Students FIRST

Research Report

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Acknowledgements

Introduction and Background to the Project

Students FIRST is a JISC funded project that explores the use of technology to deliver **F**inancial **I**nterventions to assist **R**etention and **S**tudent **T**ransitions (FIRST). It involves an innovative collaboration of partners: two Higher Education Institutions (HEIs) The University of East London (UEL) and Anglia Ruskin University (ARU) the national body for Student Services (AMOSSHE), and three private companies – John Smith's booksellers, Modus and Blackboard Connecttxt.

The project had two strands – one operational (the potential development of integrated technology solutions for students to better access student services and to improve their financial literacy), and a research strand which examined the impacts of a targeted bursary scheme at both ARU and UEL, whereby students bursaries are delivered via smartcard technologies. This report is a discussion of the findings from the research stand.

Eligible students at ARU and UEL were already issued with SMART cards that carried credit to purchase learning materials. The scheme has been in operation at UEL since the 2006/2007 academic year, and at ARU since the 2009/2010 academic year. At ARU the bursary data is loaded onto their existing student I/D cards, whereas at UEL an additional card is used. The cards are registered to a single user, and are PIN protected. Students can use their bursary cards in the John Smith's bookshops on campus, and can also use their bursaries for online purchases through the bookseller's webpage.

The intention of this scheme is that specifically targeting bursaries to ensure that students will spend these monies on learning materials will thereby enhance student learning, the student experience and academic achievement. In turn, it was believed that this would further enhance student transitions, progression and retention.

Students FIRST explored these assumptions, whilst also looking to advance the use of technology not only in delivering bursaries but bringing together several related institutional drivers and services. The research strand of the project sought to address the question:

- **Does targeted student bursary provision improve student retention, transition and success?**

Targeting

The bursaries are available to all full-time, undergraduate, home students, via an opt-in registration. The targeted nature of the bursaries means that students can only purchase materials that are related to their learning. While the schemes at ARU and UEL do have differences in the materials that students can purchase, they both share the core materials and services as follows:
- Core text books, and general books, stationery, art materials etc
- Laptops, cameras and IT equipment
- Rent on university student accommodation
- University child care provision
- Medical, laboratory and other specialist equipment
- Some printing costs

In addition, UEL offers:

- Clothes vouchers for interview attire for third year and PGCE students
- Gym membership
- Oyster and travel cards
- Field trips

As the bursary is an opt-in scheme, take up is not universal, however figures show that for UEL (based on the 2010 cohort) take up rates are 95.3%, and the same cohort at ARU has a slightly higher take up rate of 97.3%.

Retention

Research on retention in higher education in the UK has shown that the reasons students withdraw are often complex, and multi-causal. A synthesis of research in this area conducted in 2008 confirms the complexity of reasons behind an individual student's decision to withdraw from their studies. (Jones, 2008).

Expert interviews, as well as interviews, surveys and focus groups with students at the HEIs show that Student Service departments, as well as the students themselves do believe that there is a positive link between the bursary provision (in particular the *targeted* nature of the bursaries) and their own success as students. However, attributing this particular intervention to an increase in retention rates is challenging. Although HESA data shows that there was a decrease in withdrawal rates at UEL from the year the scheme was introduced (aside from the last years available data, where there was a decrease in retention rates (HESA 2009/2010) it was impossible via this research to establish a causal effect here. The potential impacts on retention are discussed more fully later in the report.

Transition

The student life cycle model becomes useful here to consider the ways in which a student transitions from one semester to the next and from one year to the next. Indeed, the bursaries are not only targeted, but they are marketed to the students as *progress* bursaries, and students are made aware that to qualify for the bursary payments they must satisfy a set of conditions – including good attendance (set by institutions and/or schools), passing their units/coursework, and not having any academic offenses (such as plagiarism). It is only when students have satisfied these conditions that the next round of bursary payments is awarded to them.

Success

Success for the research meant both academic successes for students, as well as student satisfaction with the scheme. The sales data was analysed and at both HEIs and it shows that there is a strong correlation between higher class degree classifications and spend on books. The qualitative data taken from interviews, focus groups, and student surveying also shows that the students felt that because of the bursary, they bought more books than they otherwise would have. The analysis of student academic achievement was balanced with analyses of library book borrowing (at UEL). We also analysed the sales data in terms of: gender, ethnicity, social class, and school of study, to provide an evidence base for particular types of students.

Through the focus groups and the survey, students told us that the bursary provision did indeed help them to achieve. They were well aware of the conditions that had to be met to get the next tranche of funds, and said that they made sure to attend classes, and were further motivated to successfully progress to their next years' study. In terms of student satisfaction with the scheme, feedback from students suggests that this is high. However there are some criticisms from students that are discussed later in this report.

Success of the project also comes from the service design exercise, which helped the Student Service teams to fully understand the student's journey through their bursary provision. The teams found the exercise useful and this has given them the level of detail needed so that the provision can be further enhanced with the students benefiting from enhanced provision.

Additionally, through the expert interviews, it is clear that one of the unforeseen successes of the project is a closer working relationship between John Smith's and the HEIs involved. This has resulted in increased opportunities for the institutions to work with the bookseller, so that innovations can be easily and quickly introduced, such as the clothes vouchers at UEL.

Methodology

The research employed a mixed-methods approach, comprising quantitative analysis of sales data matched with student record data from ARU and UEL. These data comprised sales and student record data for 9,546 ARU students (including 1,128 graduates, and 5,426 three year degree graduates) and sales and student data records for 28,550 UEL students (including 10,760 graduates, with 479 three year degree graduates). The sales data included some sales data from the institutions – where students can use their bursaries for rent, childcare, field trips, and other payments relevant to their studies. These data sets were harmonised using Excel and analysed with both Excel and SPSS, the statistical software package.

In addition to the large quantitative data sets, some qualitative data was also collected. We conducted a number of focus groups, with both student services personnel at HEIs (three groups), expert interviews with the technology providers and one local bookstore manager, interviews and focus groups with students at ARU and UEL (six focus groups and two interviews). In addition, we utilised data from a student survey delivered at UEL in November 2011, which was completed by 535 students, as well as qualitative data from e-mail correspondence with students who could not attend the focus groups.

There were some issues with the data, in particular poor recruitment for the student focus groups meant that ARU students were under-represented in the qualitative discussions. Alongside this, gaps in institutional student and spend data presented problems in the sales data analysis of spend on university accommodation. These data were not available disaggregated to student numbers, so was left out of the analysis. Other issues included some missing cases of socio-economic class data, a common problem when working with institutional student data. In this instance however, due to the high numbers of student and sales data involved in the research (over 38,000 students between the two institutions) there were enough cases with social class data from which to draw conclusions.

In addition to the above problems, the library loans data at UEL was only available from 2009, due to different computer systems being introduced at that time. The library loan data was also only for

physical book loans, not eBooks nor online journals. Although our findings with the library loan data, when mapped to achievement and progression data were inconclusive, more research here would be welcomed, with fuller library loan data sets that include eBook and journal loans.

As the research was conducted at a research centre that sits within one of the HEI partners (UEL), there were some early concerns raised by the other HEI partner about the appropriateness of holding ARU student data on UEL systems. We therefore used external hard drives to overcome this – and no ARU student data was on the UEL system.

Service design exercise

Alongside the mixed methods research approach, we also conducted a service design exercise which is a technique that seeks to improve service delivery by situating the client (in this case the student) at the heart of the service. The processes (both front stage and backstage) are then mapped and from this design it is then possible to identify areas where the service does not deliver in the most efficient way possible. The process promotes a holistic approach to service delivery; one which encompasses all strands that contribute to the delivery of the service, including personnel, physical environments and technologies. The service design exercise enabled student service teams to examine the bursary intervention from the students' perspectives at relevant points through the student life cycle. Acknowledging and examining the interaction points along this life cycle was a useful exercise for these teams, who then were able to enhance the service at the most important points in the life cycle: at key transition stages to further help the students with progression and academic achievement.

For the service design exercise, the approach followed that recommended by JISC, whereby we:

- Interviewed Student Services personnel at both UEL and ARU
- Collected materials relating to the bursary delivery at both institutions
- Developed an initial service blueprint (for a F/T home student with a September start)
- Refined the blueprint after data gaps were identified
- Delivered the blueprint(s) to Student Services staff at both institutions for testing

The service designs can be found as Appendix A to this report.

Rationale of Research Methodologies

Sales Data Analysis

The bulk of the analysis was concerned with the sales data, and spend patterns of particular groups of students, to better understand the relationships (if any) between spend and achievement, and between spend and progression. Issues with the data aside, these data sets of over 38,000 students were an extremely rich source of information. Error checking here was of extreme importance, and to do this we took a sample of random cases and ensured that the data was correctly harmonised for each case (by student number) before the analysis began. We also made sure not to de-aggregate any data that would identify individual students.

Focus Groups and Semi-Structured one to one interviews

The rationale for convening focus groups is that they enable the researcher to explore the degree of consensus on a particular topic (Morgan & Kreuger, 1993). The focus groups, despite not recruiting well were a good source of qualitative data, and where spontaneous information emerged, it was

weighted more heavily in the analysis than information that was delivered in answer to a specific question.

Semi-structured one to one interviews allow the researchers to delve into a particular research theme and collect rich data. We conducted these face to face. The semi-structured approach allowed the research team to ensure that consistent questions are asked of interviewees, whilst ensuring that spontaneous information was also captured. The topic guide for the focus groups and interviews can be found in the appendix, along with the consent forms (appendices B and C).

Online Survey

Online questionnaires offer a number of advantages for both respondent and researcher. From the respondent's perspective online questionnaires are quick to complete and can be completed at a time and place convenient to them. From the researcher's perspective survey responses (response rate and results) can be monitored in real time. Data quality is generally higher because data collection and data entry is fused. As a consequence, data analysis and final reporting can begin as soon as the survey closes. Through the research we made use of the online survey that was delivered to 535 UEL students. The survey included some non-prescriptive questions which we analysed with the other qualitative data. The survey questions can be found as Appendix D.

Ethical issues

Ethical concerns were addressed at every stage of the research process, from design and data collection through to writing up. Respondents were fully informed about the purpose of the study and the research process. We produced consent forms for respondents for the focus groups and interviews. The research team are experienced in working with learners and all have been CRB checked. All information was held in confidence, and any transcriptions anonymised so that no individual learner could be identified. The quantitative data sets were harmonised using the student's unique identifier (student number), however in reporting the findings, data was aggregated so that no student could be individually identified.
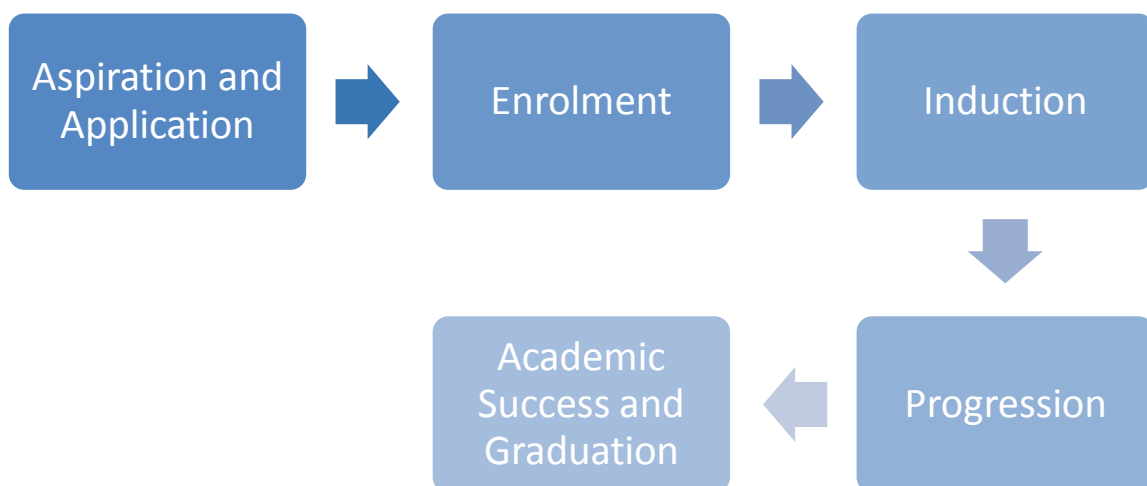
Headline Findings

- There is a positive relationship between higher spend on books and academic achievement at both UEL and ARU. Those students, who spend more on their bursaries, achieve higher degree classifications.

- Students are satisfied with the bursary, and 74% (of 547 UEL students surveyed) say that it encourages them to do better in their studies.

- Institutions believe that the bursary helps with retention rates, and aside from the last year of HESA figures (2009/2010) retention rates at UEL improved the year the scheme was introduced. However, the research cannot confirm a causal relationship between the bursary and retention.

- All students we spoke with were unaware of the bursary before they enrolled – it did not, therefore, contribute to their choice of institution.

- Spend patterns of UEL graduates, and ARU students when mapped to social class are very similar which indicates that the bursary is useful in providing equality of opportunity to access learning materials across different social classes.

- Core book, total book and total spend varies considerably according to school of study, ethnicity, and gender.

- Mapping library loan data against degree classification and book spend did not show a relationship between library loans and academic achievement at UEL.

- The main criticism from some students is that they would prefer a cash bursary – however some students we spoke with acknowledge that they would not have bought the books without the bursary, and some prefer the restrictions of the bursary to learning materials.

- Students are heavily influenced in their core book choice by lecturers, tutors and other academic staff.

- While eBooks are becoming more popular, students that we spoke with all said that they preferred a hard copy of their core texts, for note-taking. They also expressed the desire to keep their core texts from one year to the next, and after graduation.
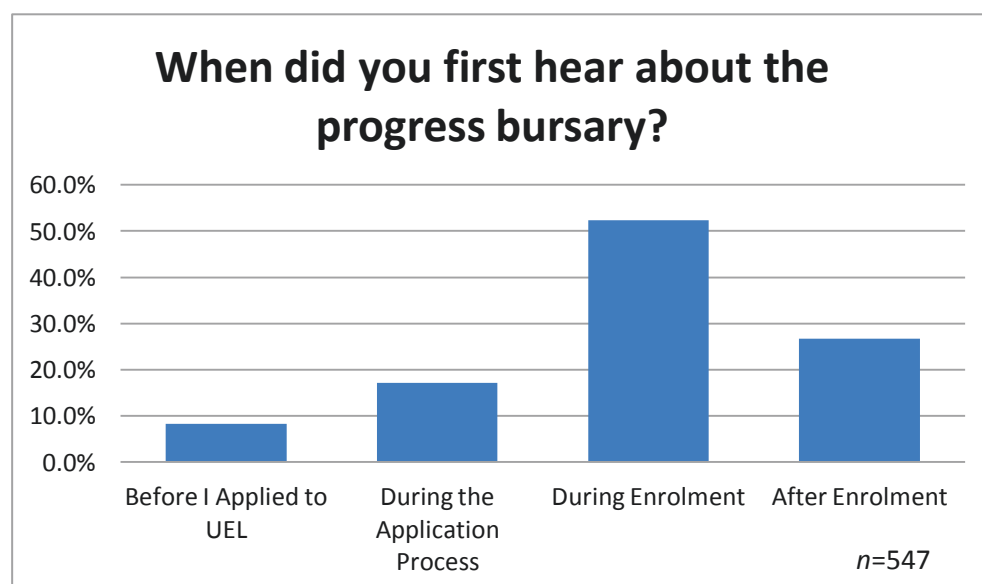
The Student Life Cycle and targeted Bursaries

To fully understand the way in which the bursary delivery impacts on students' transitions, and progression, it is useful to consider the way in which the bursary delivery has been designed (and evolved) to correspond with the stages in the students' life cycles.

