



Aston SU "Let's C.H.A.T" survey response report

Let's Come Here for an Academic Talk:

An analytical summary of Aston students' academic experiences

1. EXECUTIVE SUMMARY

Aston Students' Union have created a scheme titled "Let's C.H.A.T" (Come Here for Academic Talk) to allow students in Aston University to rate their current academic experiences, as well as to share their thoughts on improvements for Aston University to consider. Quantitative analysis of ratings for experience and current technologies, as well as qualitative analysis of participants' comments would serve priorities on which areas to improve. Survey analysis is further divided by academic qualification (Undergraduate to Postgraduate Research) for differences in experience, then by college discipline (Health and Life Sciences, Business and Social Sciences, Engineering and Physical Sciences) to categorise similar and dissimilar responses.

Key findings after data analysis reveal:

- Academic experience is very positive from undergraduate degree to postgraduate research. First Year undergraduate students receive the most satisfaction, whereas the Business and Social Science department has the most positive academic experience.
- 2. Al use is a major factor. While postgraduate students (Master's and PhD) had more experience on their learning journey, requests to use Al vary from education and training for integration with coursework, to avoidance of plagiarism and incompetent writing.
- 3. The Aston Apps platform and use of computers are highly desired with all students. Certain improvements on Aston Apps and other digital services such as Blackboard and Map include centralisation of all platforms for better user experience and cleaner user interfaces for undergraduates. Postgraduates request accessibility to a few more software programs at the latest update. Routine fixes of digital services are mandatory.
- 4. Lectures are another major factor: While inconsistency lies with moving lectures online or offline, the quality and accessibility of material provided is a common theme for improvement. Recordings, past archives, and multimedia to increase interactivity and keep students interested in learning are popular solutions for all taught students (Except postgraduate research)
- 5. Focus groups held after the scheme are more likely to be attended by postgraduate students (Master's and PhD).

We would like to thank Aryaan Awais for helping the Aston Students' Union create this report.

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2. INTRODUCTION

2.1. "Let's "C.H.A.T." scheme

First opened on 13th November 2023 and emailed to all students in Aston University through an online newsletter named "The Goose" on 15th November 2023, Aston Students' Union (ASU) launched the "Let's Chat" scheme as a replacement to Speak Week. The "C.H.A.T" invites students to "Come Here [for] Academic Talk", by sharing their thoughts and feelings on their academic experiences. This scheme is communicated through an online survey that lasted until 24th November 2023 at 5pm, with incentives promised through a prize draw if the total response count reaches a certain number (E.g. Pair of AirPods for over 3000 responses).

The survey investigated academic experience using the technology such as Artificial Intelligence (AI) and laptop or computer use. Students who applied to the survey were also obligated to share thoughts on improving their academic experiences outside of technology. This report will look at students' comfortability using these services, as well as analysing collective agreements on how ASU and Aston University can improve students' experiences. These results will determine which aspects would be prioritised in general, as well as the survey total count for the incentive rollout.

3. REPORT OUTCOMES AND METHODOLOGY

3.1. Report objectives

The report aims to analyse raw data from the "Let's C.H.A.T" scheme survey quantitatively and qualitatively to draw conclusions on each question provided.

The main objectives are:

- 1. To determine the effectiveness of Aston University's available technology and academic experiences through quantitative reasoning.
- 2. To understand the top priorities of improving academic experiences in Aston University to provide to both UK (Home) and International (Including EU) students through qualitative reasoning.
- 3. To classify these responses by academic qualification, then by college discipline to understand how experiences differ in each department and level.
- 4. To evaluate the survey total count for ASU to identify the correct incentives for rollout.

3.2. Potential analysis of survey questions

The survey contains nine questions; however, the number of questions vary by qualification. For the student as a participant in the survey, the questions are sequenced as follows: Introductory questions determine the participant's area of study; the main questions ask about user experience with various technologies mentioned in Chapter 2.1; the final questions allowed participants to express ways of improving their experience personally, with the choice of attending a focus group for more research.

Table 1 details the survey questions' chronological order and the methods of recording participants' responses:

Table 1: List of survey questions asked, methods of data capture and analysis required for investigation.

