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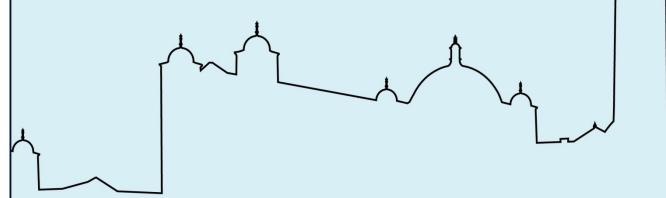
Evaluation of the Academic Enrichment Programme

Three year Summative Report: 2010/2011 - 2012/2013

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An Inspirational Student Experience at a Leading Global University

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EXECUTIVE SUMMARY

This report presents the key findings from the summative evaluation of the Academic Enrichment Programme. It summarises available data on activities and impact over the last three years of the programme between 2010/2011 and 2012/2013.

The overall purpose of the evaluation was to conduct a summative evaluation of the AEP between 2010/2011 and 2012/2013 and to assess the impact of the programme on participants.

The evaluation focussed on addressing the extent to which the four main outcomes relating to students participating in the programme were achieved. The evaluation sought to answer the following questions:

- 1. Does the programme effectively reach students' underrepresented in selective universities?
- 2. Do participating students show increased knowledge, understanding and aspirations of studying at research intensive universities?
- 3. Do participating students progress to research intensive universities?

Key Findings

1. Does the programme effectively reach students' underrepresented in selective universities?

The Academic Enrichment Programme has been successful in reaching students who are under-represented within higher education and specifically within selective universities. The AEP targeting model has ensured that the programme identifies and targets 'high priority' students and as a result the programme has successfully reached its target groups.

The vast majority (90%) of students participating in the programme over the three years came from households with no parental experience of university. They also tended to live in low income households, resided in areas of deprivation and with low levels of youth participation in higher education.

The findings also revealed that the AEP had reached students who experience multiple socio-economic disadvantages.

2. Do participating students show increased knowledge, understanding and aspirations of studying at research intensive universities?

A key aim of the AEP is to raise student's motivation, knowledge and understanding of applying to a research intensive university. Although students on the programme already tended to have positive attitudes towards higher education, the focus of the AEP was to help students understand the benefits of attending a research intensive university and to

prepare them to go to university. To this end, the findings revealed that the AEP had a positive impact on student's attitudes towards going to leading universities.

The findings suggest that the AEP has made a difference to students and has had a positive impact on student's attitudes towards applying for a research intensive university and by supporting students to make informed decision and being better prepared for university.

3. Do participating students progress to research intensive universities?

The application and destination findings showed that the majority of AEP students made applications to research intensive universities and the vast majority of students participating in the AEP progressed to higher education.

Destination data revealed that significant proportions of AEP students progressed to selective universities with 47% of Cohort 2 and 62% of Cohort 3 AEP students progressing to studying at a Russell Group university, which is significantly greater when compared to national, regional and local benchmarks.

Overall, students were very positive about the programme and felt they benefited greatly from the experience, including:

- Being better prepared for A Level exams
- Improved study skills
- Improved confidence and self esteem
- Increased knowledge about university and the application process.

1. INTRODUCTION

This report presents the key findings from the summative evaluation of the Academic Enrichment Programme. It summarises available data on activities and impact over the last three years of the programme between 2010/2011 and 2012/2013.

1.1 The Academic Enrichment Programme

The Academic Enrichment Programme (AEP) is a widening participation initiative delivered by the University of Birmingham that aims to improve access of underrepresented groups into research intensive universities. The programme is made up of a number of components including a residential experience, mentoring and study skills support. It has been supported by alumni donations from the Derek and Margaret Hathaway Foundation and Martin Devenish.

The Academic Enrichment Programme aims to help students secure places at research intensive universities by:

- Supporting students to raise academic grades
- Giving students first-hand experience of the academic learning to be expected from a research-led institution
- Raising student's aspirations, motivation, knowledge and understanding of applying to a research intensive university.

Students join the AEP in Year 12 and attend a week-long residential school at the University campus in Edgbaston in the summer of Year 12. They also receive on-going, one-to-one ementoring from current undergraduates. In Year 13 students attend two study-skills sessions at key points and have access to on-line revision materials to support exam performance. A celebratory 'graduation' event for students and parents is held at the end of the programme.

Eligibility criteria

The Academic Enrichment Programme aims to attract applications from the most able students who are currently under-represented within higher education but have a realistic opportunity of being offered a place at a research-intensive university. The programme has stringent social and academic criteria in order to target gifted and talented students from less advantaged backgrounds.

Students who meet the following eligibility criteria were targeted by the programme:

 Attend a non-selective state school with a high proportion of students in receipt of free school meals and/or in inner-city areas

And:

- Have a minimum of eight GCSEs grade A*-C (including Maths and English) with at least five GCSEs at grade B
- Be the first generation in the family to apply to university (parents who have not been to university)
- Have parents in non-professional occupations

- Residing in areas of disadvantage and low youth participation in higher education
- Have a household income of below £42,600
- · Living in, or grew up in care
- · Has a disability.

1.2 Academic Enrichment Programme Logic Model

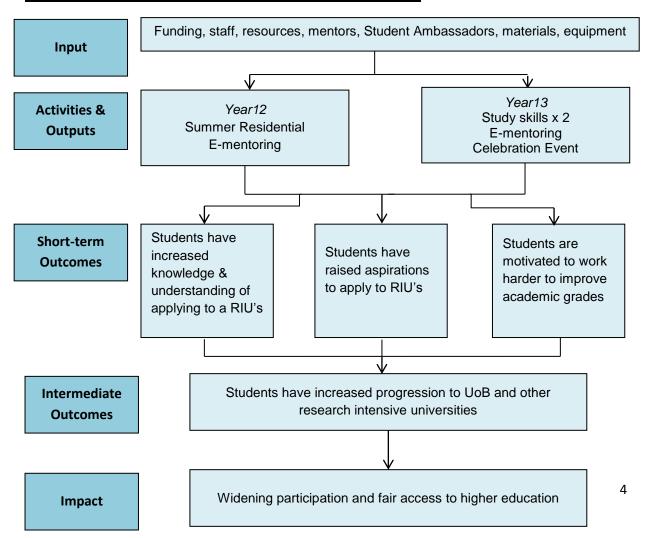
A logic model graphically represents the relationship between the key components of a programme. A logic model was developed for the AEP to understand what the programme is trying to achieve and how programme activities will lead to the achievement of the intended outcomes. The AEP logic model is presented in Figure 1.