The concept of the student life cycle has been successfully mobilised to give a fuller understanding of the various stages and transitions that learners progress through during their higher education experience, and can be presented graphically, as follows:

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┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│  Aspiration and  │ ──▶ │    Enrolment     │ ──▶ │    Induction     │
│   Application    │     │                  │     │                  │
└──────────────────┘     └──────────────────┘     └──────────────────┘
                                                            │
                                                            ▼
           ┌──────────────────┐     ┌──────────────────┐
           │     Academic     │ ◀── │   Progression    │
           │   Success and    │     │                  │
           │    Graduation    │     │                  │
           └──────────────────┘     └──────────────────┘
```

Application and Enrolment

In terms of the targeted bursary delivery, very few students were aware of the bursary before they applied, and most found out about the scheme during enrolment. Indeed, the students we spoke with all found out about the scheme during induction. The data from the student survey at UEL shows that at this institution, most students first hear about the scheme at the time of enrolment.

When did you first hear about the progress bursary?

Category	Percentage
Before I Applied to UEL	~8%
During the Application Process	~17%
During Enrolment	~52%
After Enrolment	~27%

n=547

Induction

The focus groups and student interviews certainly confirmed that students were unaware of the bursary when they made their choice of where to study. The students at UEL and ARU told us that they were introduced to the bursary in induction week.

> "During induction week, there were posters, we were told about it and I registered my I/D card."
>
> *First Year, Computer Sciences, ARU*

> During induction we were told about it but then it was too much information to take in. It was confusing because I wasn't clear about using the card. But then a lady talked to us about it during induction and it made it much clearer, so I went to the bookshop and signed in.
>
> *First Year, Childhood Studies, UEL*

Progression

From the start, the bursary is "branded" as a progress bursary, and students are made aware that the funds received are dependent on passing their units/modules. When the bursary was first introduced to UEL however, it became apparent that there was a "funding gap" in September - the first semester of the first year, where students needed to buy their core texts and other learning materials *before* they progressed to the second semester. John Smith's then introduced the "free book scheme" in 2007/8 whereby students could purchase £100 worth of books, on credit against their future bursary that they received when they progressed. This was subsequently raised to £150 and stationery packs and art materials were added to the early provision scheme. ARU has had this in place since first introducing the bursary in the 2009/10 academic year.

The students we spoke with knew that when they spent the £150 and did not pass, they would "owe" these funds. Some students saw this as a motivating factor. In fact, when UEL students were surveyed about the "free books" scheme, 83% said that having the books at this time helped them with their studies. (*n*=547)

> Because you have to pass all your modules in the first semester to get the balance of £350 and if you don't pass they deduct the £150 from your account so for me I'm not going to go beyond the £150 my first semester. So I need to make sure I pass all me modules – I don't want to owe anybody.
>
> *First Year, School of Education, UEL*

Do you think having access to the books you needed at the start of your First Semester via the 'Free Books' offer helped you with your studies?

No
17%

Yes
83%
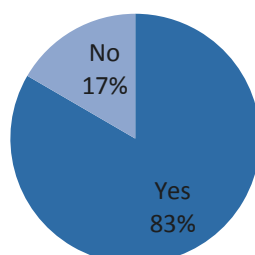
Once the student has passed the first semester units/modules, has demonstrated good attendance (as defined by the institutions and in some cases, schools, but no less than 75% attendance) and has not breached academic regulations, they will get the rest of the bursary in February (if they were a September start).

Retention

We know that students who are not engaged with their institutions are at risk of withdrawal, particularly in the first year of study. The bursary delivery was consciously designed to help students in their first year, with the "free book" scheme to help further engage students. From previous research we have come to understand that student's individual decisions about withdrawing are complex and multi-faceted; a synthesis of research around retention conducted in 2008, by Dr. Robert Jones confirms that a major factor in students leaving their studies is a sense of engagement, of "fitting in" to both their institution and their chosen subject area. A recent project briefing on retention by Action on Access, (2011) confirms that student engagement lies at the heart of successful retention.

In terms of the bursary delivery, this can be seen as an additional intervention that promotes institutional engagement; however it is difficult to extrapolate this one intervention from many retention programmes that might be in place at a particular institution. Certainly at UEL there is the belief that the bursary intervention assisted with retention, although this was one of a number of interventions initiated to help improve retention rates. When ARU and UEL retention rates are mapped against a comparator institution, (London Metropolitan University, which has a John Smith's Bookstore on campus, but no bursary provision), we can see that the UEL retention rates certainly increased during this time (2006-2009). However, the most recent academic year for which we have data (based on HESA figures) shows that retention rates actually declined at both UEL and ARU.

Year	ARU	UEL	London Met
2004/2005	12.9%	14.8%	15.5%
2005/2006	11.4%	12.8%	13.7%
2006/2007	13.0%	13.6%	16.2%
2007/2008	11.9%	9.9%	15.4%
2008/2009	9.9%	7.3%	19.3%
2009/2010	12.9%	10.5%	17.6%

HESA: Non-continuation following year of entry: Full-time first degree entrants, all students, percentage no longer in HE.

The UEL figures do show an increase in retention rates from the year the scheme was introduced 2006/2007, aside from the last year's available data. As ARU only introduced the scheme in 2009/2010 it is too early to see if there is an impact at institutional level on retention rates. The comparator institution, London Metropolitan University has seen relatively low retention rates compared with the other two institutions.