##	Question	Method of data	Type of analysis
***	Question	capture	required
1	Domicile?	Multiple choice	Quantitative
2	What college do you belong to?	Multiple choice	Quantitative
3	Year of Study?	Multiple choice	Quantitative
4	How would you rate your academic experience at Aston University so far?	Likert Scale (1-5)	Quantitative
5	Have you used AI (Artificial Intelligence) to support your learning journey?	Binary (Yes/No)	Quantitative
6	Are the PCs and laptops that are available for use in PC labs and library, fit for purpose?	Binary (Yes/No)	Quantitative
7	Would you find an Aston App useful?	Binary (Yes/No)	Quantitative
8	What could Aston University do to better support your academic journey? (e.g Al use, digital services, lecture materials)	Free sentences	Qualitative
9	Would you like to take part in one of our focus groups?	Binary (Yes/No)	Quantitative

3.3. Survey analysis process

From Chapter 3.1., the objectives state that survey data classification is categorised by academic qualification, answered from Question 3 in Table 1. Each qualification from undergraduate to graduate is different in terms of requirements, course structure and student expectations. These qualifications are then divided further into college disciplines, answered from Question 2 in Table 1. Each of the three colleges offer and assess different skillsets, as well as being in different areas of the university with specialised resources to help.

Figure 1 displays how the survey data is categorised by qualifications and college discipline:

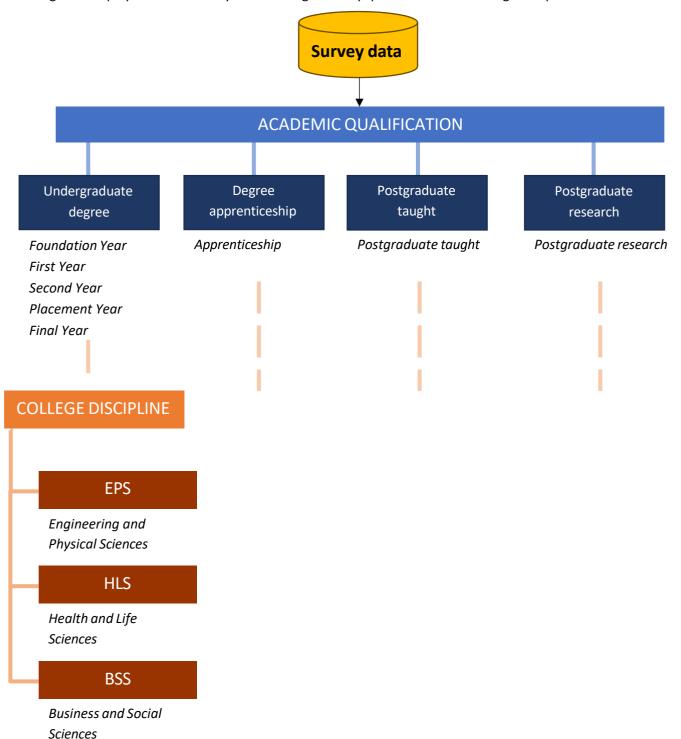


Figure 1: Proposed classification of survey data by qualification and college discipline for analysis

3.4. Quantitative reviews by qualification

Excluding Questions 1 and 2 from Table 1, six of the nine survey questions use methods such as multiple-choice, Likert Scale and binary (Yes/No) choices. Each of the following qualifications will review the response distribution of each survey question, comparing the three college disciplines as well. Potential reasons for these results are provided, however the reasoning is limited by the data provided.

3.4.1. Undergraduate Degree

Shown in Chapter 3.3, Figure 1 encompasses five years in the undergraduate degree. In the survey, there are **732 undergraduates**: **598 Home (UK)** and **134 International (Including EU)**. Figure 2 shows the distribution of these undergraduates from Foundation to Final Year, showing the majority (48.5%) identified as First Year students.

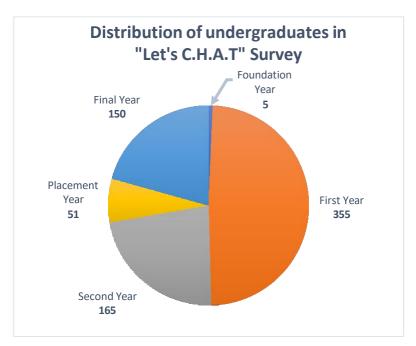


Figure 2: Distribution of the 732 undergraduate students from Foundation to Final Year

Figure 3 shows the overall representation of the three colleges' academic experiences, represented in uniquely formatted matrices where total count is distributed according to all undergraduate years in each column against the Likert scale values between 1 to 5. Each column also represents the total count of participants in each year of college. The colour scale represents the gaussian distribution (average) of responses in each year, with few responses (Outlier) in red and frequent responses (Peak average) in green. The highest average value across all responses is coloured bright green.