The programme logic model shows that the AEP has four main intended outcomes:

- 1. Students have increased knowledge and understanding of applying to a research intensive university
- 2. Students have raised aspirations to apply to research intensive universities
- 3. Students are motivated to work harder to improve academic grades
- 4. Students have increased progression to UoB and other research intensive universities.

The ultimate impact of the programme is to widen participation and fair access to higher education.

Figure 1: Academic Enrichment Programme Logic Model



1.3 Evaluation Aims

The overall purpose of the evaluation was to conduct a summative evaluation of the AEP between 2010/2011 and 2012/2013 and to assess the impact of the programme on participants.

The evaluation focussed on addressing the extent to which the four main outcomes relating to students participating in the programme were achieved. The evaluation sought to answer the following questions:

- 1. Does the programme effectively reach students' underrepresented in selective universities?
- 2. Do participating students show increased knowledge, understanding and aspirations of studying at research intensive universities?
- 3. Do participating students progress to research intensive universities?

1.4 Evaluation Methodology

The evaluation findings are based on the following programme data, which was analysed to report on findings across the three cohorts.

Programme monitoring data

The Academic Enrichment Programme monitoring data was analysed to report on:

- The number of students and schools participating in the programme over the three cohorts, and,
- Targeting and socio-economic characteristics of students.

Student attitudinal surveys

Students on the AEP complete attitude surveys before starting the residential and again after completing the residential. This provides data on students' aspirations, knowledge and understanding of higher education before and after the residential. The main topics explored in the survey are:

- Aspirations for higher education and research intensive universities
- Knowledge and understanding of university application processes
- Feedback on participating in the programme.

End of programme survey

At the end of the AEP students were asked to complete a questionnaire to obtain data on their future plans and applications to university. The survey also sought feedback on the ementoring.

Post programme survey

Post AEP a telephone survey was conducted with students to obtain data on their attainment and destinations.

E-mentoring website statistics

Brightlinks web statistics were analysed to report on e-mentoring activity and usage.

1.5 Report Structure

The report continues in the following sections:

- Section 2: Targeting and Participation
- Section 3: Programme Activity
- Section 4: Impact: Achievement of Outcomes
- Section 5: Conclusions.

2. TARGETING & PARTICIPATION

This Section provides details on the scope of the programme and a breakdown of the characteristics of students who participated in the programme between 2010/2011 and 2012/2013.

It covers the following:

- AEP targeting model, and
- Participation and socio-economic characteristics of Cohorts.

2.1 AEP Targeting Model

The Academic Enrichment Programme has a well-developed targeting model that scores and weights a range of socio-economic measures (in addition to academic criteria) to identify priority students. This model enables programme staff to identify students who experience multiple social-economic disadvantages. The targeting measures, priority scoring and weighting are displayed in Table 1 and Table 2 below.

Table 1: AEP targeting measures, priority scoring and weighting

Measure	Priority Scoring and Weighting
IMD ¹	Disadvantaged scores 1, advantaged scores 0
POLAR 2 (YPR) ²	Target scores 1, not target scores 0
Parental HE	Target scores 2, not target scores 0
NS-SEC ³	Target scores 1, not target scores 0
EMA/Bursary	Target scores 1, not target scores 0
Disability ⁴	Target 6, not target 0
Teacher statement	Target 6, not target 0 (includes in care)
Score range	0 to 18

Table 2: AEP Student targeting and priority scoring

¹ Indices of Multiple Deprivation is based on 40% most disadvantaged Wards

² POLAR 2 (YPR) is data based on youth participation from most disadvantaged quintiles 1 and 2 (Wards with lowest youth participation in higher education)

³ NS-SEC is parents are in lower socio economic groups 4-8 (semi-skilled/manual occupations)

⁴ Disabled learners and those with a supporting teacher statement score a minimum of 6 to make them automatically target

Priority level ⁵	Priority Score
Very high	6 to 18
High	5
Medium	3 to 4
Low	2
Very low	0 to 1

2.2 Participation and Socio-economic Characteristics of Cohorts

Table 2.3 below summarises the socio-economic characteristics of the first three cohorts of the programme. Over the three years of the Academic Enrichment Programme, a total of 304 students participated in the programme from 128 different local target schools.

Gender

The majority of students participating in the programme were female. Over the first two years of the programme the ratio of male to female students remained at approximately 1:2. By the third year the numbers of students from each gender were starting to become more equal; however a 14 percentage point gap still remains.

The increasing gender gap between male and female participation in higher education, where males lag behind females, is a wider national issue. Male students also appear to be the minority group in other similar widening participation outreach programmes⁶ and therefore the gender gap must be an issue for further consideration for university outreach programmes.

Ethnicity

The proportion of students from ethnic minority backgrounds was consistently high over the three years (just under 50 per cent), partly reflecting the diverse ethnic backgrounds of the areas and schools targeted by the programme.

Disability

The percentage of students on the programme with disabilities and / or learning difficulties increased year on year with a significant increase in the third cohort (1% in Cohort 2, 5% in Cohort 2 and 13.6% in Cohort 3).