Although the research cannot show a causal relationship between the bursary and retention, we can suggest that *if* the bursary scheme is helping students to be retained, it may well be because of the added institutional engagement with students, and the assistance that the scheme gives them in terms of academic achievement. In future years, the targeted bursary delivery should continue to be mapped alongside retention rates to examine any possible impact it may have here.

Academic Achievement

It is clear that the bursaries are having an effect on academic achievement, by providing students with the learning materials that they need. In terms of achievement then, many students do feel that the bursary helps with their studies and 74% of UEL students surveyed said that this was the case *(n=547)*.

Do you feel that the Progress Bursary encourages you to do better in your study?

- 18% Indifferent
- 8% No
- 74% Yes

■ Yes
■ No
■ Indifferent
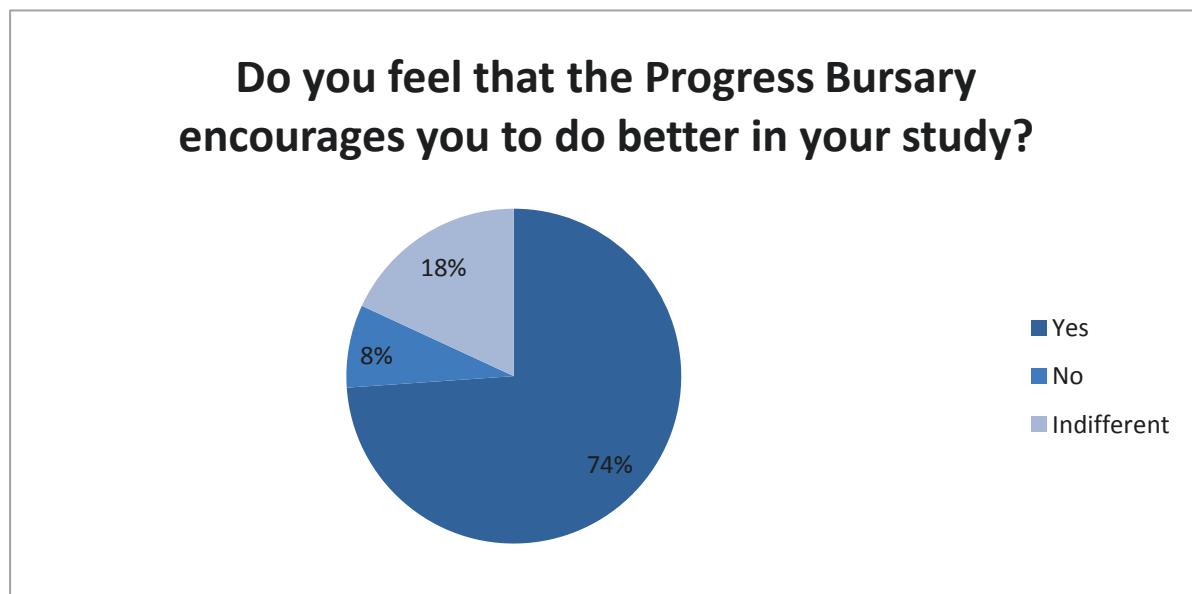
Through the focus groups and interviews we asked students if they thought the bursaries helped them with their studies. The financial incentive of extra bursary monies as and when they progressed seems to give an added motivation to pass, and to pass the first time around, rather than re-sit or repeat units/modules.

> It has helped me because I always worked to pass in order to get the bursary. That was great for me – trust me! Because I thought if I fail then they would deduct the value. It really helped me to work hard because I didn't want them to take the money away!
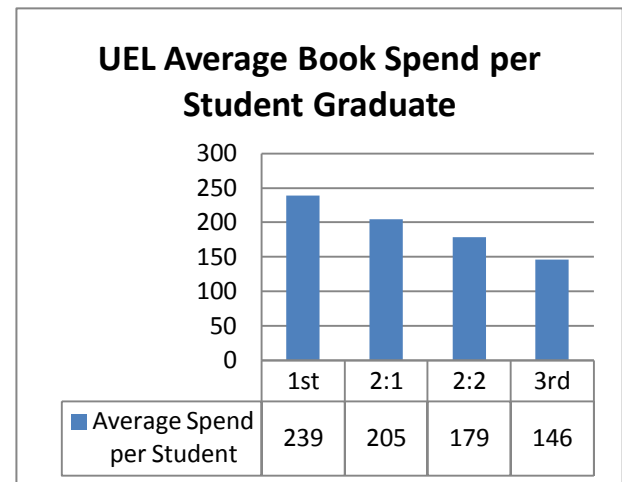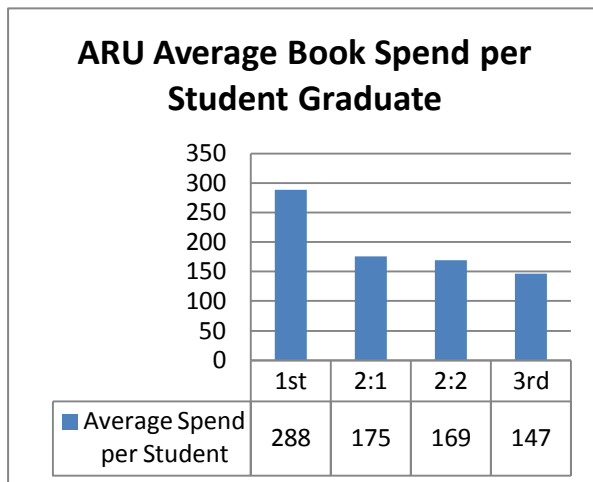>
> *Third Year, Combined Honours, UEL*

> It's been a real help to me. Libraries, no matter how good they are – you don't always have enough copies for everybody and you're not up against a deadline...and get the book back and somebody is waiting for it. You don't have any of those problems or issues. And you've got the book with you for the whole course.
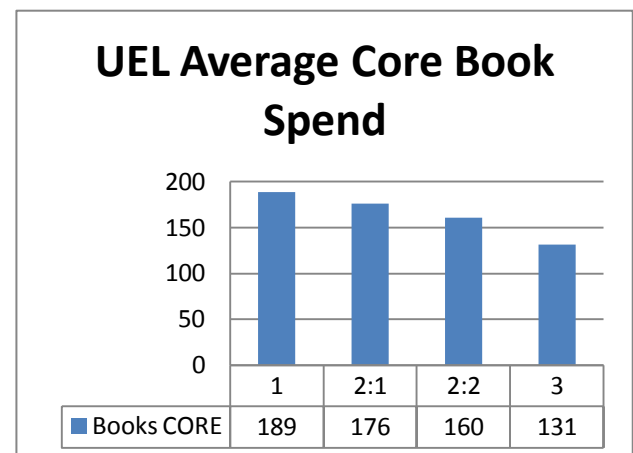>
> *Third Year, Social Work, UEL*

Academic Success and Graduation

There is a strong positive correlation between the amounts spent on books (all books, both general and core texts) and a higher class of degree amongst both UEL and ARU graduates. The following averages are all mean averages of graduates from a three year degree course. This includes 5,426 UEL students, and 479 ARU students.

ARU Average Book Spend per Student Graduate

	1st	2:1	2:2	3rd
Average Spend per Student	288	175	169	147

UEL Average Book Spend per Student Graduate

	1st	2:1	2:2	3rd
Average Spend per Student	239	205	179	146

When we examine the average spend by graduates on core texts, we can see the same positive correlation.

ARU Average Core Book Spend

	1	2:1	2:2	3
Books Core	201	147	138	108

UEL Average Core Book Spend

	1	2:1	2:2	3
Books CORE	189	176	160	131
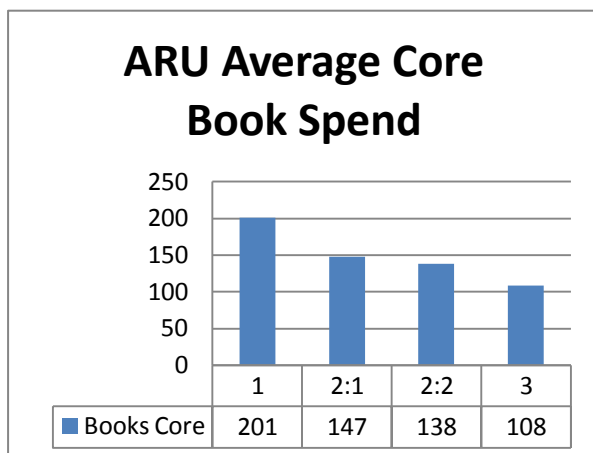
However, when we examine total spend, we see the same positive correlation for the UEL data, but for the ARU graduates, the total spend does not match the pattern we see with book spend.

ARU Total Spend

	1	2:1	2:2	3
TOTAL SPEND	518	495	512	563

UEL Average Total Spend

	1	2:1	2:2	3
TOTAL ALL SALES	905	875	846	731
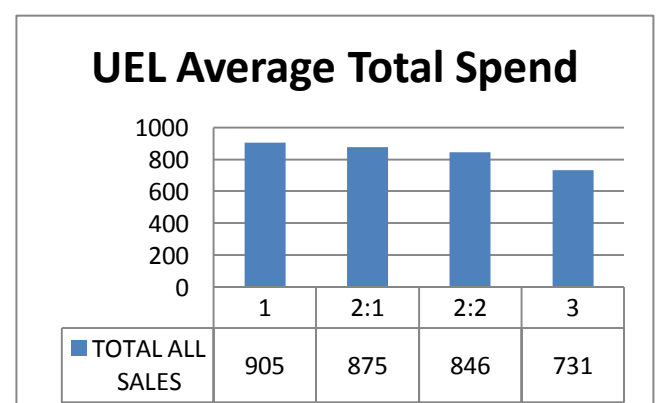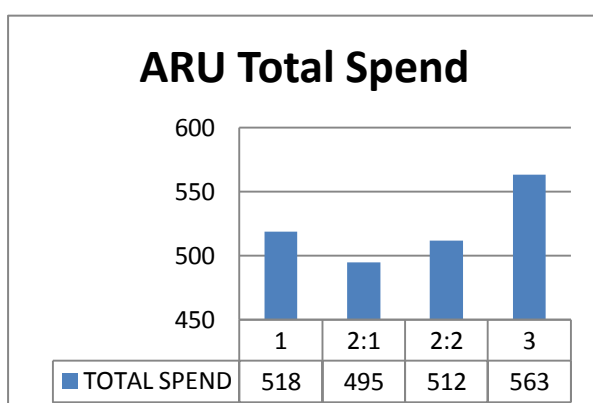
So while there is a strong, positive correlation between total book spend and core book spend at both institutions (the UEL correlation being stronger), at ARU there is actually a negative correlation between total spend and class of degree.

This indicates that although the bursary is targeted to learning materials, it is in fact, **book** spend that is the most important indicator of academic success, as it is here that the correlations are stronger. This importance of books (and in particular physical books) to students was borne out through the interviews and focus groups.

Book Spend Pattern analysis

As we found spend on books to be the most important thing in terms of student's academic achievement, we further analysed total book, and core book spend. When analysing the sales data compared with demographic categories and school of study we found some difference between the top and bottom average spends for some of these groups. We examined the spend patterns in terms of the following: school of study, ethnicity, social class, and gender. These analyses were done with the graduate cohort from UEL, as there were enough students to base sound conclusions on, namely 5,426 students. As ARU has only had the bursary scheme in for a shorter amount of time, there were only 479 ARU graduate students who could be considered. When these data were mapped out, there were too many instances where there was only one, or two students falling within a particular category, which skewed any potential results. The following therefore holds true only for the UEL cohorts. For a full demographic breakdown of the student characteristics of both UEL and ARU students, please see Appendix E.

School of study

The spend patterns between subject areas, as indicated by the schools under which students studied, shows marked differences in average spends, particularly for core text and book spends. This of course reflects different subject areas for which core texts may not be as important. For the UEL data, this can easily be seen through the low book spend for students studying in the school of Arts and Digital industries, which encompasses areas such as fine art, textiles, and digital media production. Total spend for this school is high, however, as these students are spending more on digital equipment and art materials. Conversely Law, Social Sciences and Psychology have a much higher average book spend, as they are more dependent on core texts.

This finding was not unexpected, as other research has found highly divergent course costs, including book spends between subject areas. The most recent Sodexo *University Lifestyle Survey* (2012) confirms this.

> Law students appear to be big spenders with 11% saying they spend £21 or more on books in an average week, while those studying mathematics, computing and technology subjects were most likely to spend nothing (70% did).
>
> Sodexo *University Lifestyle Survey*, 2012:26

The graph below shows the differences in book spend by school of study.

UEL Book Spend by School of Study