How would you rate your academic experience at Aston University so far?



IILJ	Healt	Health and Life Sciences: 243 (33.2% total share)					
HLS	Foundation	1 st Year	2 nd Year	Placement	Final Year		
Average	0	4.17	3.85	4	3.72		
1	0	2	2	0	2		
2	0	1	3	1	1		
3	0	11	12	4	14		
4	0	60	30	5	29		
5	0	38	15	6	7		



LFJ	Engineerin	g and Physic	al Sciences: 2	212 (29.0% to	tal share)
EPS	Foundation	1 st Year	2 nd Year	Placement	Final Year
Average	3.75	4.02	3.79	4.18	3.95
1	0	0	0	0	0
2	0	6	4	0	1
3	2	25	13	2	10
4	1	54	14	5	20
5	1	28	12	4	10



BSS				(37.8% total	
	Foundation	1 st Year	2 nd Year	Placement	Final Year
Average	4	4.09	3.85	3.75	4.01
1	0	2	1	1	0
2	0	3	1	0	3
3	0	22	15	7	9
4	1	56	32	12	36
5	0	45	11	4	16

Figure 3: Matrices for average experience ratings of the three colleges across five undergraduate years

For the remaining quantitative questions, summaries are given by the three colleges across the five undergraduate years. The breakdown is given in Appendix A, with total count and percentage share of the whole survey total on agreement to each question.

Have you used AI (Artificial Intelligence) to support your learning journey?



Business and Social Sciences

31% said yes



28% said yes



47% said yes

Are the PCs and laptops that are available for use in PC labs and library, fit for purpose?



Business and Social Sciences

93% said yes



Health and Life Sciences

93% said yes



Engineering and Physical Sciences

89% said yes

Would you find an Aston App useful?



Business and Social Sciences

80% said yes



76% said yes



81% said yes

Would you like to take part in one of our focus groups?



Business and Social Sciences

47% said yes



37% said yes



42% said yes

Observed from Figure 4, the most common rating from all three colleges was a score of 4 from a First-Year undergraduate. Other consistent patterns noted from all three colleges altogether are average scores of 4 from Second Year and Final Year undergraduates, as well as a lack of scores from Foundation Year Students.

Though mostly positive, score variations from Second Year undergraduates may be caused from inexperience in handling heavier workload. This is known by undergraduates as "The Dip", where coursework and examination quantity doubles compared to first year, prompting time management strategies. This is similar with Final Year undergraduates, though there is little correlation if academic experience improves or worsens after Second Year due to the same amount of workload presented. For Placement students' inconsistent scores, the nature of their placement ranging from the level of involvement in their role to conditions agreed on working can affect their experience.

There are several aspects on undergraduate studies that would explain the results turnout of some questions:

- The presence of AI is growing in fields of academia, as well as accessible web tools that students use for modifying coursework:
 - The theoretical and mathematical difficulty of EPS subjects may be greater than other colleges' subjects; desire to use AI for help is more likely.
 - Unlike EPS, BSS and HLS place more emphasis on social skills and interactions rather than technical skills. In EPS, AI may be used to solve technical problems individually.
- Low turnover of willing participants for focus groups may be social or time commitment problems:
 - o In Appendix A, First Year students have higher willingness than other students in different years from the amount of free time. This lessens with more years spent towards Final Year.
 - Additional responsibilities such as part-time work may explain rejection of attending a focus group.

3.4.2. Degree Apprenticeship

Compared to Chapter 3.4.1, the degree apprenticeship only lasts one year and includes all college disciplines for comparison. There are **24 Home (UK)** students in the survey doing a degree apprenticeship. Figure 4 shows the average academic experience rating between the three colleges.