Socio-economic criteria

The vast majority of the students participating in the programme were from groups that are under-represented within higher education. Table 3 reveals that:

Around two thirds of the students were residing in areas of disadvantage. This
proportion remained consistent over the three cohorts (between 64-66%)

⁵ Learners scoring 6 or above are very high priority. Only learners who have a supporting teacher statement or are disabled can score above 6. Priority score of 6-18 = learner meets all criteria

⁶ Realising Opportunities Programme (Evaluation of the Realising Opportunities Programme, Annual Report 2013) Sutton Trust Summer Schools (The impact of the Sutton Trust's Summer Schools on subsequent higher education participation: a report to the Sutton Trust, December 2011)

- The vast majority of students (90% over the three cohorts) have parents with no experience of higher education
- The proportion of students living in areas classified as having low levels of youth participation in higher education has remained at just over half in each of the three cohorts (52-56%)
- Seventy per cent of students over the three cohorts were from lower socioeconomic groups. Cohort 1 had the highest percentage at 82%; however this fell to 63.5% in Cohort 2.
- The percentage of students in receipt of Educational Maintenance Allowance (EMA) was high in Cohort 1 (82%) and fell by 10% to 72% in Cohort 2. Due to the abolition of EMA a new indicator of income levels was introduced in Cohort 3. The Table below shows that the vast majority of students (90%) had a net income of below £42,600.
- Table 3 illustrates that many of the AEP students faced more than one disadvantage. For example, over the three cohorts two thirds of students were from lower socio economic groups and lived in households with no parental experience of university.

Table 3: Socio-economic characteristics of AEP students⁷

Socio-economic Characteristic	Cohort 1 2010/2011	Cohort 2 2011/2012	Cohort 3 2012/2013	Total Cohorts 1-3 ⁸
Number of students	102	99	103	304
Number of schools	42	49	57	128
Female students	63%	62%	57%	60.5%
Male students	37%	38%	43%	39.5%
BME students	47%	44%	48%	45.0%
Disability	1.0%	5.1%	13.6%	6.6%
NS-SEC	82.0%	63.5%	73.0%	69.7%
IMD ⁹	64.4%	64.2%	66.3%	62.8%
POLAR 2 (YPR) ¹⁰	51.9%	55.8%	55.4%	49.0%
No parental HE	99.0%	96.8%	92.9%	90.1%
EMA	82.2%	72.4%	-	76.6% ¹¹
Net income below £42,600 ¹²	-	-	90.2%	90.2% ¹³
NS-SEC and no parental HE	75.4%	62.4%	69.4%	65.5%
IMD and no parental HE	62.5%	62.0%	63.3%	58.2%
POLAR 2 (YPR) and no parental HE	50%	58.2%	55.1%	51.3%

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⁷ Percentages shown of known numbers

⁸ Percentages reflect known numbers over the three cohorts

⁹ Indices of Deprivation is based on 40% most disadvantaged wards

¹⁰ POLAR 2 (YPR) is data based on youth participation from most disadvantaged quintiles 1 and 2 (wards with lowest youth participation in higher education)

¹¹ Figure reflects Cohorts 1 & 2 only

The income threshold is the national income threshold used by Student Finance England. In 2013 students with a household income of less than £42,611 were eligible for the maintenance grant.

¹³ Figure reflects Cohort 3 only

3. PROGRAMME ACTIVITY

This Section reports on the scope of the programme. It describes the programme model and assesses the success of programme delivery to participants.

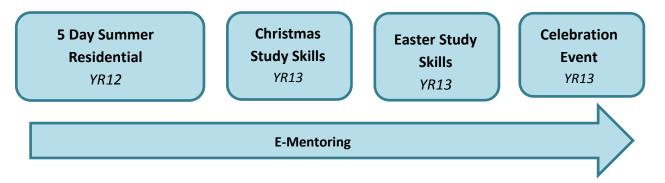
3.1 Programme Model

The Academic Enrichment Programme model comprises four strands of activity:

- 1. Five day summer residential
- 2. Christmas and Easter study skills sessions
- 3. E-mentoring by current undergraduate students
- 4. Celebration event.

The diagram below illustrates the AEP model. Students join the programme on August for a five day summer residential. In Year 13 students attend two study skills sessions, one in December and the second in April. The final event is a celebration event to mark the end of the programme and students' achievements. E-mentoring by current undergraduates at the University of Birmingham starts in Year 12 after the residential and continues through to the following August in Year 13.

Figure 2: Academic Enrichment Programme model



3.2 Summer Residential

The summer school is the core activity of the AEP. During the residential students 'lived' in the University halls of residence - replicating the experience they would have as enrolled students.

The Table below highlights the type and scale of the activities students participated in during the residential. It reveals that students attended lectures and seminars, visited local business, attended higher education information and motivational talks and participated in a variety of social activities.

Students had the choice of attending one of four broad academic streams relating to their current studies or to the degree programme they wished to study. The academic streams offered to students were:

- 1. **Humanities and Social Sciences:** Geography, English, History, Drama, Law, Politics, Social Policy, Public Policy, Social Work, Sociology, Theology, Psychology
- 2. **Business:** Accounting, Economics, Business, International Studies
- 3. **Physical Sciences**: Engineering, Computer Science, Physics, Maths
- 4. **Biological and Health Sciences:** Physiotherapy, Medicine, Dentistry, Nursing, Biology and Chemistry.

Over the three cohorts, a total of 108 academic sessions were delivered, 18 social activities, 13 higher education information sessions and motivational talks and 8 visits to local businesses.

Table 4: AEP residential activity

Activity	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Academic	38	31	39	108
Social	7	5	6	18
Business	3	2	3	8
HE / Motivation	4	4	5	13

To mark the end of the residential, students attend a formal dinner hosted by the University. Alumni, senior managers and academics from the university were invited to attend this celebration dinner.

Student views on the summer residential

Each cohort was asked to identify the reasons they chose to participate in the AEP. Table 5 below shows participants believed the programme would motivate them to study harder and more efficiently, and improve their communication skill, independence and confidence. The proportion of students indicating these reasons remained consistently high across all three cohorts.