	Architecture, Computing & Engineering	Arts & Digital Industries	Cass School of Education and Communities	Combined Honours	Health, Sport & Biosciences	Humanities and Social Sciences	Law & Social Sciences	Psychology	Royal Docks Business School
BOOKS CORE	119	48	205	190	150	151	282	295	220
TOTAL BOOK SPEND	141	68	263	213	182	174	310	340	233
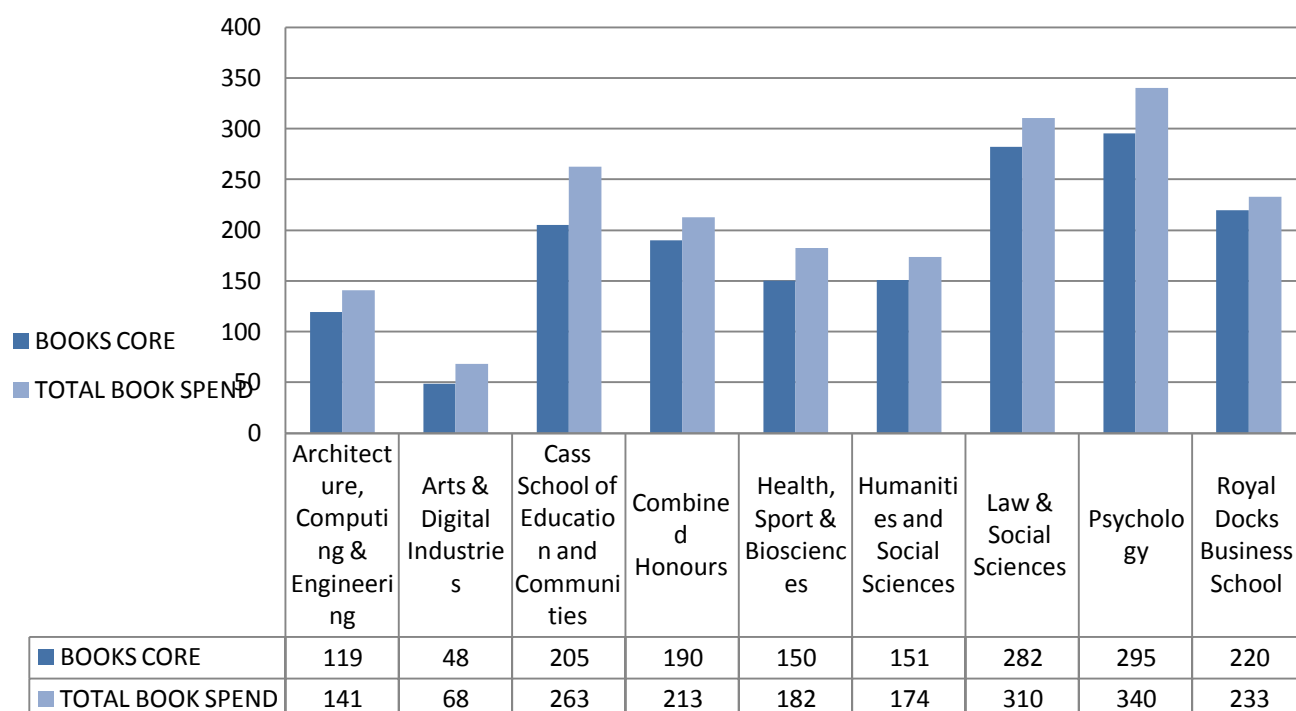
In fact the *University Lifestyle Survey* shows that for over half (58%) of the students surveyed (*n*=2,001) claim not to spend anything on books. For those that do, this survey found that (21% of all respondents) spend less than £5 in an average week, while just 3% said they spend over £21 a week on a regular basis. (Sodexo, 2012:25). This breaks down by area of study as shown in the table below.

	Humanities & Arts	Social Sciences	Science & Engineering	Maths/Computing & Technology	Business & Management	Law	Medicine & allied subjects
0	52%	54%	68%	70%	53%	46%	63%
1-5	26%	22%	17%	17%	25%	18%	15%
6-10	13%	11%	11%	7%	13%	13%	10%
11-20	6%	9%	2%	3%	6%	12%	9%
21+	3%	4%	2%	3%	4%	11%	3%
Average Spend per Week 2012	£5.00	£5.70	£2.90	£3.50	£6.90	£9.40	£4.50

*Table re-created from Sodexo University Lifestyle Study 2012, p 73.*

Ethnicity and Gender

While we expected to find differences in book spend patterns according to school of study, what we did not expect was to find such marked differences in spend by ethnicity. The two largest ethnic cohorts at UEL are White British, and Black African comprising 19.4% and 20.9% of the total student population respectively. Of course it must be noted that in this analysis of bursary provision, overseas students are not eligible, and therefore were excluded from the analysis. Here, we can see that while spend on core texts by white British and Black Africans are similar, the total book sales are more divergent.

UEL Book Spend by Ethnicity
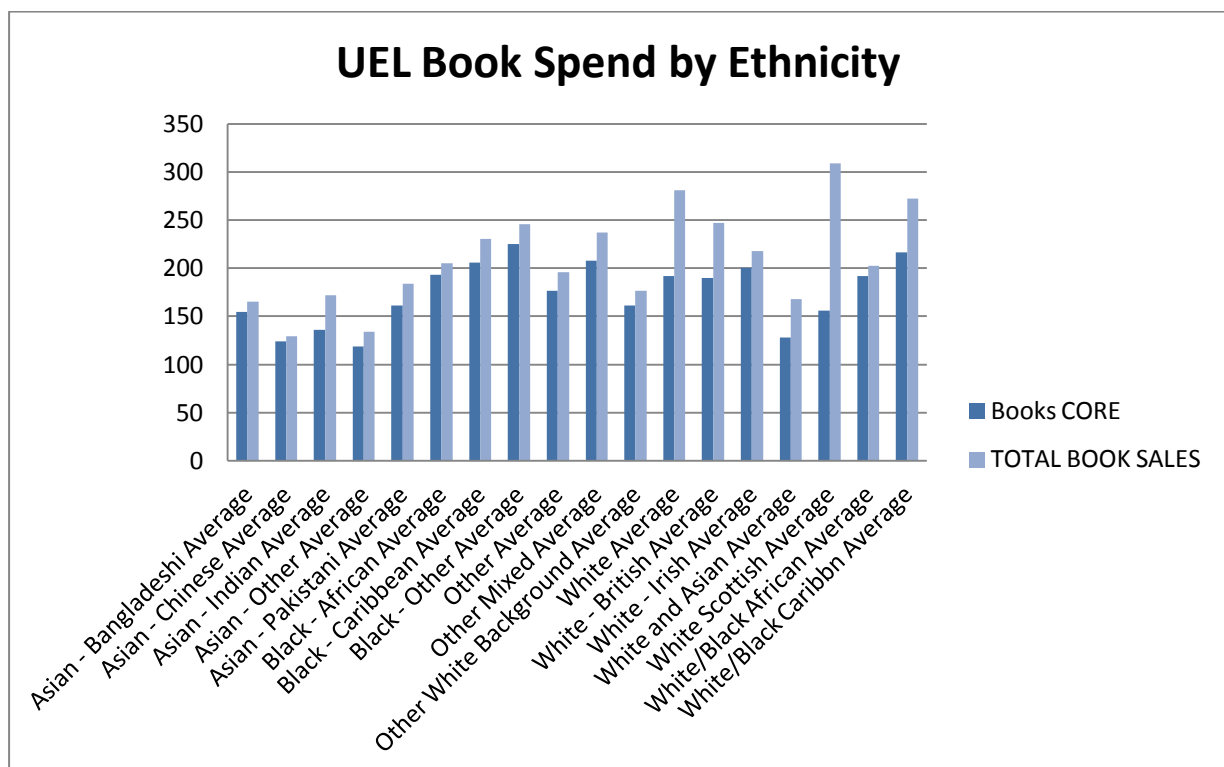
To examine this in more detail, we looked at the breakdown of schools of study by ethnicity. This shows that the schools across UEL have different ethnic breakdowns within them, for example, the School of Arts and Digital Industries, and Psychology have a disproportionately high level of white British students compared with the overall student population, and the school of Law and Social Sciences have a disproportionately higher amount of black African students. This explains some of the divergent spend between ethnicities in terms of both core books, and total book sales. To see the full breakdown of ethnicities by schools, please see appendix F.

The spend patterns analysis shows that there are differences in spend levels by gender, with females spending on average £36 pounds more on core books than their male counterparts, and £44 more on books overall. Again we examined the gender breakdown of the schools, and found that the gender spread between schools is disproportionate, which is also affecting total spend patterns. The following charts show this in more detail.

UEL Book Spend by Gender

	Female average	Male average
■ BOOKS CORE	181	145
■ TOTAL BOOK SALES	210	166
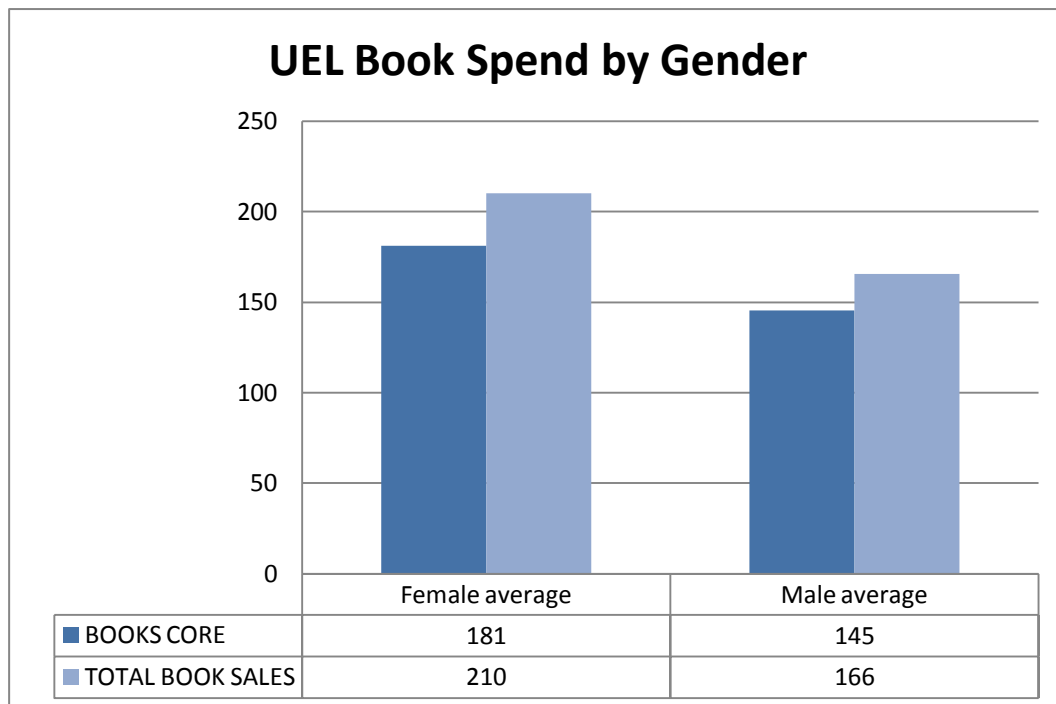
Here we can see that two of the schools with the highest spend on books – Psychology, and Education have proportionately more female students, and the School with the lowest spend on books, Architecture, Computing and Engineering, has proportionately more male students. These disproportions account for the differences in spend patterns between genders.

Males by School

Females by School
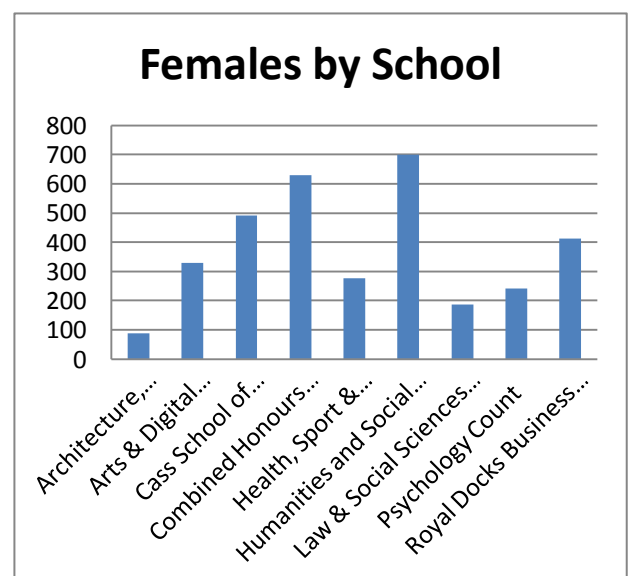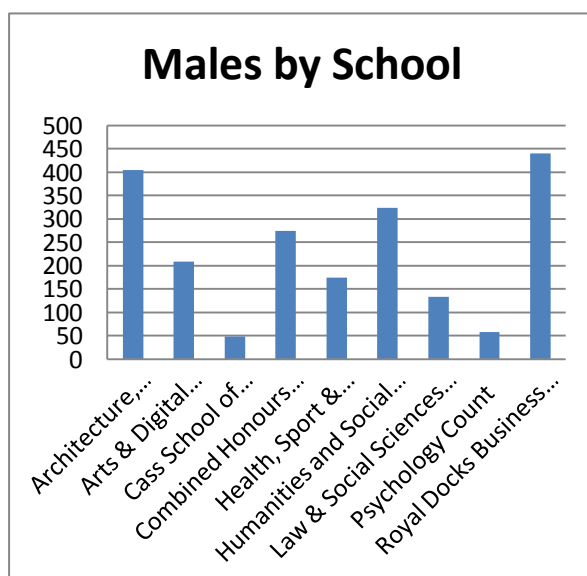
Social Class

The average spend on books between social class groupings of graduates at UEL showed very little difference which suggests, that as one student said - the bursary " gives you some equality so that everyone can afford the books." *Second Year Events Management, UEL.* Although most of these book spend analyses concentrate only on the graduate cohorts at UEL, we did examine average

spend according to social class for all ARU students for whom we held data. We found that here too, the average spends between social classes do not considerably differ.

UEL Book Spend by Social Class

	Higher managerial and professional	Lower managerial and professional	Intermediate	Small employers and own account workers	Lower supervisory and technical	Semi-routine occupations	Routine occupations	Never worked and long-term unemployed	Not classified
■ BOOKS CORE	172	181	166	189	171	192	159	187	191
■ TOTAL BOOK SALES	230	209	198	208	202	237	186	196	220

The targeted bursary provision was designed to assist students with their learning materials, and to ensure that all students could afford texts, not just those with the financial resources to do so. In this, based on the findings of this research it has been successful. The spend patterns associated with social class means that there is some equality of opportunity being provided here, as all students, via the bursary provision can afford the most essential learning tools – core textbooks.

The importance of text books to students

Students we spoke with would rather own a copy of their own core texts. They spoke about the physical nature of their texts (over eBook options) as a good thing, in some instances as a comforting presence. The sales data confirms this finding – that students prefer a physical text that they own, rather than eBooks, as less than one percent of ARU and UEL students have bought eBooks through their bursary.

Interviewer: Do you think the bursary has had an impact on your grades?

Student: Definitely. I don't like to study with people around, I like to be on my own, so basically when I have a book, and I know it's **MY** book and that I can do what I want in my book *[makes a writing gesture]* which I can't do with a library book, I can't scribble on it, or fold it, or highlight it. Most times I will highlight and comment on what they are saying. So most times its easier when I am writing my essay I know I made a point here, I had argued this point here – disagreed with this point ...and I realised that it's like a family – all the modules link together one way or another – so that this reference might come in handy with another module.

First Year, Early Childhood studies, UEL

In the focus groups, we also found that students wished to keep their texts through their studies, and even after graduation. Students were aware of the John Smith's buy back scheme, whereby students can sell their textbooks back to John Smith's, but were not willing to part with their books.