Н	ow would	you rat	te your acaa	emic experience at	t Aston l	Jniversi	ty so f	ar?
---	----------	---------	--------------	--------------------	-----------	----------	---------	-----

5	1	5	3
4	2	1	7
3	0	2	3
2	0	0	0
1	0	0	0
Average	4.33	4.38	4
College	HLS	EPS	BSS
Count	3	8	13

Figure 4: Matrix showing the average score of each college's academic experience for degree apprentices.

Have you used AI (Artificial Intelligence) to support your learning journey?



8% said yes



0% said yes



13% said yes

Are the PCs and laptops that are available for use in PC labs and library, fit for purpose?



92% said yes



66% said yes



75% said yes

Would you find an Aston App useful?



85% said yes



100% said yes



75% said yes

Would you like to take part in one of our focus groups?



23% said yes



100% said yes



25% said yes

Figure 4 shows the total quantity of participants accepting degree apprenticeships to be lower than undergraduate degree studies, lowering reliability of average scores on academic experience. This could be due to unfamiliarity or unpopularity with the qualification as no international students, including EU students, are signed on.

Academic experience is very positive, noted by the lack of rating scores below 3. Across all colleges, EPS scores highly. The 100% scores from HLS on some questions are a result of low participant count, yielding more influential percentages if more participants agree.

There are several aspects on degree apprenticeships that would explain the results turnout of some questions:

- The concept of degree apprenticeships involves paid employment at a company in conjunction to receiving a degree title.
 - Undergraduate studies place emphasis on theoretical knowledge, whereas degree apprenticeships place emphasis on practical experience at specific occupations.
 There is speculation that AI use has low correlation with vocational courses, as agreed responses are not above 20%.
- BSS has high agreement with PCs and technology being fit for purpose.
 - BSS degree apprenticeships focus on IT, administration, analysis, and project management. All these areas require practice use of a computer on commonly used programs such as Microsoft Office (Word, Excel, Projects, Teams...).
 - HLS and EPS also use computers, but they may not be fit for purpose due to using specialist software for specific tasks such as simulations and modelling. These software programs require the latest versions to keep up with advancements.
- Low turnout of focus group participants can stem from time commitments to the company.
 - o As addressed, HLS's 100% score is from low participant count.

3.4.3. Postgraduate Taught

The postgraduate stage differs from the undergraduate stage due to the intellectual demand of the degree, as well as direction towards research and novelty of ideas to potentially apply in industry, instead of predetermined coursework and examinations. There are **229 postgraduate taught students (Master's level): 31 Home (UK)** and **198 International (Including EU) students.** The exact Master's application (MPhil, MSc, MBA, MEng, MA, MRes... etc.) is not given for the survey. Figure 5 details average academic experiences on all three colleges at this academic qualification.

Н	low would	you rat	te your acad	lemic experience at	Aston	Universit	y so j	ar?
---	-----------	---------	--------------	---------------------	-------	-----------	--------	-----

5	14	25	64
4	17	25	50
3	6	10	16
2	0	0	2
1	0	0	0
Average	4.22	4.25	4.33
College	HLS	EPS	BSS
Count	37	60	132

Figure 5: Matrix showing the average score of each college's academic experience for Master's students.

Have you used AI (Artificial Intelligence) to support your learning journey?



61% said yes



27% said yes



70% said yes

Are the PCs and laptops that are available for use in PC labs and library, fit for purpose?



Business and Social Sciences

92% said yes



86% said yes



95% said yes

Would you find an Aston App useful?



Business and Social Sciences

83% said yes



78% said yes



82% said yes

Would you like to take part in one of our focus groups?



73% said yes



59% said yes



78% said yes

From Figure 5, academic experiences across all colleges remains positive, with the BSS college showing greater positive experience. The ratio of international students to home students for postgraduate degree courses is 6.38:1, with more accumulated in BSS courses. This may be influenced by Aston University's entrepreneurial success stories from international students and the positive reputation of the business school to obtain an MBA.