Table 5: Reasons why students chose to participate in the AEP

Reason	Cohort 1	Cohort 2	Cohort 3
Motivate me to study and work harder	85%	86%	88%
Help me to study more efficiently	80%	84%	86%
Improve my communication skills	87%	85%	87%
Increase my independence	89%	95%	90%
Increase my confidence	88%	83%	86%

Benefits of participating in the summer residential

The summer school aims to prepare students for university. Students were asked to provide feedback on the benefits they had experienced through participating in the summer residential by responding to the extent they agreed with a range of statements relating to preparing them for university.

Table 6 reveals that almost all the students across all cohorts 'strongly agreed' or 'agreed' that they 'benefited greatly from my Summer Residential Experience at University of Birmingham' with 100% of students agreeing with this statement in Cohort 3.

The proportion of students agreeing with the statement 'the summer residential helped me become better prepared to take tests such as A-Levels' increased year on year for each cohort from 77% in cohort 1 to 88% in cohort 3. Other areas that increased year on year included 'helped me feel better prepared for final year sixth form' which increased by 6 percentage points to 94% in cohort 3 and 'exposed me to rigorous and challenging courses' which increased by 5 percentage points to 91% in cohort 3. The improvements over time suggest the programme has continually improved based on the needs and feedback of the students.

The Table below also suggests that students have benefited from being better prepared for university through increased confidence, improved attitudes towards higher education and gained a range of skills as a result of participating in the summer residential.

Table 6: Student feedback on summer residential

AEP has:	Cohort 1	Cohort 2	Cohort 3
Helped me feel better prepared for final year sixth form	88%	93%	94%
Helped build my confidence and self esteem	93%	87%	97%
Improved my study skills	66%	82%	78%
Helped me set higher academic goals	91%	86%	96%
Improved my attitude about education	94%	91%	96%
Helped me become better prepared to take tests such as A-Levels	77%	84%	88%
Exposed me to rigorous and challenging courses	86%	89%	91%
I benefitted greatly from my Summer Residential Experience at University of Birmingham	99%	98%	100%

A great experience - the lectures and living away from home was great

I thought the residential was an amazing opportunity and definitely prepared me for applying to university

I loved the experience thank you!

AEP Students: Cohorts 2 & 3

3.3 E-Mentoring

E-mentoring is a key component of the AEP offer to students. The e-mentoring is delivered via a secure and moderated online portal – Brightlinks¹⁴ – provided by the Brightside Trust. All mentors receive training on mentoring and using the Brightlinks portal.

All AEP students in the three cohorts received e-mentoring support from undergraduate students throughout the duration of the programme to support them with the university application process.

The e-mentoring usage statistics are presented in the Table below. The statistics reveal that e-mentoring was well utilised by students across the three cohorts and the level of engagement with the e-mentoring increased year on year. For example:

- Over the three cohorts students logged on to e-mentoring 8,560 times, this averages at 28 logins per student. Two thirds of students (66%) logged in 12 times or more (at least once a month).
- Students spent a combined total of 22,816 minutes (380hrs 16mins) on the site; this is an average of 75 minutes (1hr 15mins) per student.
- A total of 2,667 messages were sent by students to mentors and a total of 3,538 messages were received by students from their mentors.
- Just over a third of students (34%) were assigned a course by their mentor15.

¹⁴ https://www.brightlinks.org/

¹⁵ Mentors can recommend a range of courses to mentees depending on their needs. The courses cover life skills such as time and money management, study skills and career goals.

Table 7: E-mentoring usage statistics

Mentoring Usage	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Total number of logins by all students	1,693	3,066	3,801	8,560
Average number of logins per students	17	31	37	28
Number of students logging in 12 times or more	58	74	68	200
Total number of minutes on site by all students	6,512	7,883	8,421	22,816
Average minutes on site per student	64	80	83	75
Number of students spending an hour or more on site	44	45	43	132
Total number of messages sent by students to mentors	844	862	961	2,667
Average number of messages sent by students to mentors	8	9	9	9
Total number of messages received by students from mentors	1,274	1,219	1,045	3,538
Average number of messages received by students from mentors	12	12	10	12
Number of students assigned a course by their mentor	18	54	30	102

What did students use e-mentoring for?

Students were asked to identify the different reasons they used e-mentoring¹⁶. The Chart below shows that the main reason cited by students was to receive advice on their UCAS application, with the highest percentage of students citing this in Cohort 3 (88%). This was followed by to keep in touch with their mentor, reported by just over a quarter of students across all three cohorts. Small number of students also used e-mentoring for help with A level coursework (between 3-7% of students across the three cohorts).

Other reasons students cited for using e-mentoring included: help with UCAS personal statement, discussing grades, advice on colleges and university, referencing, finance, to get advice on interviews, scholarships, accommodation and student life.

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¹⁶ Students were able to identify more than one reason

100% 88% 90% 80% 70% 59% 59% 60% Cohort 1 50% Cohort 2 40% 27% 28% 28% Cohort 3 30% 20% 9% 10% 8% 7% 10% 5% _{3%} 0% to get advice on my to keep in touch to get help with my other **UCAS** application A level coursework with my mentor

Figure 3: What did you use e-mentoring for?

How useful was the e-mentoring for students?

Students were asked to rate how useful they found the advice provided through e-mentoring. Figure 4 reveals that the majority of students found the advice and information either 'very helpful' or 'somewhat helpful'. The proportion of students who reported to have found the e-mentoring to be very useful increased year on year for each cohort from 38% in Cohort 1 to 62% in Cohort 3; an increase of 24%.

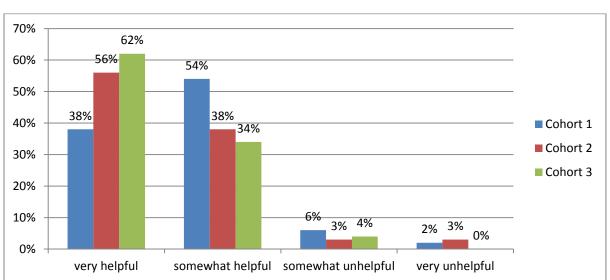


Figure 4: How helpful did you find the advice/information you were given via e-mentoring?