> Student 1: I buy certain books from there because I wanted to keep them. Not because I couldn't borrow them, but because I wanted to own them – keep certain books.
>
> Student 2: To be honest I use more textbooks than eBooks.
>
> Student 3: When something is physical in front of you, it's more reassuring.
>
> *Focus group, second and third year Journalism students, UEL*

From the student survey – when asked what the most useful thing to buy on the bursary was, out of 535 responses, 341 (64%) said that books were the most useful. Other popular responses were Oyster cards (18.7%), and Laptops (22.2%). This question was not prescriptive, with respondents writing in their answers.

In addition to the reassurance provided by a physical book, students are very reliant on their lecturers to recommend the best books for them. We found that some students will examine a particular text in the library before purchasing it – but overall students are guided by the academic staff when it comes to text book choice.

> For me when a lecturer said that a book is important – I just want to go with what the lecturer said – they want to see that authors name on the reference list.
>
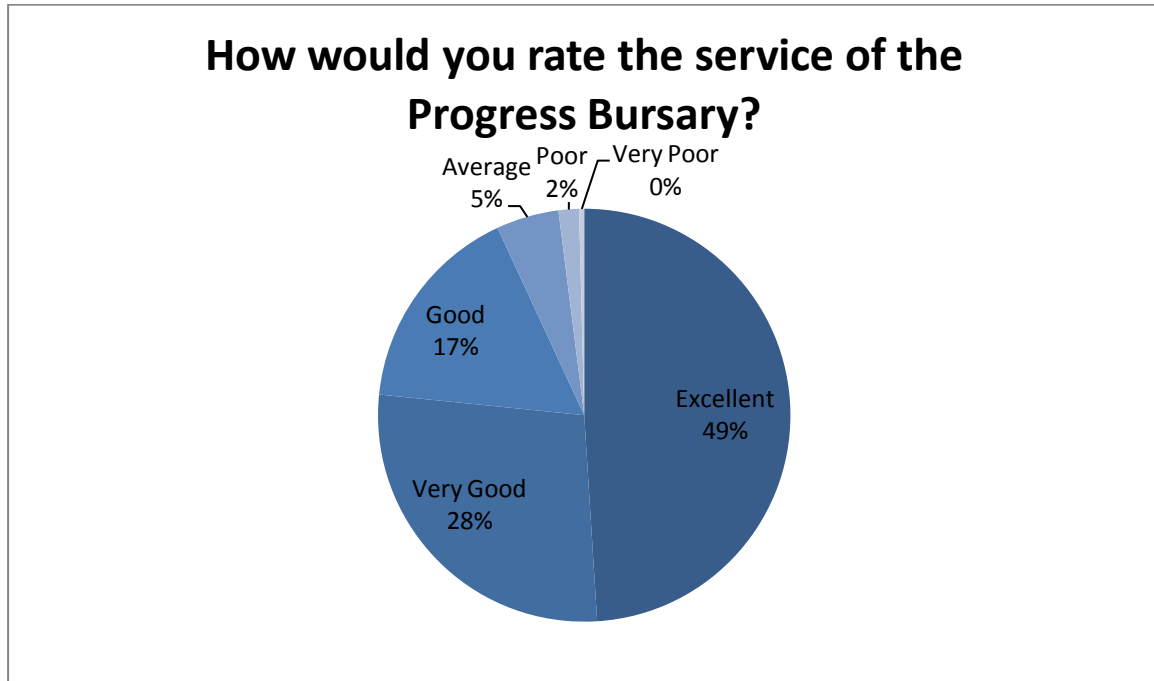> *First Year, School of Education, UEL*
>
> And better still they [lecturers] tell you where to concentrate on – chapters one and three, and when a lecturer keeps singing with it you know you had better pay attention!
>
> *Second Year, School of Education, UEL*

To further examine the relationship between books and achievement, we accessed UEL library loan data to match numbers of books loaned to students. The library computer system was changed in 2009, so we only had data since this year. To mitigate the problems arising from this, we compared these data to those students who began their degree course after this time. Alongside this, the loans data only included physical book loans, not eBooks, or other electronic materials such as journal articles. When these data were plotted against book spends and academic achievement, the results were inconclusive. There was no correlation between class of degree and amounts of books loaned, nor between numbers of books loaned and bursary spend. This does not mean that there are no positive relationships between library book usage and academic achievement, but this particular research could not, for the above reasons, establish a conclusive link here.

Student satisfaction

The students that we spoke with through the interviews and focus groups were all satisfied with the bursary provision. Indeed, from the student survey conducted at UEL, a majority of students rated the bursary service as excellent or very good.

How would you rate the service of the Progress Bursary?

- Average 5%
- Poor 2%
- Very Poor 0%
- Good 17%
- Excellent 49%
- Very Good 28%

Alongside this, a vast majority of students said that they would recommend the bursary to students at other institutions.

Would you recommend the Progress Bursary to friends at other Universities?

■ Yes ■ No

- 5%
- 95%
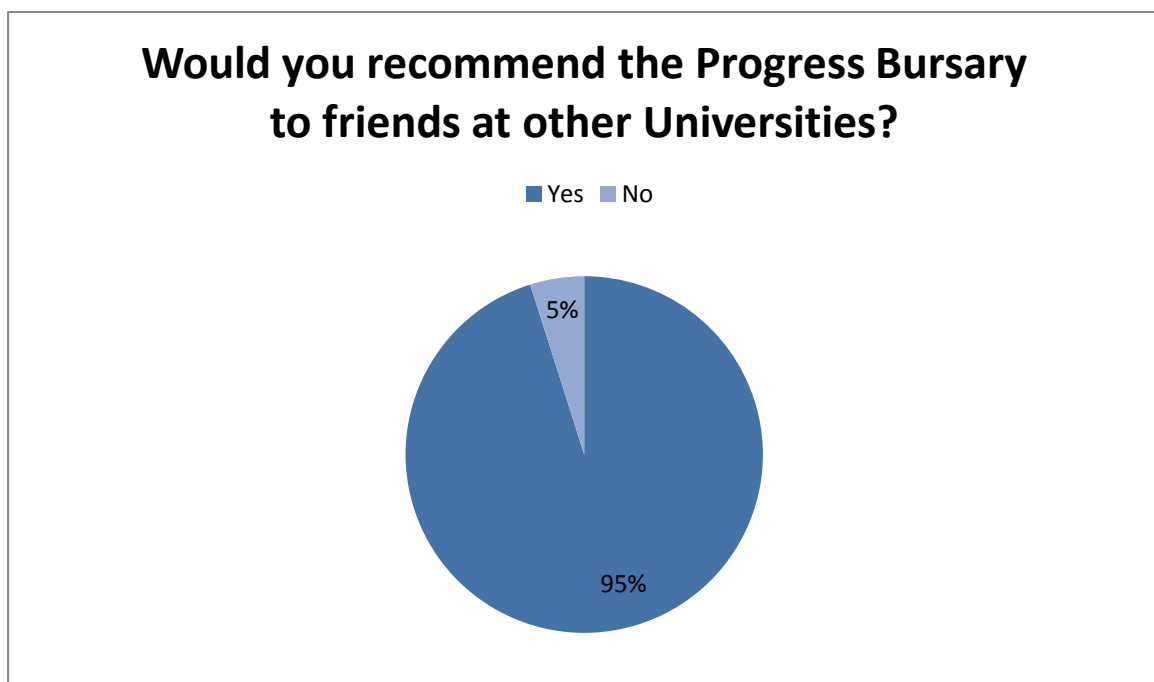
Although the results from the survey, and indeed the data from focus groups and interviews show that students are satisfied with the bursary scheme, and believe that it helps them with their studies, there were two areas where students were critical.

The first main criticism from students is that they felt that the bookshop was expensive. However, these criticisms have been declining over the years that the bursaries have been in place, and John Smith's keeps a list of the top courses, and top books that are priced competitively. In fact the criticisms about pricing were mainly concerned with computing and other equipment – not core texts. The bulk purchasing power of the bookshop allows core text to be competitively priced, particularly those sold in specialist bundles which are made up according to reading lists from particular institutions. However, it is likely that while students are limited to spend their bursary money at one particular retailer, this criticism will be ongoing, regardless of whether a particular retailer is expensive or not.

The second criticism is that some students said that they would prefer a cash bursary to spend as they please. Of course, this stands against the primary purpose of targeting bursary provision for learning materials. This was discussed in the focus groups, and while some students said they would prefer cash, other students were more appreciative that they could not spend the bursary how they liked, and welcomed the restrictions.

> Interviewer: Would you rather have a cash bursary?
>
> Student: I would prefer it on my card because it can be spent *here* rather than going to spend it down the pub!
>
> *First Year, Computer Studies student, ARU*

Indeed, what emerged through the focus group discussions was a complex understanding that while students who were in financial difficulty may find it hard to "make ends meet" they understood that the restrictions placed on bursary spend were also beneficial to their learning. We asked the students if they would have bought their books if they did not have the bursary, and many were unsure whether they would have or not. The risk of students spending bursary money on non-learning related materials, that came from these discussions, particularly for students without financial resources, is high.

> I wouldn't have bought any of the books without it, because basically the government grant and loan is not actually enough to live on and buy books at the same time.
>
> *First Year, Community Services and Enterprise, UEL*
>
> I would have been more hesitant, I think, depending on how much money I had. I didn't have to pay much, but my sister had to pay £300, mine were only £80. If I had to pay £300 then maybe, but because mine were only £80 I would have anyway.
>
> *Second Year, Psychology student, UEL*

> I think...with the big things like books and electronics it's good that it's restricted to that. Because, you can always find a few pounds for the small things like food. But if you have to buy your books – which can be £70 – its better you keep it for that.
>
> *Second Year, Psychology student, UEL*
>
> Yeah, you might be tempted to buy a lot of junk when you should save it for your books.
>
> *Female, First year, Education student, UEL*
>
> This semester I haven't bought any books actually. The lecturer gave us three core texts, but I wanted to ask the lecturer which book is the best. There's a book on entertainment law which isn't so relevant to the course, but because I have the bursary I think I will buy it anyway.
>