There are several aspects on postgraduate taught courses that would explain the results turnout of some questions:

- All can be directly used in some modules as part of their specifications:
 - EPS would use AI for integration in industrial automation, intelligent control systems and computer science topics such as machine learning, vision and neural networks.
 - BSS would use AI for enhancement of business fundamentals such as marketing and consulting. Image-generation of campaign pictures and project management in technology innovation are some uses.
 - HLS could only use AI for aiding research. Functional elements of HLS courses involve experimental laboratory testing and use of facilities in fields such as optometry, pharmacy, and audiology where understanding of the human body is essential.
 - Al use may be prevalent with inexperienced students as academic writing is a core component at a master's level. Use of Al would associate with coursework and thesis completion.
- Availability of attending focus groups is higher compared to undergraduate or apprenticeship level:
 - Several opportunities exist with course leaders for international students to discuss and provide feedback on their Master's courses.
 - HLS may have less availability from clinical placements in professional settings as courses in most specifications are patient-centred, hosted in clinical environments.

3.4.4. Postgraduate Research

From all the academic qualifications, postgraduate research has the highest intellectual challenge due to requiring autonomy and independence of contributing original knowledge to academia. In the survey, there are **36 postgraduate research (PhD) students**, with **13 Home (UK)** and **23 International (Including EU) students**. Further details such as self-funded or paid studentships are not specified. Figure 6 details the average academic experience for the three colleges at the highest academic qualification.

vou rate vour acc		

5	8	7	2
4	5	3	7
3	1	2	1
2	0	0	0
1	0	0	0
Average	4.5	4.25	4.1
College	HLS	EPS	BSS
Count	14	12	10

Figure 6: Matrix showing the average score of each college's academic experience for PhD students.

Have you used AI (Artificial Intelligence) to support your learning journey?



70% said yes



21% said yes



83% said yes

Are the PCs and laptops that are available for use in PC labs and library, fit for purpose?



90% said yes



79% said yes



83% said yes

Would you find an Aston App useful?



Business and Social Sciences

80% said yes



Health and Life Sciences

86% said yes



Engineering and Physical Sciences

75% said yes

Would you like to take part in one of our focus groups?



70% said yes

Health and Life Sciences

50% said yes



58% said yes

Postgraduate research academic experience is generally positive in all three colleges from no responses scoring below 3, with HLS receiving more positive feedback. This college also has more participants.

There are several aspects on postgraduate research courses that would explain the results turnout of some questions:

- Like postgraduate taught modules, AI can be used to integrate or assist with their research direction:
 - o Some PhDs in EPS involve research into AI science, explaining the high score (83%)
 - Some PhDs in BSS involve research into areas such as digitizing supply chains and intelligent disaster management in smart cities. Though it is not clarified how many have applied into these areas, use of AI is required, hence the high score (70%)
 - PhDs in HLS may use certain facilities, routine experimental lab testing and modelling as primary skills.
- Time commitment to laboratory work or software development may explain the low scores of retaining participants for focus groups in HLS and EPS, compared to BSS.
 - BSS may involve fewer practical commitments, leaning more towards critical interpretation of case studies and conceptual frameworks.

3.5. Qualitative reviews by qualification

Only one question is classed as qualitative, however the free sentences response is analysed using keyword searching and systemising: Reviewing common keywords and systemically highlighting different problems associated with that filtered keyword in a network diagram. A "generalised statement" with a fractional participant count is formed from examining said count of similar responses.

Responses ignored from qualitative analysis are:

- Non-replies ("Nothing")
- Positive or indifferent comments ("It's good!", "Everything is fine")
- Contradictory statements where responses are twofold ("More online, face-to-face lectures")
- Unless high in frequency, few word responses or vague statements ("Better materials")

These statements are reviewed in each college discipline to note any differences in requesting improvements.

3.5.1. Undergraduate Degree

All five undergraduate years are in the same diagram. Three separate diagrams are created for each college to note differences and similarities in requested support materials. Grey shapes represent keywords for search filters, with "generalised statements" connected through thick lines as different responses. Dashed lines show overlapping response (e.g. "How to use Aston Apps, maybe clean up user interface?"). Participant count is represented as "(##)".

Figure 7 shows the keyword search network for common responses in BSS undergraduates.