Students were also asked for their feedback on how their experience of e-mentoring could have been improved. Suggestions included the need for more opportunities for students to get to know their mentors before starting e-mentoring. Some suggestions from students to develop better relationships with their mentors included:

- Face-to-face meetings during AEP Study Skills Sessions
- Group activities and ice-breakers in mentor groups on the residential
- Come to the university to visit the mentor and shadow them
- Have a mentor session at Christmas to discuss progress.

The e-mentoring usage data and student feedback shows improvements over time, suggesting the usage and quality of e-mentoring improved as e-mentoring continued to become a key component of the programme.

I really enjoyed the AEP and would consider becoming an AEP mentor if I had the opportunity

AEP Student: Cohort 3

I found that my mentor was very helpful in helping me make decisions on my UCAS application

AEP Student: Cohort 3

3.4 Study Skills

Students on the AEP in each cohort attended two study skills sessions to help prepare them for study in year 13 and at university. The first session is held in December and aimed at providing students with the skill and resources they need to support their work in year 13. This session was delivered by the University of Birmingham Library Services staff and covered the following topics:

- Internet research
- Web evaluation
- Libraries and Plagiarism
- Referencing.

The second study skills session is held in April and the focus of the session was study skills at university. It aimed to prepare students for the rigour of academic study, the expectations of academics in higher education and for academic writing at undergraduate level. This session was delivered by academics at the University.

The session was followed by the *End of Programme Celebration Event* to which parents were also invited to attend. The celebration event included a buffet for all students and invited guests and certificates were presented to all students on the programme.

In addition to the study skills sessions, all students on the programme were provided with logins for the Examtutor.com¹⁷ website which were funded by the programme. Examstutor.com is a resource for students which aims to support them to prepare for their exams and provides further support with revision and effective study skills.

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¹⁷ http://www.examstutor.com/

4. IMPACT: ACHIEVEMENT OF OUTCOMES

This Section presents findings on the impact of the Academic Enrichment Programme on participant's progression to the University of Birmingham and other research intensive universities. It reports on the achievement of the programme's intended outcomes drawing on data from student attitudinal surveys, end of programme survey and the post programme survey.

The outcomes are discussed under the following headings:

- Knowledge, understanding and aspirations of higher education
- Academic achievement
- Progression to university.

4.1 Knowledge, understanding and aspirations of higher education

A key aim of the AEP is to raise student's knowledge, understanding and aspirations of applying and attending a research intensive university and to support them with their applications. The programme logic model in Section 1 of the report illustrates that the programme model is based on the assumption that the first step to increasing progression to research intensive universities is for changes in students' knowledge, understanding and aspirations of applying to research intensive universities and being motivated to achieve the grades to enter a research intensive university.

This sub-section explores the extent to which students' knowledge, understanding and aspirations of higher education changed by participating in the AEP. It presents findings from the student attitudinal surveys and covers:

- Knowledge and understanding of going to university
- · Attitudes and aspirations toward higher education, and
- Understanding the process of applying to university.

Knowledge and understanding of going to University

Students were asked to what extent they agreed with the statement 'I feel I know enough about university to help me make a decision about going'. At baseline, less than a quarter of the students in all three cohorts strongly agreed with this statement. At the point of follow-up, this increased significantly across all cohorts with the biggest increase in Cohort 3 which increased by 47%. This suggests at the point of follow-up students had more knowledge about university to aid decision making compared to baseline.

Table 8: Percentage of students strongly agreeing with the statement 'I feel I know enough about university to help me make a decision about going'

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	24%	13%	24%	23%
Follow-up	63%	52%	71%	69%
% Change	+39%	+39%	+47%	+46%

Students were also asked to what extent they agreed with the statement 'I know what I want to study at university'. At baseline, just 15%-36% of students strongly agreed with this statement across the three cohorts. At follow-up, the proportions increased with the biggest increase seen in Cohort 3 which increased by 50% from 15% to 65%, suggesting that following AEP, students had a better idea of what they wanted to study at university.

<u>Table 9: Percentage of students strongly agreeing with the statement 'I know what I want to study at university'</u>

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	36%	28%	15%	29%
Follow-up	54%	49%	65%	62%
% Change	+18%	+21%	+50%	+33%

Students were asked about their confidence in their ability to meet the academic requirements of university. At baseline, just 15% of the total students across the three cohorts strongly agreed with the statement 'I feel confident about my ability to meet the academic requirements of university'. At follow-up this increased by a quarter in Cohorts 1 and 2 suggesting that student's confidence in meeting university academic requirements increased compared to baseline.

<u>Table 10: Percentage of students strongly agreeing with the statement 'I feel confident about my ability to meet the academic requirements of university'</u>

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	15%	10%	15%	15%
Follow-up	41%	26%	40%	39%
% Change	+26%	+16%	+25%	+24%

Attitudes and aspirations towards higher education

Students were asked to rate 'how important is it to you that you go to university'. At baseline, the majority of students across all three cohorts thought it was 'extremely important' for them to go to university. At follow-up the figures increased across all cohorts but the highest increase was seen in Cohort 3 which increased by 17%.

<u>Table 11: Percentage of students reporting it was 'extremely important' that they go to</u> university

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	71%	74%	68%	79%
Follow-up	81%	77%	85%	90%
% Change	+10%	+3	+17%	+11%

As well as asking students the importance of going to university, they were also asked 'how important is it to you that you go to the best university'. At baseline, over two thirds of students across the three cohorts reported that this was either 'extremely important' or 'very important'. At the point of follow-up, there were significant increases across all three cohorts with the largest increase seen in Cohort 3 which saw a change of +19%.

<u>Table 12: Percentage of students reporting it was 'extremely important' or 'very important' that they go to the best university</u>

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	58%	59%	67%	69%
Follow-up	72%	74%	86%	87%
% Change	+14	+15	+19%	+18%

The findings suggest that the AEP students already had positive attitudes towards higher education. This may be expected since the majority of students were studying A Levels; however, the follow-up findings suggest that a greater proportion of students were likely to report it was important that they go to the 'best' university after participating in the AEP.