> *Third Year, Event Management student, UEL*

Overall we found that students do understand that despite potential financial pressures they might have associated with university, the targeted bursary helps them with their studies, and motivates them to succeed.

> Interviewer: Any last thoughts or comments?
>
> Student 1: I think it is an incentive for working class people, I mean, especially if you live in London and are not very rich. It's a big incentive, I think so.
>
> Student 2: I disagree. If someone wants to do well, they'll do well.
>
> Student 1: No, no, no – it's not about doing well. Coming to university for you, because you're not poor – it was just about coming to university. It wasn't about how am I going to survive, with transport, living, how am I going to eat – day to day things that surround it. If you've got a child as well – say a single mum – and you have to do all that travelling around London. Take me for example, if I don't work, I can't come to university. It helped. I can imagine someone living in London without enough money to come to university. And if they'd have known about it – if two universities are doing the same course, they would choose the one with the bursary.
>
> *Focus Group, UEL, Journalism Students*

Conclusions and Recommendations

Examining the bursary provision through the student life cycle is illuminating, as we can then establish the gaps in the intervention that may affect different points in the life cycle, and fully understand the impact of the scheme at each of these different points. It is clear that students do not know about the bursary in the first stage of the student life cycle – more could be done by institutions to address this in the pre-entry stages when they offer IAG (information, advice and guidance).

During induction week many students feel overwhelmed, as they are absorbing a high level of institutional information about their course. While marketing materials, e-mails etc all help to inform the students, we found that it does not replace face to face contact and information. Institutions need to work with the bursary providers to ensure that students understand the bursary, how to apply and what conditions must be met to receive the full sums of money. Although take up rates are high, they are not universal – and an opt-out, rather than an opt-in system could be considered.

Data collection of bursary spend could be a useful resource for institution in isolating those students who are not engaging, and therefore are at more risk of withdrawing. If these data were consolidated by student service teams, and combined with attendance data, and other data showing engagement with the institution (logging into the institutions intranet, library loans) a picture of students who are at risk would emerge, and appropriate steps could be taken to ensure that these students become appropriately engaged with the institution.

Students told us that the bursary does motivate them to do better in their studies, and to attend more classes. The result of this is clear, with those spending more on books, achieving higher degree classifications. However patterns of spending do differ between schools, ethnicity and gender. These patterns should continue to be analysed in the future and at other institutions to compile a good data source for further research.

The main way that the bursary impacts on students is via academic achievement. Students want to own their books, and keep them through their studies and after graduation. They want those books recommended by their lecturers, and trust that their lecturers are experts in prescribing particular texts. The research revealed a strong, sometimes emotional relationship that students have to a physical text book, and while eBooks are becoming more popular, they will not replace the physical text's role in a student's life and studies.

Although the bursary is targeted towards learning materials in the broadest sense, and while different subject areas may require materials other than books the fact that there is such a strong correlation between book spend and achievement may give credence to the argument that limiting a proportion of the bursary to books might help students achieve better academically.

In terms of student satisfaction, there were some criticisms about the restrictions of the bursary, however students on the whole understand why these are in place, and some students that we spoke with suggested that they appreciated the restrictive nature of the bursary, to ensure that they had the financial resources for their learning materials, in order to achieve successfully at their studies.

References

Action on Access, (2011) *Retention Grants Programme Briefing No. 6*.

Jones, R., (2008) *Student retention and success: a synthesis of Research*.

Morgan D.L., & Kreuger, R.A. (1993) 'When to use focus groups and why' in Morgan D.L. (Ed.) *Successful Focus Groups*. London: Sage.
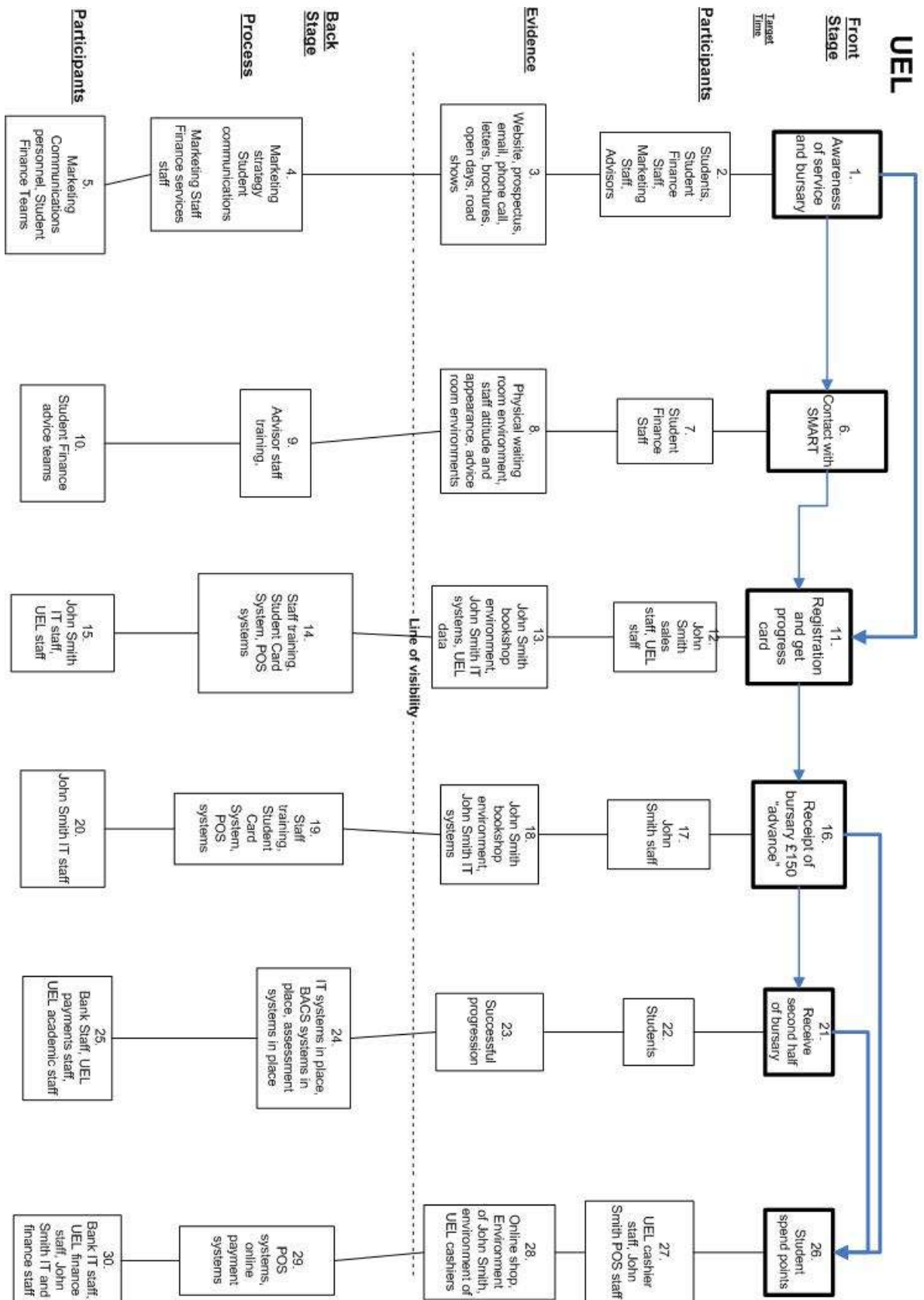
Sodexo, (2012) *University Lifestyle Survey*

Department for Innovation, Universities and Skills, (2008) *Student Income and Expenditure Survey 2007/2008*, DIUS Research Report 09 05
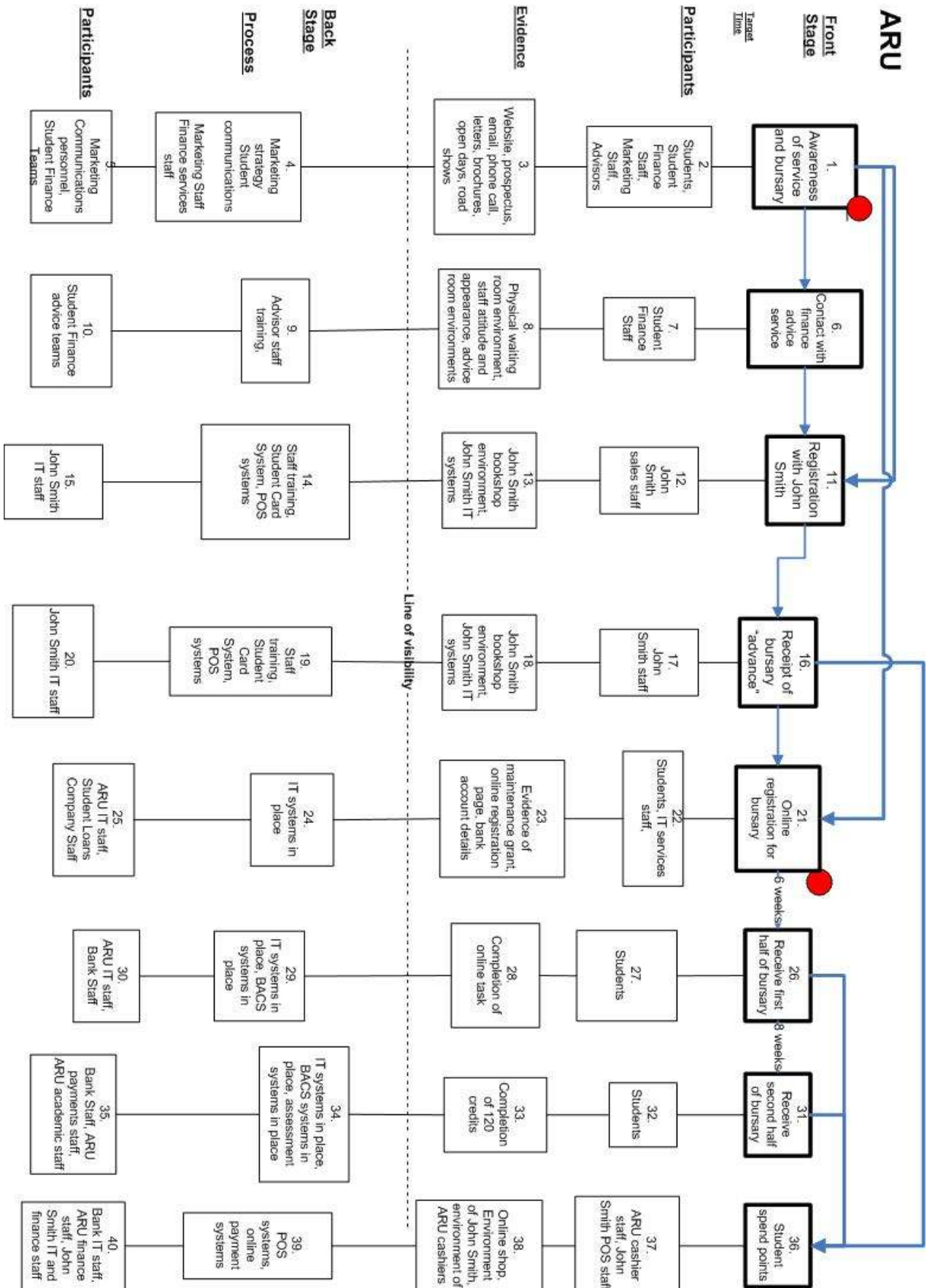
HESA   data   from
http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141

Appendices

Appendix A Service Designs UEL

UEL

Column labels (rotated): Front Stage | Target Time | Participants | Evidence | Back Stage | Process | Participants

Line of visibility

- 1. Awareness of service and bursary
- 2. Students, Student Finance Staff, Marketing Staff, Advisors
- 3. Website, prospectus, email, phone call, letters, brochures, open days, road shows
- 4. Marketing strategy Student communications
- 5. Marketing Communications personnel, Student Finance Teams

- 6. Contact with SMART
- 7. Student Finance Staff
- 8. Physical waiting room environment, staff attitude and appearance, advice room environments
- 9. Advisor staff training.
- 10. Student Finance advice teams

- 11. Registration and get progress card
- 12. John Smith sales staff, UEL staff
- 13. John Smith bookshop environment, John Smith IT systems, UEL data
- 14. Staff training, Student Card System, POS systems
- 15. John Smith IT staff, UEL staff

- 16. Receipt of bursary £150 "advance"
- 17. John Smith staff
- 18. John Smith bookshop environment, John Smith IT systems
- 19. Staff training, Student Card System, POS systems
- 20. John Smith IT staff

- 21. Receive second half of bursary
- 22. Students
- 23. Successful progression
- 24. IT systems in place, BACS systems in place, assessment systems in place