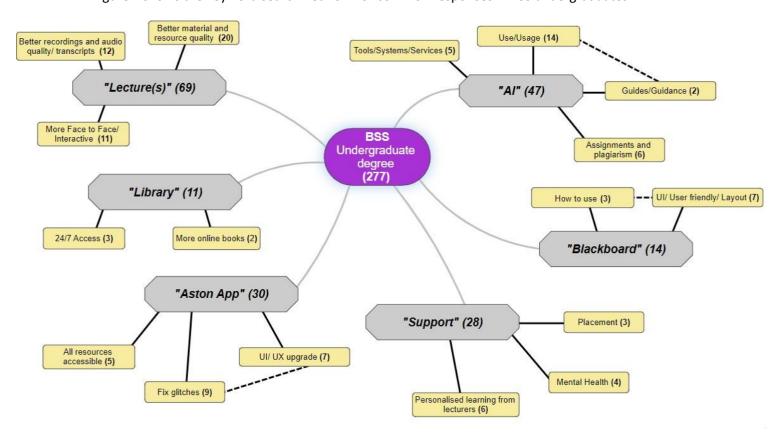


Figure 7: Qualitative keyword analysis from BSS undergraduates

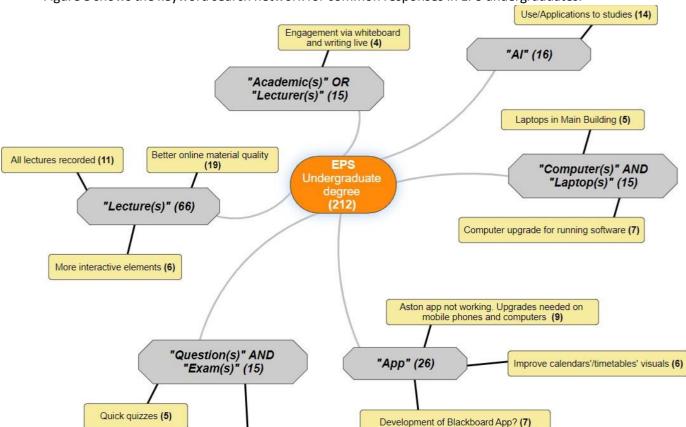


Figure 8 shows the keyword search network for common responses in EPS undergraduates.

Figure 8: Qualitative keyword analysis from EPS undergraduates



More practice exam questions (8)

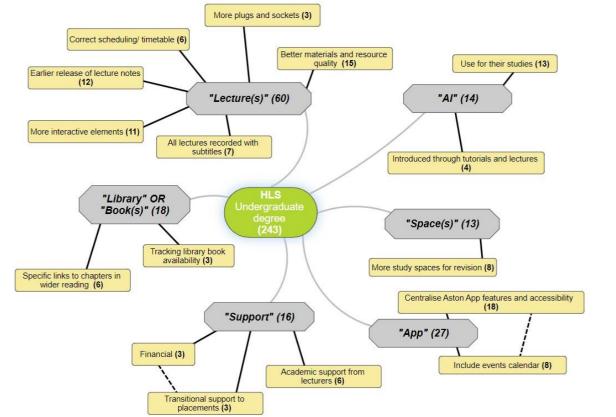


Figure 9: Qualitative keyword analysis from HLS undergraduates

Undergraduates in all three colleges regularly highlight areas such as AI, the Aston Apps system, qualities of regularly scheduled face-to-face lectures and both academic and library services. Focal points of improvement involve: Interactivity with their learning through non-repetitive information and multimedia variety for clarity of understanding course content; the integration and bug fix of several mobile services into a centralised system for easy accessibility; accurate alignment of scheduled lectures and events in their timetables to avoid clashes and the guidance of using AI with their studies for assignments to avoid plagiarism.

Standout improvements from some undergraduates' detailed responses are listed below:

- Industry visits and experiences for hands-on learning
- Live monitoring of classroom, PC labs and study space occupancies
- Provision of freebies such as energy bars and electronic equipment
- Alignment of examination questions and preparation with presented lecture material

3.5.2. Degree Apprenticeship

Due to the low participant registration for degree apprenticeships, filtered keywords are not needed. All three colleges are analysed together for similar responses: Some having common responses between two colleges, while similar responses of two or more participants are shown.

Figure 10 depicts the analysis of all three colleges together for shared or separate responses in degree apprenticeships.