Understanding the process of applying to university

Students were asked how clearly they understood the university application process. At baseline just under a third of students across the three cohorts stated they were 'very clear' about the university application process. At follow-up, this increased significantly by 50% from 31% to 81%.

<u>Table 13: Percentage of students reporting they were 'very clear' about the university application process</u>

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	31%	19%	32%	31%
Follow-up	83%	66%	71%	81%
% Change	+52%	+47%	+39%	+50%

Students were also asked about how clear they were about writing personal statements. At baseline just over a third of students across the three cohorts reported they were *'very clear'* about writing personal statements. At the point of follow-up, there were significant increases across each cohort. The biggest increase was seen in Cohort 3 which increased by 46% from 28% to 74%.

<u>Table 14: Percentage of students reporting they were 'very clear' about writing personal statements</u>

	Cohort 1	Cohort 2	Cohort 3	Total Cohorts 1-3
Baseline	37%	25%	28%	34%
Follow-up	75%	67%	74%	80%
% Change	+38%	+42%	+46%	+46%

The findings of the baseline and follow-up survey, suggest there were significant changes in students understanding of a range of processes relating to applying to university since baseline. For example, the following changes were seen in Cohort 3:

- At baseline only 16% of students stated they were very clear about the academic support services. This increased by 56% to 72% at follow-up.
- At baseline 62% of the students stated they were very clear about the benefits of a university with a good reputation. This increased by 24% to 86% at follow-up.
- At baseline 42% of the students stated they were very clear about tuition fees. This doubled to 84% at follow-up.
- At baseline 35% of the students stated they were very clear about their career options. This increased by 27% to 62% at follow-up.

I have really enjoyed being part of this programme and found the information given very useful, I'm very grateful that I was able to be part of the AEP, thank you.

The programme was very useful because it offered advice which is clear and concise; it also allows one to experience the course they wish to apply for. I'm very grateful for everything and happy that I applied for the programme. Thank you very much

AEP has been a fantastic experience, the help received while applying, writing personal statements has been exceptional.

AEP Students: Cohorts 2 & 3

4.2 Academic achievement

High academic attainment is a prerequisite to progressing to selective universities. This subsection reports on the academic achievement of the AEP students; the findings are based on the results of the post programme survey.

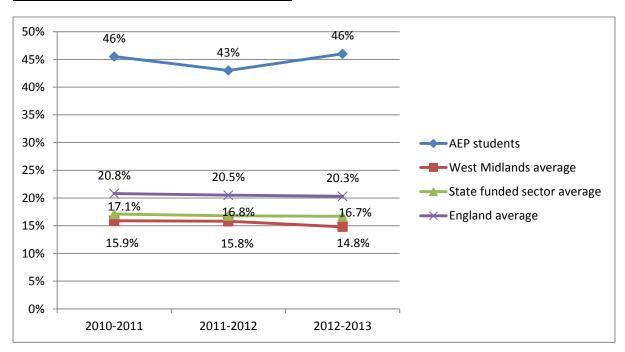
The Chart below shows the percentage of AEP students achieving grades AAB or better at A Level. Forty six per cent of Cohort 1 and Cohort 3 AEP students achieved A Level grades of AAB or better. The figure was slightly lower for Cohort 2 at 43%.

Regional and national trends of percentage of students achieving A Level grades of AAB or better are also presented in the Chart to provide context for the AEP cohort figures. In 2012-2013 AEP students outperformed:

- West Midlands state-funded schools by 31.3 percentage points
- England State-funded schools by 29.3 percentage points
- England all schools (includes independent schools) by 25.7 percentage points.

Since there was bias in the selection of AEP students on GCSE grades, these results therefore need to be interpreted with caution. Nevertheless they provide useful context.

<u>Figure 5: Percentage of AEP students¹⁸ achieving grades AAB or better at GCE A</u> <u>Level and regional and national trends¹⁹</u>



The Chart below shows the percentage of AEP students achieving grades A*-A or better at A Level. Over a quarter of students in Cohorts 1 and 3 (27% and 26%) achieved grades A*-A or better at A Level. The figure for Cohort 2 was 22%.

¹⁹ West Midland results cover state-funded students. State funded sector includes: state-funded mainstream schools, Academies, free schools, maintained special schools and FE Sector Colleges

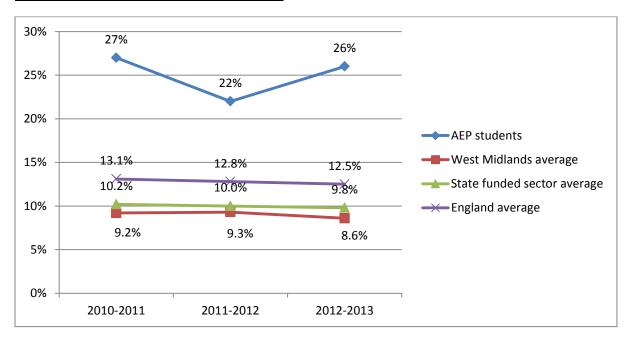
 $^{^{\}rm 18}$ A Level grades were obtained for 32% of Cohort 1, 88% of Cohort 2 and 78% of Cohort 3 students.

When comparing the achievement of the AEP 2012-2013 Cohort with national and regional trends, AEP students outperformed:

- West Midlands state-funded schools by 17.4 percentage points
- England State-funded schools by 16.2 percentage points
- England all schools (includes independent schools) by 13.5 percentage points.

Again, these results need to be interpreted with caution due to the bias in the selection of AEP students on GCSE attainment.

Figure 6: Percentage of AEP students achieving 3 A*-A grades or better at GCE A Level and regional and national trends



4.3 Progression to university

This sub-section reports on the progression of students to university following AEP. It includes findings from the end of programme survey and the post programme survey and covers:

- Applications to university
- Destinations.

Applications to university

At the end of the AEP, students were asked if they had applied to go to university. The Chart below shows the percentage of AEP students who reported they had applied to university²⁰. The majority of students in both Cohorts 2 (85%) and 3 (88%) had applied to university. This was to be expected since the students were all studying A Levels.