- 25. Bank Staff, UEL payments staff, UEL academic staff

- 26. Student spend points
- 27. UEL cashier staff, John Smith POS staff
- 28. Online shop, Environment of John Smith, environment of UEL cashiers
- 29. POS systems, online payment systems
- 30. Bank IT staff, UEL finance staff, John Smith IT and finance staff

Appendix A Service Designs ARU

ARU

Front Stage

Target Time

Participants

Evidence

Line of visibility

Back Stage

Process

Participants

1. Awareness of service and bursary

2. Students, Student Finance Staff, Marketing Staff, Advisors

3. Website, prospectus, email, phone call, letters, brochures, open days, road shows

4. Marketing strategy Student communications

5. Marketing Staff Finance services staff

Marketing Communications personnel, Student Finance Teams

6. Contact with finance advice service

7. Student Finance Staff

8. Physical waiting room environment, staff attitude and appearance, advice room environments

9. Advisor staff training.

10. Student Finance advice teams

11. Registration with John Smith

12. John Smith sales staff

13. John Smith bookshop environment, John Smith IT systems

14. Staff training, Student Card System, POS systems

15. John Smith IT staff

16. Receipt of bursary "advance"

17. John Smith staff

18. John Smith bookshop environment, John Smith IT systems

19. Staff training, Student Card System, POS systems

20. John Smith IT staff

21. Online registration for bursary

22. Students, IT services staff.

23. Evidence of maintenance grant, online registration page, bank account details

24. IT systems in place

25. ARU IT staff, Student Loans Company Staff

26. Receive first half of bursary

27. Students

28. Completion of online task

29. IT systems in place, BACS systems in place

30. ARU IT staff, Bank Staff

31. Receive second half of bursary

32. Students

33. Completion of 120 credits

34. IT systems in place, BACS systems in place, assessment systems in place

35. Bank Staff, ARU payments staff, ARU academic staff.

36. Student spend points

37. ARU cashier staff, John Smith POS staff

38. Online shop, Environment of John Smith, environment of ARU cashiers

39. POS systems, online payment systems

40. Bank IT staff, ARU finance staff, John Smith IT and finance staff

6 weeks, 8 weeks

Appendix B Focus Group and Interview Topic Guide

Students FIRST

Focus Groups Topic Guide

ALL: Identify selves, school, subject area, year of study.

Tell me about your first ever experiences of the bursary – what happened? How did you have to sign up? Was this process easy/difficult? What year was this?

What happened next?

Has anyone had experience of more than one year of provision? Has the process remained the same over those years or changed? Has it become easier – or more complicated?

What can you use your cards to spend on?

What have you used your cards to buy?

How do you feel about this system? Has it helped you with your studies? How has it helped? Or not?

How many of you have bought textbooks? Other reading materials? Electronics?

What about eBooks?

Do you have a smart phone? Laptop? Tablet?

How often do you access electronic resources that are course related?

How often do you use the library to borrow books? Would you rather own a text or borrow it?

Have you used up all your bursary? What happens if you do not use the money – have any of you got any back? How did this work?

What else would you like to spend this money on?

Did you know about the bursary before you applied to UEL/ARU? If you did, did this influence your choice about coming here?

Any last comments?

POST IT NOTE EXERCISE:

Can you write down all the good things you have experienced with the bursary on a post it note, and all the bad things on another.

Appendix C Consent Forms

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

The purpose of this letter is to provide you with the information that you need prior to consenting to participate in this study.

Students FIRST: an examination of the delivery of bursaries at UEL

Project Description

Continuum – the Centre for Widening Participation Policy Studies at UEL is conducting a research project examining bursary delivery. You are being asked to participate in a focus group discussion or interview. The discussion will be focused on gaining your insights about the bursary delivery. As part of this research programme we will be recording video and audio of the interviews. **All information gathered from the focus groups will remain confidential, and no names or identifying attributes will be used in the final report.**

Visual/Audio Release

The University of East London (UEL), its employees, agents and others working under its authority, have my permission to use my picture and any other recordings of me (my "image) for information purposes. This covers all types of image recording including photographs, digital images, drawings, renderings, voices, sounds, video recordings, audio clips and any accompanying written descriptions. I understand that I may notify UEL if I no longer wish to have my image used, and that subject to any reasonable consideration, it will be withdrawn. However, any material containing my image already in production or circulation at the time will be allowed to fulfil its intended purpose and life expectancy.

Linked Student Data I also consent to the research team using my student data that UEL has on file for this research project.

Disclaimer

You are not obliged to take part in this study, and are free to withdraw at any time. Should you choose to withdraw from the interview process you may do so without disadvantage to yourself and without any obligation to give a reason.

_____

I have read the information above relating to the programme of research in which I have been asked to participate. I hereby fully and freely consent to participate in this study, and I understand that this may be audio taped and/or filmed. Having given this consent I understand that I have the right to withdraw from the research at any time without disadvantage to myself and without being obliged to give any reason.

Name (PLEASE PRINT) _____

Mobile telephone number _____ Email address _____

I am of legal age and competent to sign this release. I have read this release before signing. I understand its content, and I freely accept the terms.

Signature_____   Date _____

Appendix D Online Questionnaire

1. Please quote your name and student number (John Smith, 0123456) so you have the chance of winning a £50 voucher at John Smiths!

2. When did you first hear about the Progress Bursary?	
Answer Options	