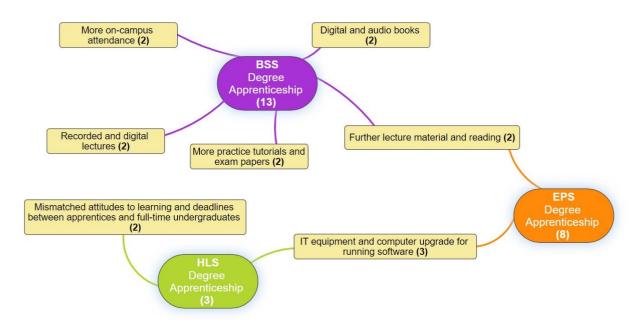


Figure 10: Qualitative response compilation from degree apprenticeships in all three colleges Intersecting areas of improvement in Figure 10 involve upgrading computer specifications to run available software between HLS and EPS, as well as more lectures to help tie theory and application into their chosen apprenticeship occupation for BSS and EPS.

Academic activity on campus is desirable for BSS students, as time is split between work and study. Increasing digital material for examination study is a key improvement.

3.5.3. Postgraduate Taught

For postgraduate taught (Master's) level, all three colleges are analysed separately with keyword filters due to sufficient total participant counts.

Figure 11 shows the keyword search network of postgraduate taught students in BSS.

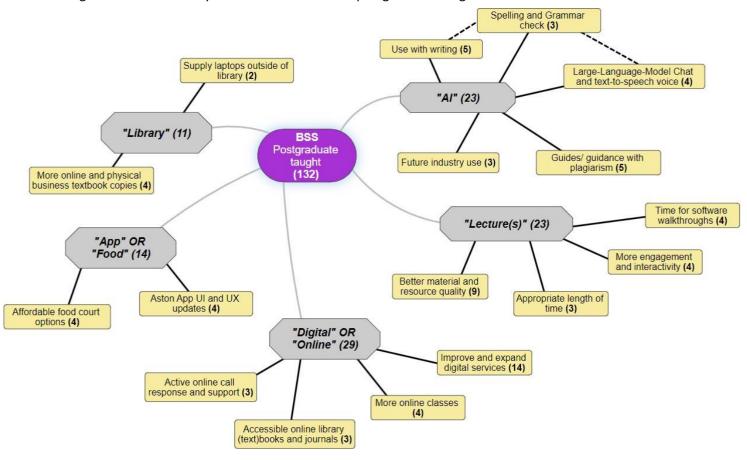


Figure 11: Qualitative keyword analysis from BSS Master's students

Figure 12 shows the keyword search network of postgraduate taught students in EPS.

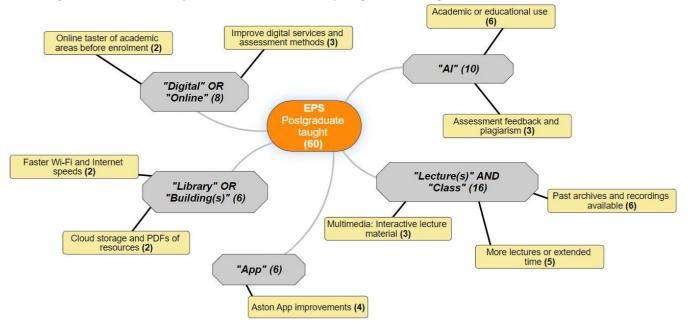


Figure 12: Qualitative keyword analysis from EPS Master's students

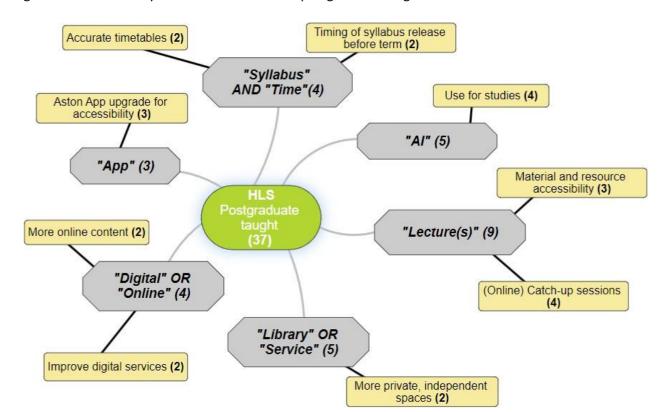


Figure 13 shows the keyword search network of postgraduate taught students in HLS.

Figure 13: Qualitative keyword analysis from HLS Master's students

Compared with undergraduates, postgraduates across all colleges have voiced a wider range of interests for improvement, but fewer weight in most responses. This is partly due to participant count, specifically in HLS.