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 $^{^{20}}$ Data was only available for Cohorts 2 and 3

Just 15% of students in Cohort 2 and 12% in Cohort 3 had not applied to university in the current year. Students not applying to university were either repeating a year or taking a gap year, suggesting that they still intended to go to university.

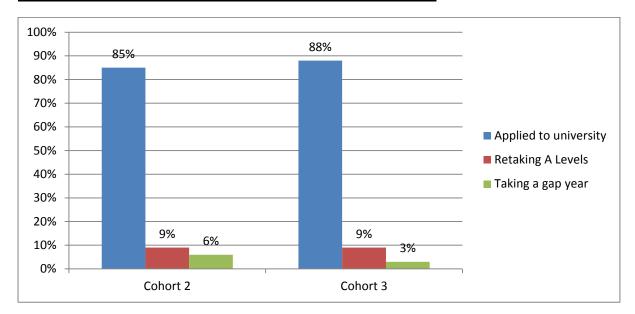


Figure 7: Percentage of AEP students applying to university

Students who reported they had applied to university were asked to list the universities (up to five) they had applied to. Cohort 2 students had applied to a total of 70 different universities and Cohort 3 students had applied to a total of 66 different universities. The Chart below shows the universities receiving the highest number of applications from AEP students.

Unsurprisingly, the Chart below shows that the University of Birmingham (UoB) was by far the most popular choice for AEP students in terms of university applications. Over three quarters (76%) of Cohort 2 AEP students who had applied to university had applied to UoB, the figure was slightly lower for Cohort 3 with 72% applying to UoB.

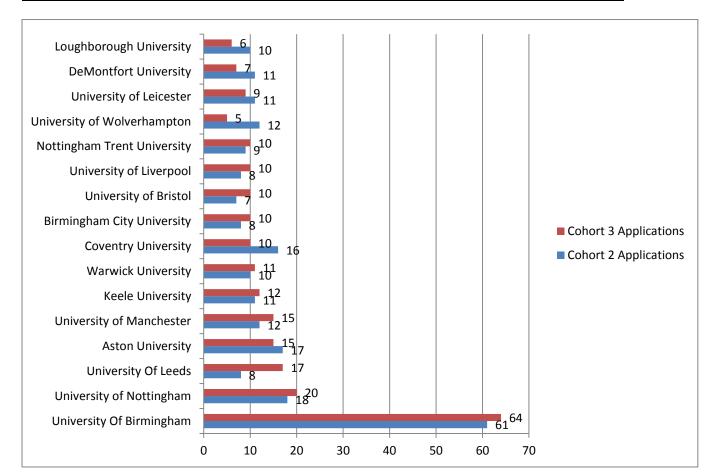


Figure 8: Universities receiving the highest number of applications from AEP students

Destinations

Destination data was obtained for Cohort 2 and 3 AEP students and is presented in the Chart below. The Chart shows that the majority of students in both cohorts (82% in Cohort 2 and 88% in Cohort 3) progressed to higher education. It also reveals that:

- 46% of students in Cohort 2 and 61% of students in Cohort 3 progressed to a Russell Group university
- 56% of Cohort 2 and more than two thirds (68%) of Cohort 3 students progressed to studying at a selective university (Russell Group, 1994 and Aston, Oxbridge).
- 29% of Cohort 2 and 38% of Cohort 3 students progressed to studying at the UoB.
- 17% of Cohort 2 and 12% of Cohort 3 students were either retaking A Levels or deferring their application to university.

38% 40% 35% 29% 30% 26% 23% 25% 20% 20% 15% 15% 9% 9% Cohort 2 10% 6% Retaking A Level's

Deferred Application 2%^{3%} ■ Cohort 3 5% 0%

Figure 9: Destinations of AEP students²¹

To provide some context, the Chart below compares the percentage of AEP students progressing to Russell Group universities (including Oxford and Cambridge) with the percentage of national, regional and local Key Stage 5 students in the 2009/10 academic year progressing to Russell Group universities in the 2010/11 academic year.

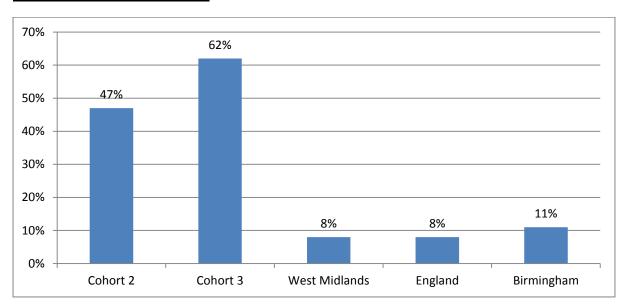
The Chart reveals that the proportion of AEP students in both cohorts progressing to Russell Group universities was significantly greater than the England and West Midlands Cohorts (+39% & +54%) and the Birmingham Cohort (+36% & +51%).

Although, there was some bias in the selection of AEP students based on GCSE grades, the difference in the proportions is significantly greater and the figures are even more notable given that the national, regional and local data includes both advantaged and disadvantaged students.

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²¹ Destination data was obtained for 89% of Cohort 2 and 92% of Cohort 3 students.

<u>Figure 10: Percentage of AEP, national, regional and local students²² progressing to Russell Group universities²³</u>



The Chart below shows the number of students in each cohort who applied and accepted places at the University of Birmingham through the Access to Birmingham Scheme (A2B)²⁴. The Chart shows that:

- 41% of Cohort 1; 55% of Cohort 2 and 48% of Cohort 3 AEP students applied to the University of Birmingham through the A2B scheme.
- 45% of Cohort 1; 44% of Cohort 2 and 63% of Cohort 3 AEP students who applied through A2B were made an offer and accepted places at the University of Birmingham.