Before I Applied to UEL During the Application Process During Enrolment After Enrolment	

3. Do you feel that the Progress Bursary encourages you to do better in your study?	
Answer Options	
Yes No Indifferent If you Answer 'Yes' or 'No', please expand as to why	

4. Would you recommend the Progress Bursary to friends at other Universities?		
Answer Options	Response Percent	Response Count
Yes No		

5. How would you rate the service of the Progress Bursary?		
Answer Options	Response Percent	Response Count
Excellent Very Good Good Average Poor Very Poor		

6. What would you say is the most useful product (books, cameras etc) or service (Accommodation, Field Trips) you have purchased using the Progress Bursary? Free text Question.

7. If there was a product or service you feel that could enhance your study that is not already on offer via the Progress Bursary, what would this be? Free text Question.

8. What product or service do you think would be useful after you have graduated (interview technique books etc)? Free text Question.

9. Do you think having access to the books you needed at the start of your First Semester via the 'Free Books' offer helped you with your studies?

Answer Options	Response Percent	Response Count
Yes		
No		
Comments		

10. How would you prefer to be updated on your Progress Bursary balance/ new products and services available though the scheme?

Answer Options	Response Percent	Response Count
University Email		
Personal Email		
Posters		
Letters		
Text		

Appendix E: Student Demographics.

To fully understand the sales data analysis, it is useful to examine the demographic makeup of both ARU and UEL students. The data sets were analysed with SPSS in terms of frequencies, and the following section provides an overview of the demographic characteristics of those students whose data we analysed.

UEL

There were a total of 28,550 UEL students (including 10,760 graduates) whose sales patterns were analysed. The charts and tables of the students' school of study and demographic breakdown are as follows.

School of Study

It must be noted that the above schools are based on UEL's new school structure, which came into effect in the 2011/2012 academic year. Therefore many of the students in the analysis will have studied under slightly different school structures.

UEL Students by School of Study
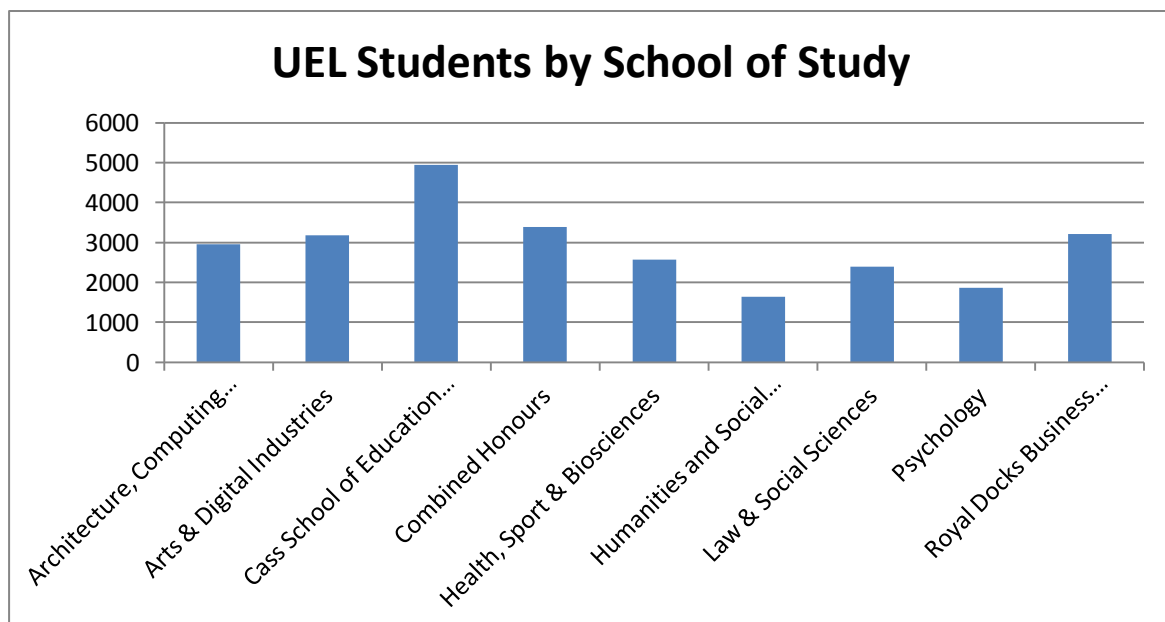
Ethnicity

As can be seen in the table that follows, the ethnic background of UEL students is diverse, with white British, and Black African being the two largest ethnic categories. Of course it must be noted that in this analysis of bursary provision, overseas students are not eligible, and therefore were excluded from the analysis.

UEL Students by Ethnicity
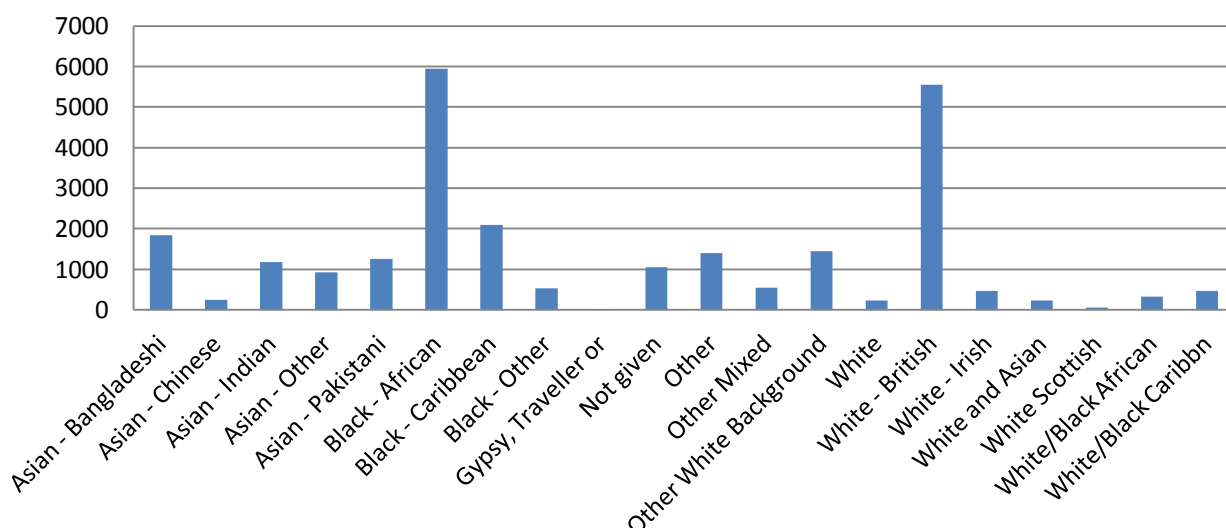
Social Class

While social class data collected by HEIs is often problematic, with many students falling in the non-classified range, we have valid social class data for 7,672 students. These data are based on the National Statistics Socio-economic Classification (NS-SEC) and is collected via UCAS enrolment forms. If the student was under 21 at the start of their course, their parental classification is used. If they were over 21, the classification is their own. There are nine different valid NS-SEC classifications:

1. Higher managerial and professional occupations
2. Lower managerial and professional occupations
3. Intermediate occupations
4. Small employers and own account workers
5. Lower supervisory and technical occupations
6. Semi-routine occupations
7. Routine occupations
8. Never worked and long-term unemployed
9. Not classified

UEL Students by Social Class
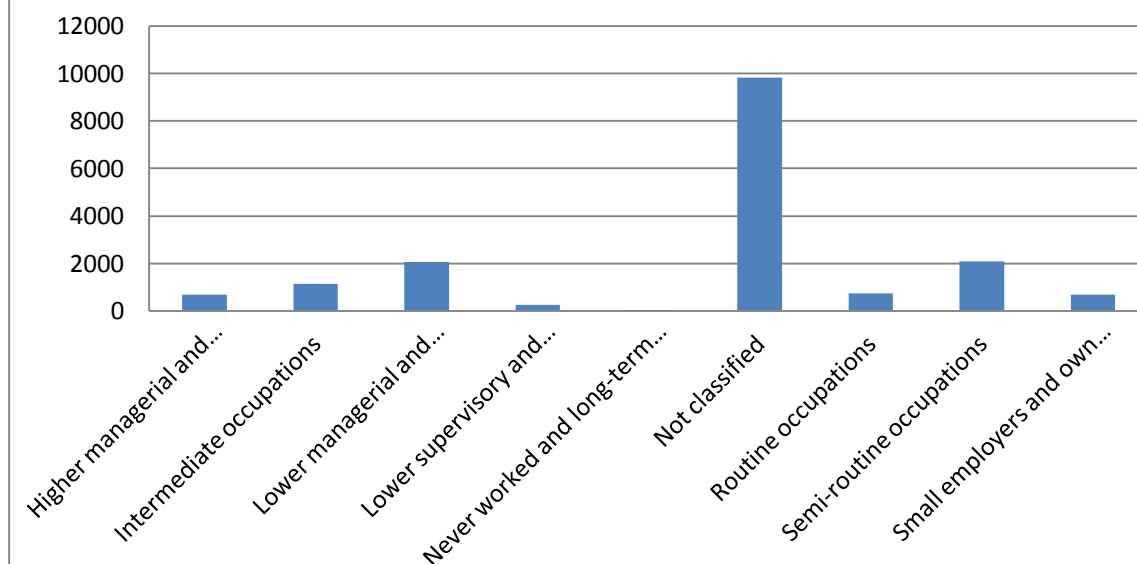
Age

The age of UEL students can be seen in the following chart, and shows that the majority of the student population at UEL are older than school leaving age. It must be noted that these ages are the ages of the students in 2012, not the age at which they entered the institution.

UEL Students by Age (in 2012)
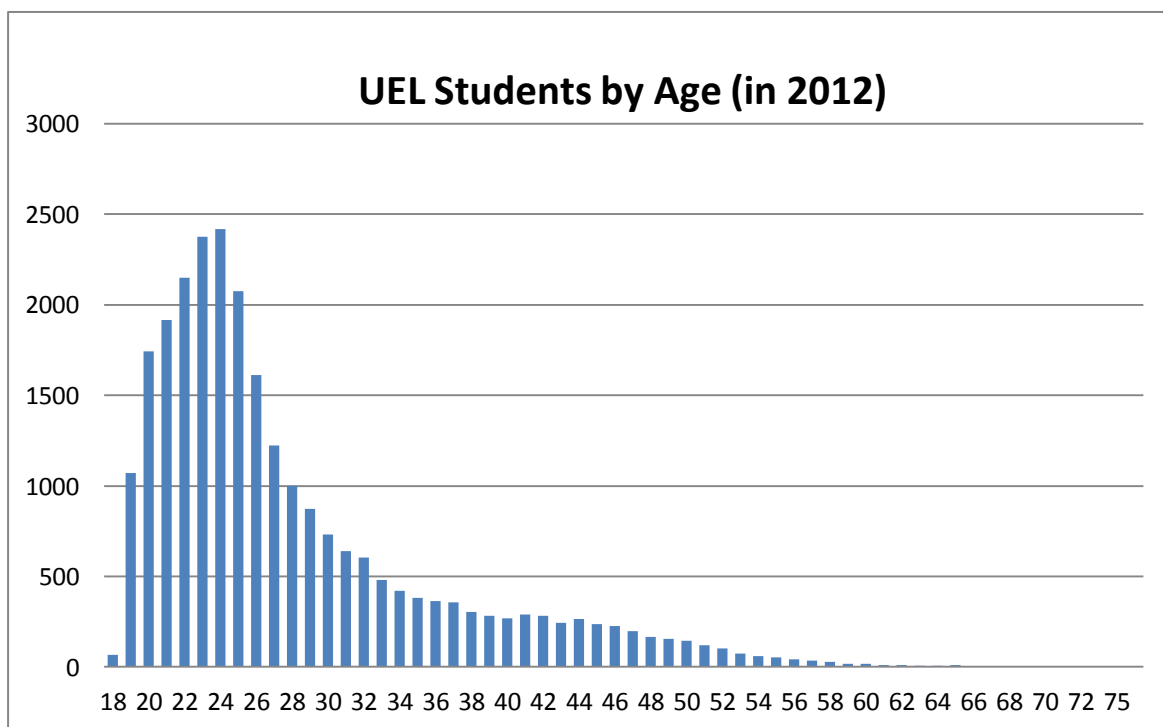
Gender

The gender breakdown of the UEL students under analysis shows a much higher proportion of female to male students, being 59.75% and 40.25% respectively, which shows a slightly higher proportion of females than the national average in 2010/2011 which is 56.41% female and 43.59% males (both undergraduate and post graduate students).

UEL Students by Gender

F 15645
M 10541
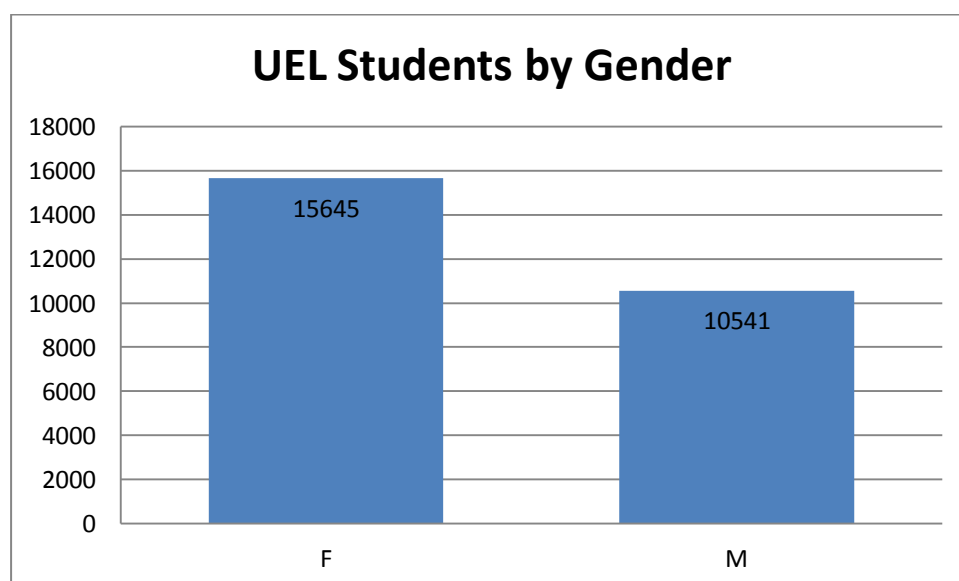
ARU

There were a total of 9,546 ARU students (including 1,128 graduates) whose sales patterns were analysed. The charts and tables of the students' school of study and demographic breakdown are as follows.

ARU Students by School of Study
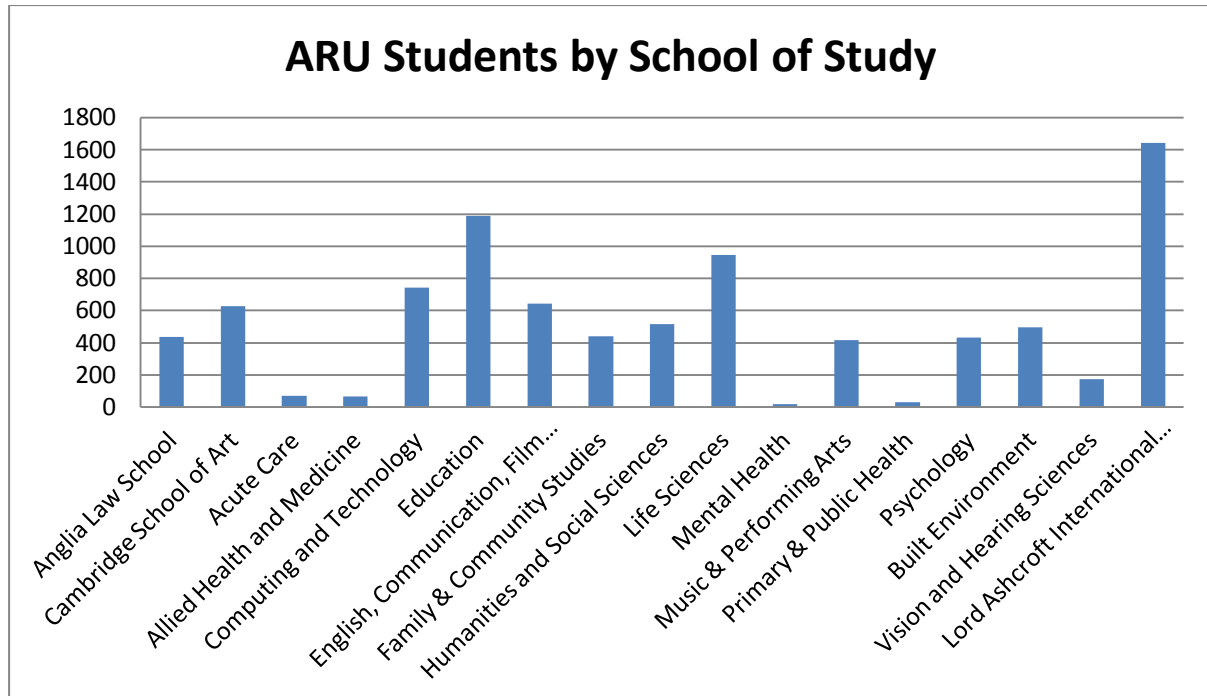
Ethnicity

As can be seen from the chart below, while the ethnic mix of ARU students shows some diversity, the majority of students are white and white British.

ARU Students by Ethnicity
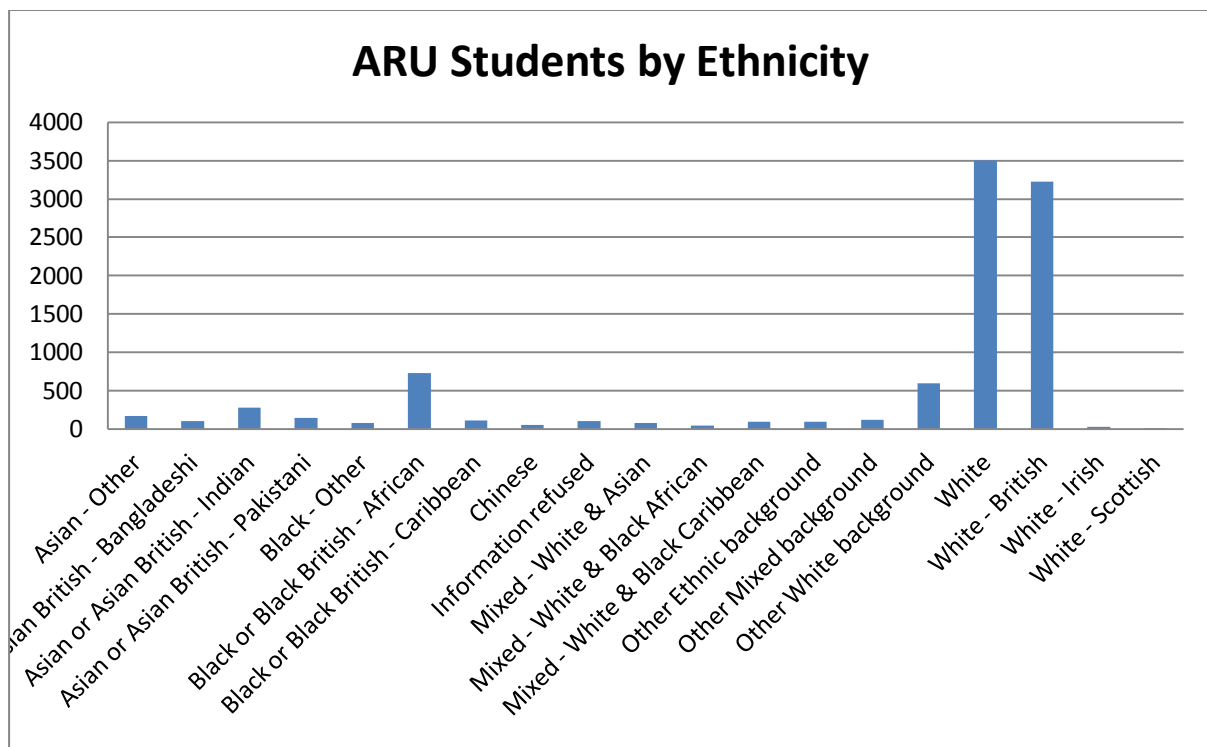
Social Class

Social class data at ARU is collected in the same was as for UEL, based on NS-SEC, and has similar problems with large numbers of students falling in the not classified category. However, we do have accurate social class data for 5,635 ARU students (excluding those who are not classified, and excluding those for which we have no data).

ARU Students by Social Class
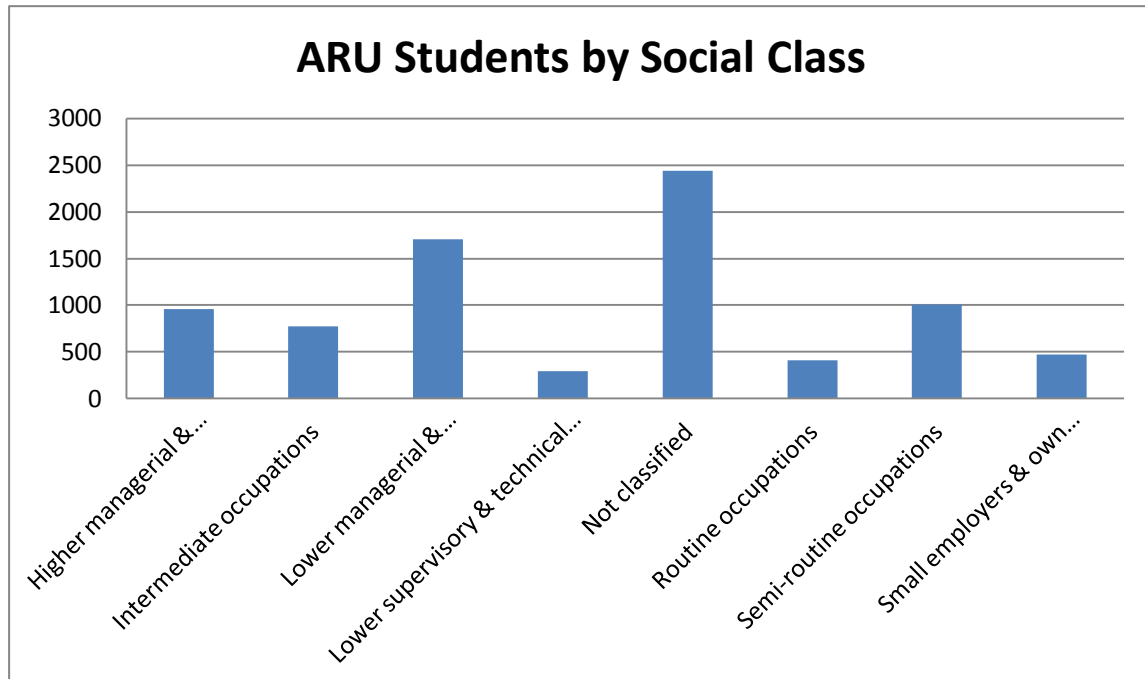
Age

As with the UEL data, the age of students presented is their age this year, not the age when entering their studies. Here, we see a slightly more youthful population that the UEL students.

ARU Students by Age (in 2012)
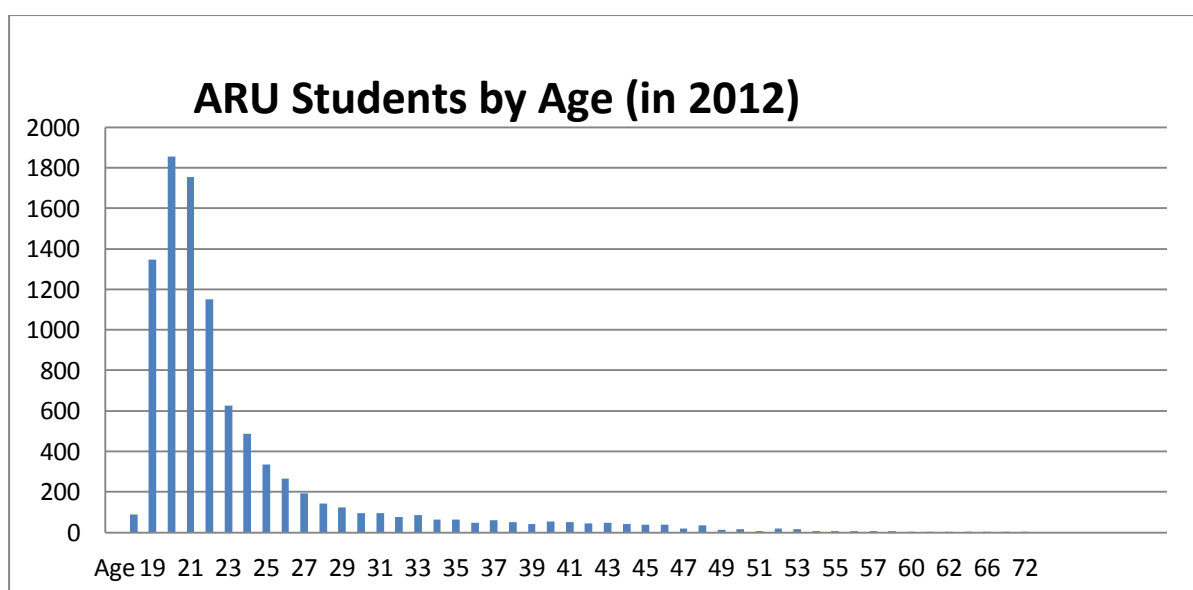
Gender

Again we can see that there are proportionately more female than male students at ARU. Female students make up 57.5% and male students 42.5% of the student population. These figures are slightly closer to the national average in 2010/2011 which is 56.41% female and 43.59% males (both undergraduate and post graduate students).
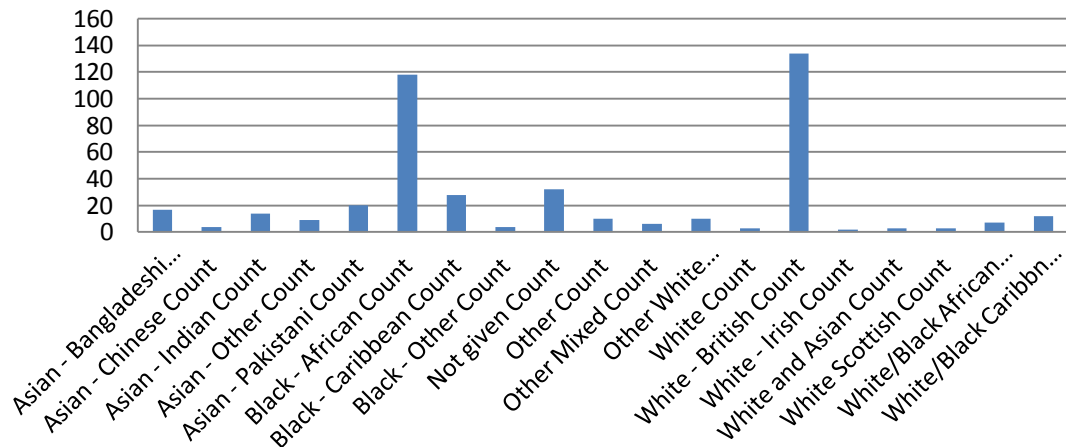
ARU Students by Gender

Architecture, Computing and Engineering

Arts & Digital Industries

Education and Communities
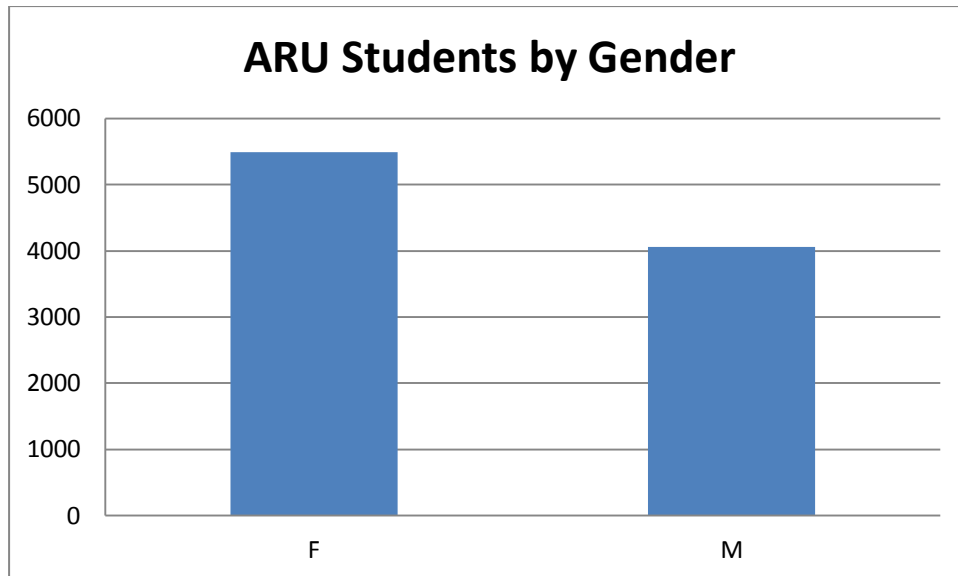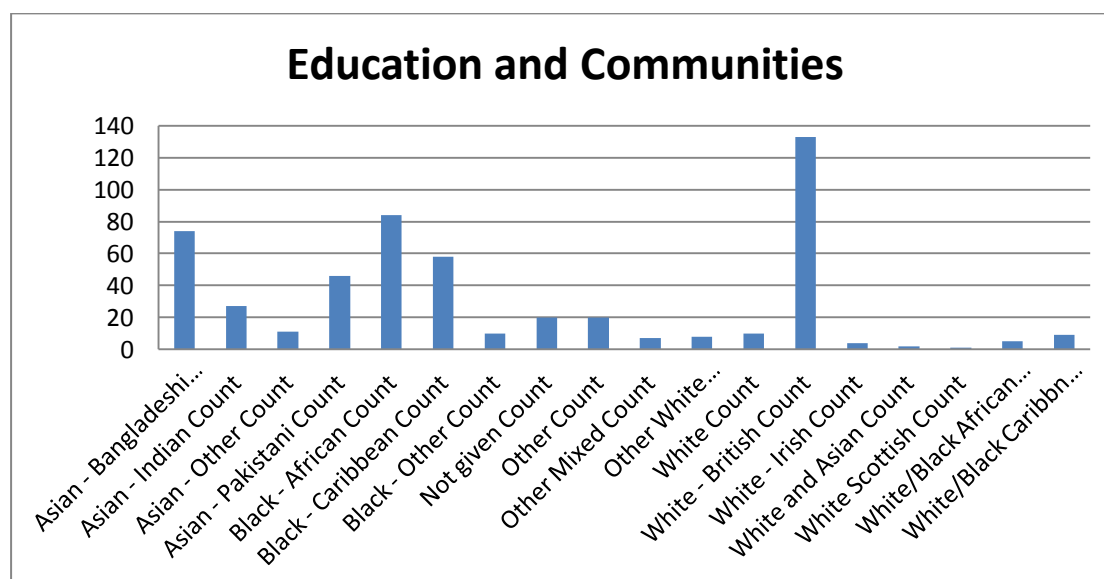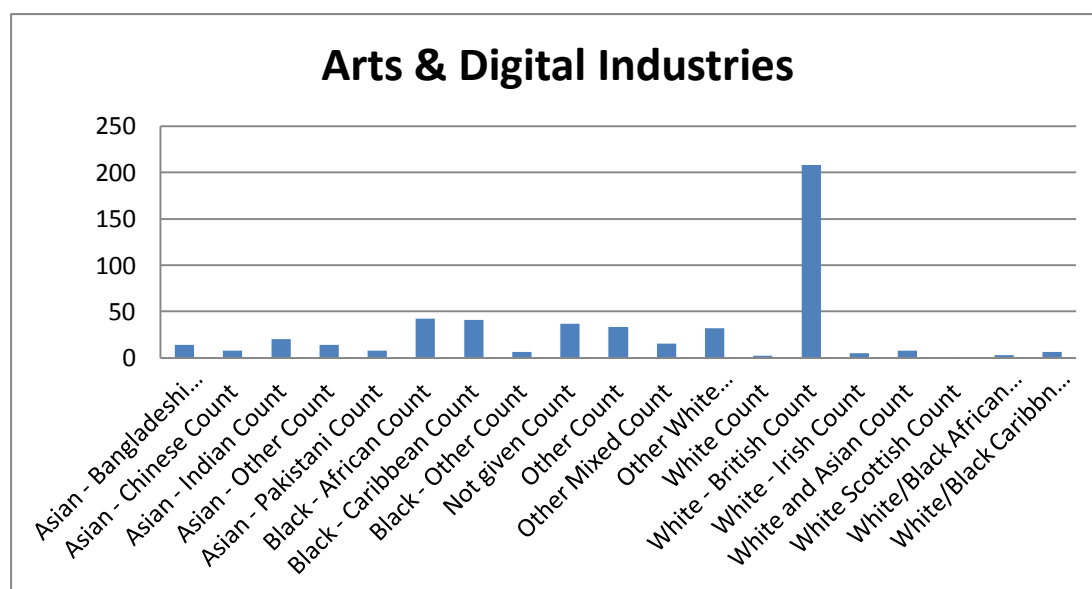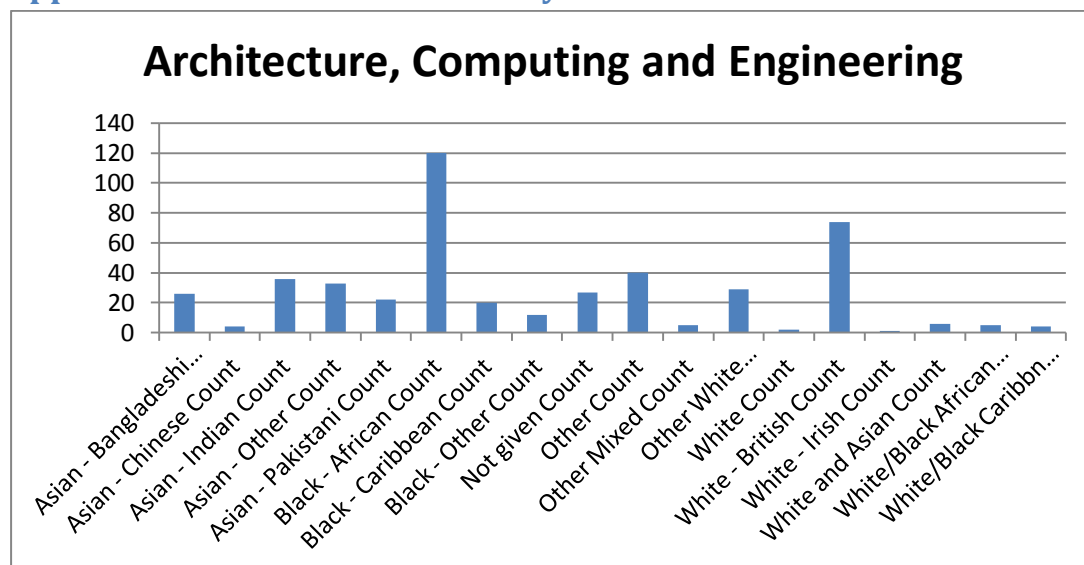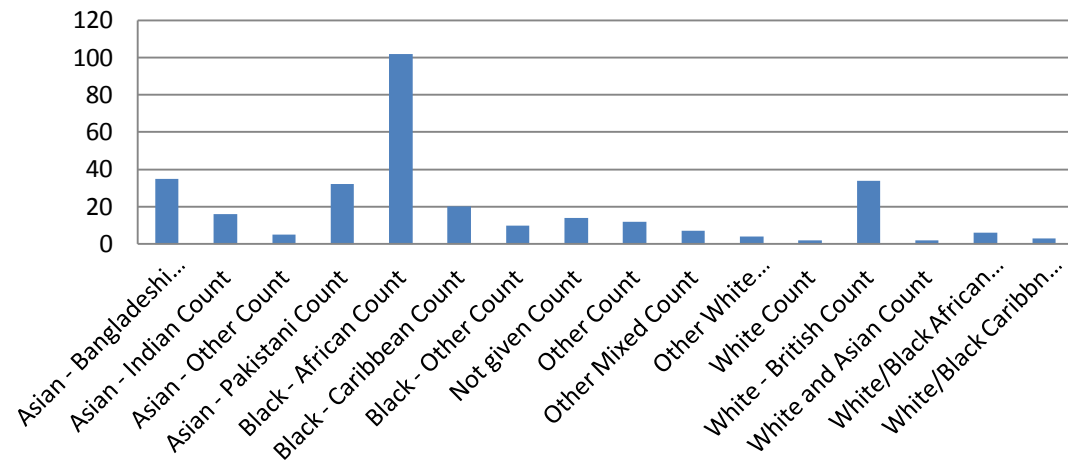
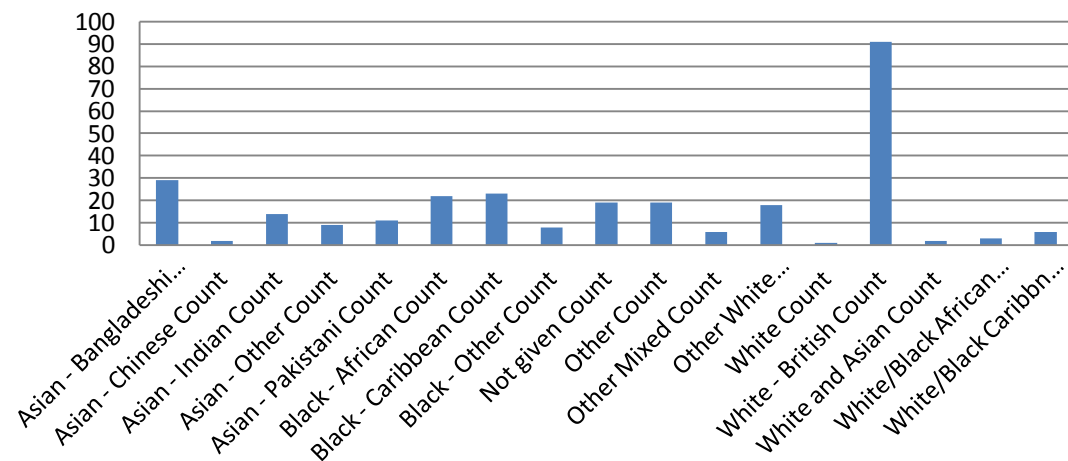## Combined Honours
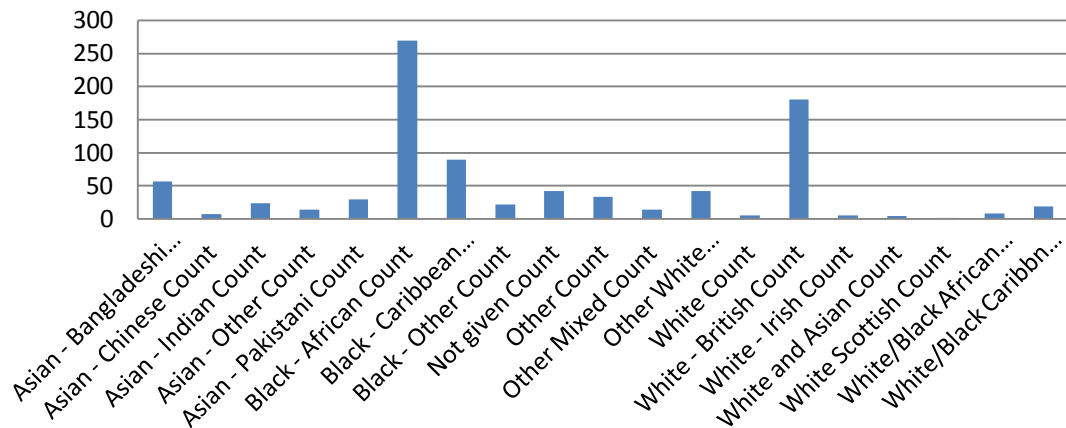
Health, Sport & Biosciences

Humanities and Social Sciences
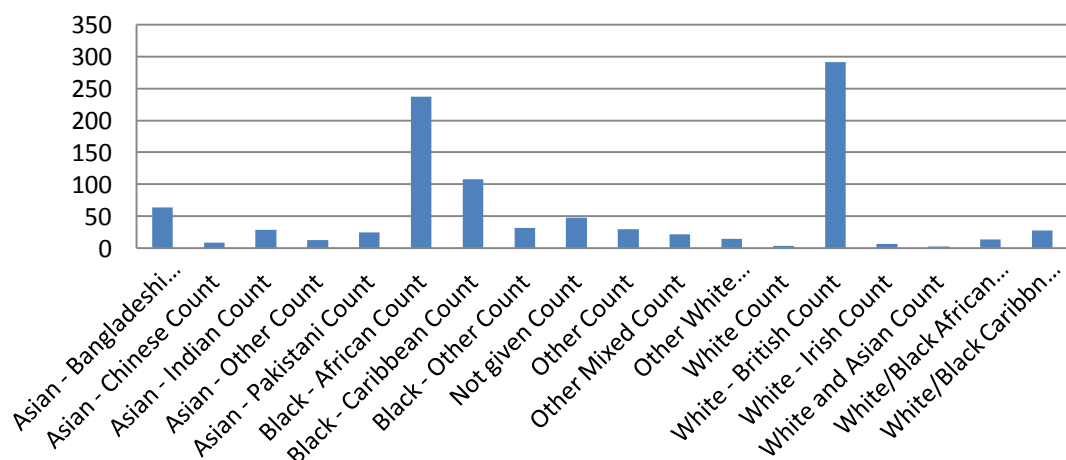
Law and Social Sciences

Psychology

Business