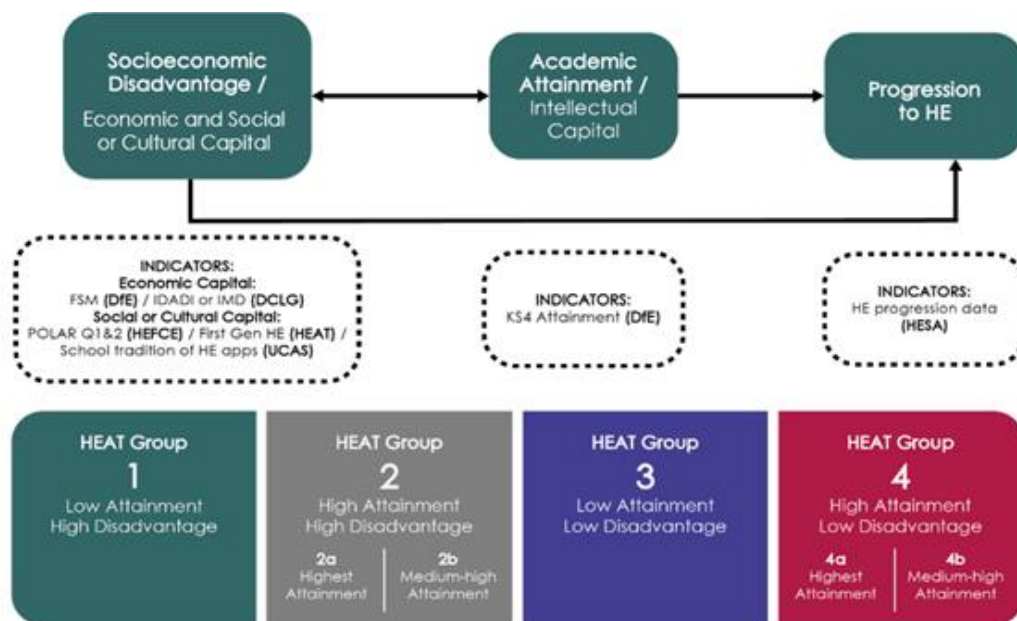
Do not enrol in HE	17%	10%	13%	16%	8%	13%
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Figure 1: The HEAT Jigsaw



<p>Report 1: Level 2 <i>(underlying dataset not yet available to members)</i></p> <ul style="list-style-type: none"> • KS4 attainment of participants engaged pre 16
<p>Report 2: Level 3 <i>(underlying dataset not yet available to members)</i></p> <ul style="list-style-type: none"> • Transition from Level 2 to Level 3 • Post 16 trajectories • KS5 attainment of participants engaged post 16 • HEI choice
<p>Report 3: Level 4 + <i>(HESA dataset available to members)</i></p> <ul style="list-style-type: none"> • Application and conversion to HE • Progression to HE (contextualised with KS4 attainment) • Post 18 trajectories (HE, HE in FE, Apprenticeships) • Achievement and success in HE • Progression to PG • Graduate outcomes

Figure 2: The HEAT Groups



High Attainment (Group 2 and 4) = Those who have achieved 5 or more GCSEs or equivalent at grades A*-C (Level 2) including English and Maths. Group 2 is further broken down based on their average capped point score at KS4, Group 2a, the highest attainment group achieved 352 points or more (equivalent to 5 grade Bs and 3 Cs); Group 2b, the medium-high attainment group achieved fewer than 352 points.
Low Attainment (Group 1 and 3) = Those who have not achieved 5 or more GCSEs or equivalent at grades A*-C (Level 2) including English and Maths.



High Disadvantage (Group 1 and 2) = One type of economic capital (FSM or IDACI or IMD) and one type of social or cultural capital (POLAR3 or 4 Q1&2 or First Generation HE or Acorn Group M, O, P, Q or Low culture of HE applications within school).
Low Disadvantage (Group 3 and 4) = Those who did not meet the disadvantage criteria above.

*Average capped point scores at KS4 are 401 points for Group 2a and 331 points for Group 2b. This difference of 70 points equates to 11.6 grades over eight GCSEs or equivalents.