²⁴ The A2B scheme is the University of Birmingham's Flagship access scheme that aims to ensure that the University of Birmingham is accessible to the most able students from under-represented groups. For further information please visit: http://www.birmingham.ac.uk/a2b/

²² Data is for England, West Midlands and Birmingham Key Stage 5 students in the 2009/10 academic year progressing to Russell Group universities in the 2010/11 academic year. The base cohort includes students in English schools and colleges.

²³ Including Oxford and Cambridge.

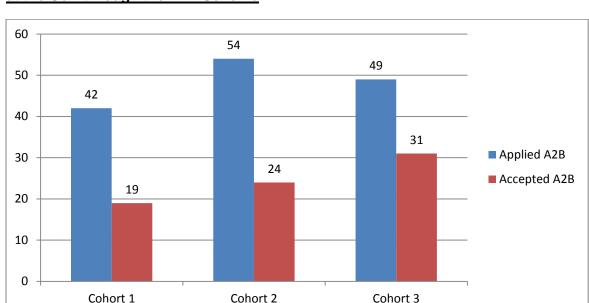


Figure 11: Number of AEP students in each cohort who applied and accepted places at the UoB through the A2B Scheme

I went to a state secondary school and was the first of my family to even apply for university. The application, entry and choices were all new to me and only through the AEP Summer School and A2B Outreach programme was university a possibility.

While in sixth form I attended the Academic Enrichment Programme which was a great opportunity. By participating in the AEP summer school this enabled me to see what university life was like, the kind of courses I could get involved in and to decide whether university was really a place for me. Since I had no family with prior knowledge of university this programme gave me that information to help me make those important decisions. AEP greatly increased my confidence levels and inspired me to work harder to achieve the grades to get to a Russell Group University.

I applied to the University of Birmingham through the A2B programme to study Biochemistry and was fortunate to be awarded the A2B scholarship which has been of great financial support throughout my academic studies.

While the AEP showed me the possibilities of university, the A2B scholarship allowed me to attend university in terms of financial support. The scholarship made it possible to finance my academic studies while living away from home.

I intend to carry on to postgraduate study to complete a postgraduate diploma in education of science specialising in Biology and go into a career of teaching.

AEP student, applied to UoB through A2B

Being the first of my family to go to university, I had limited information about the process and the experience itself. Even though I knew I wanted to go to university, I had little idea of how to choose from all the different options offered. Therefore, I was very interested in participating in the Academic Enrichment Programme in order to help me choose the right course and university. I found out about the AEP in Year 12 from a friend who was also in the same situation.

The business stream on the AEP included insightful academic sessions, inspiring company employer presentations and great advice. In the space of a week, I was able to understand more about how to choose courses, the university process, experience university and learn about potential employers. I was also able to gain support through the e-mentoring and other contacts. Before the programme, I was very confused about what to choose but my mind was made up once I had 'graduated' from the AEP.

There were also many opportunities to meet employers. With company presentations from top employers such as Deloitte and KPMG during the AEP, I was able to understand early on what outcomes would be available to me once I graduated. Also, I was able to understand what skills I needed to gain during my time at university to increase my chances of being a part of their graduate schemes.

I heard about the A2B scheme during my time on the AEP and I was eager to apply to the University of Birmingham and take advantage of applying through this route. I applied to study Business Management and the A2B scheme offered me financial support whilst at university for achieving standard entry grade requirements. With the extra funding I was able to buy the recommended study aids and enjoy student life without worrying financially. I had the opportunity to meet my A2B scholarship donor (a large multinational company) which meant I was given opportunities to network with their current graduates and managers.

My future plans include working for a large multinational company, in a consultancy background when I graduate. The outreach programmes have benefited me greatly in terms of employment prospects and self-improvement. Therefore, I am keen to offer others the same opportunities. By being involved in several student ambassador activities and duties at university, I will be able to guide and advise others who were in my position during the application process of university and beyond.

AEP student, applied to UoB through A2B

5. CONCLUSIONS

As stated in Chapter 1, the aim of the evaluation was to assess the extent to which the programme had achieved its intended outcomes. This is discussed by summarising findings by the following evaluation questions.

1. Does the programme effectively reach students' underrepresented in selective universities?

The Academic Enrichment Programme has been successful in reaching students who are under-represented within higher education and specifically within selective universities. The AEP targeting model has ensured that the programme identifies and targets 'high priority' students and as a result the programme has successfully reached its target groups.

The vast majority (90%) of students participating in the programme over the three years came from households with no parental experience of university. They also tended to live in low income households, resided in areas of deprivation and with low levels of youth participation in higher education.

The findings also revealed that the AEP had reached students who experience multiple socio-economic disadvantages.

2. Do participating students show increased knowledge, understanding and aspirations of studying at research intensive universities?

A key aim of the AEP is to raise student's motivation, knowledge and understanding of applying to a research intensive university. Although students on the programme already tended to have positive attitudes towards higher education, the focus of the AEP was to help students understand the benefits of attending a research intensive university and to prepare them to go to university. To this end, the findings revealed that the AEP had a positive impact on student's attitudes towards going to leading universities.

The findings suggest that the AEP has made a difference to students and has had a positive impact on student's attitudes towards applying for a research intensive university and by supporting students to make informed decision and being better prepared for university.

3. Do participating students progress to research intensive universities?

The application and destination findings showed that the majority of AEP students made applications to research intensive universities and the vast majority of students participating in the AEP progressed to higher education.

Destination data revealed that significant proportions of AEP students progressed to selective universities with 47% of Cohort 2 and 62% of Cohort 3 AEP students progressing to studying at a Russell Group university, which is significantly greater when compared to national, regional and local benchmarks.

Overall, students were very positive about the programme and felt they benefited greatly from the experience, including:

- Being better prepared for A Level exams
- Improved study skills
- Improved confidence and self esteem
- Increased knowledge about university and the application process.

The AEP provided me with a fantastic insight into university life and reassured me that although no-one in my family had attended university, I had the ability to succeed and complete a degree. Without the AEP and A2B programmes, I genuinely doubt I would be at the University of Birmingham doing as well as I have done.

AEP student, applied to UoB through A2B