Common themes of improvement identified from the three colleges involve accessibility to lecture material, AI, digital services and Aston App UI and UX changes. Summarised actions for improvement are stated: Guidance with AI use for improving academic writing, spelling and grammar in assignments; an archived library of previously recorded lecture material and resources from past years as an alternative way to expand learning content; earlier material released for preparation and general improvement of digital services, with emphasis on user experience and user interface.

Standout improvements from some Master's students' detailed responses are listed below:

- Access to industry-specific tools and software, providing skill certifications upon completion to transition to industry easier.
- Outlines, expectations and examples of assignment types such as essays, laboratory reports and research examples to present better submissions.
- Study abroad programs
- PC health monitoring in computer labs as some keyboards and screens need replacement.
- Personalised AI chatbots for tutoring and outlining future steps.

3.5.4. Postgraduate Research

Postgraduate research positions (PhD studentships) are competitive, with low student numbers expected. Filtered keywords are not needed. All three colleges are analysed together for similar responses: Some having common responses between two colleges, while similar responses of two or more participants are shown.

Figure 14 depicts the analysis of all three colleges together for shared or separate responses in postgraduate research.

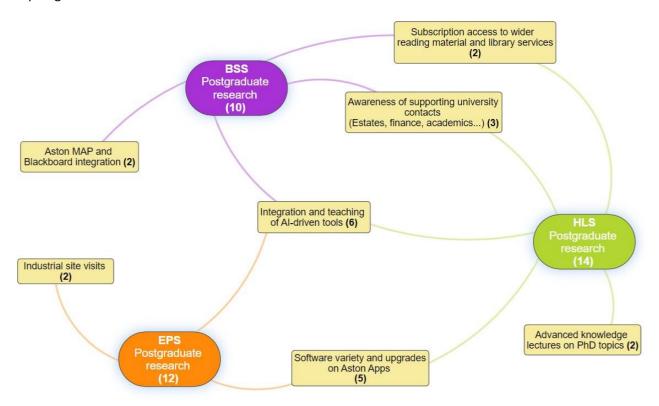


Figure 14: Qualitative response compilation from PhD students in all three colleges

Al-driven tools are the primary improvement shared in all three colleges, voiced from six PhD students combined. Specific concerns for this response involve fact-checking, idea generation and personalised tutoring through chatbots to provide feedback in addition to the supervisors' inputs.

Software is another area for improvement. While specific software such as "Nvivo" and "Machine Learning" are requested, PhD students reported struggles with accessibility to some software packages in Aston Apps for research.

Transparency with contacts to academic and university services, as well as subscriptions and accessibility to more journal articles and library books, are shared interests between BSS and HLS. These contacts can be compiled in a list for fast access should problems with research experiments, literature reviews or funding occur.

4. CONCLUSIONS

The report aimed to analyse and extract key areas of improvement from the survey provided by ASU under the "Let's C.H.A.T" scheme. Survey information was analysed both quantitatively for participant count in assessing experience ratings and use of facilities, as well as qualitatively to highlight different responses outside of the main survey questions. To identify and compile actions easier, the survey was primarily classified by academic qualification, then divided by college discipline.

The report finds Aston students have a generally positive academic experience across all qualifications. This is apparent in first year at the undergraduate stage, as well as the BSS department on most qualifications. Use of a computer and exploring Aston Apps are highly desired across all students.

Though most students do not have experience in AI, use is greatly encouraged. Specifically, how to use this as a positive advantage for their work, avoiding plagiarism and producing competent academic writing. Other desired improvements highlighted across the survey are easier navigation to programs and good quality lecture material through Aston University's digital platforms such as Aston Apps or Blackboard, as well as better lecture interactivity whether online or face-to-face. Rising to higher qualifications, emphasis is stronger on software upgrades, accessibility to past or future learning resources, communication through transparency of contacts and timetable scheduling.

For further review of students' academic experience improvements, postgraduates (Master's and PhD students) are more likely to attend focus groups than undergraduates or apprentices. Finally, the scheme should reward five random students a £20 Love2Shop voucher for the survey total reaching between 1000 to 2000 participants.

5. APPENDICES

APPENDIX A: Distribution of undergraduate responses for binary quantitative survey questions

