Acknowledgements

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Introduction and Background to the Project

Students FIRST is a JISC funded project that explores the use of technology to deliver Financial Interventions to assist Retention and Student Transitions (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 executive summary is a synthesis of the headline findings from the research strand.

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.

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%.

**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 sales and student data records for 28,550 UEL students (including 10,760 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 (nine in total), 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 547 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. A more detailed methodological discussion is set out in the full research report.

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.
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 UEL student 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 e-books 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:

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.

<table>
<thead>
<tr>
<th>When did you first hear about the progress bursary?</th>
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<tbody>
<tr>
<td>Before I Applied to UEL</td>
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<tr>
<td>During the Application Process</td>
</tr>
<tr>
<td>During Enrolment</td>
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<tr>
<td>After Enrolment</td>
</tr>
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\[ n=547 \]
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.

Progression
From the start, the bursary is “branded” as a progression 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

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, particularly 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 students engaging with their studies; 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. 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.

<table>
<thead>
<tr>
<th>Year</th>
<th>ARU</th>
<th>UEL</th>
<th>London Met</th>
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</thead>
<tbody>
<tr>
<td>2004/2005</td>
<td>12.9%</td>
<td>14.8%</td>
<td>15.5%</td>
</tr>
<tr>
<td>2005/2006</td>
<td>11.4%</td>
<td>12.8%</td>
<td>13.7%</td>
</tr>
<tr>
<td>2006/2007</td>
<td>13.0%</td>
<td>13.6%</td>
<td>16.2%</td>
</tr>
<tr>
<td>2007/2008</td>
<td>11.9%</td>
<td>9.9%</td>
<td>15.4%</td>
</tr>
<tr>
<td>2008/2009</td>
<td>9.9%</td>
<td>7.3%</td>
<td>19.3%</td>
</tr>
<tr>
<td>2009/2010</td>
<td>12.9%</td>
<td>10.5%</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

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

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?**

- Yes: 74%
- No: 18%
- Indifferent: 8%
The data shows that there is an impact on academic achievement as students who spend a higher amount on books (all books, both general and core texts) obtain a higher class of degree. This was true for both UEL and ARU graduates, as can be seen from the graphs below.

The amount spent on core texts, and the total bursary spend shows a similar relationship to higher degree classifications.

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.

The importance of physical books to students is high. 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.

In the focus groups and interviews, 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, hereby students can sell their textbooks back to John Smith’s, but were not willing to part with their books.

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 etc … 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
We also found that 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.

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 could only access loans data from this year onwards. 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 relationship between class of degree and amounts of books loaned, nor between numbers of books loaned and bursary spend.

In terms of book spend, when analysing the sales data compared with demographic groupings we found some difference between the top and bottom average spends for some of these groups. The average spend on books between social class groupings showed very little difference which shows that as one student suggested the bursary “gives you some equality so that everyone can afford the books.” Second Year Events Management, UEL.

We found that there were some differences in spend patterns between genders, ethnicities, and school of study. For a full breakdown and discussion of these spend differences, please see the full research report.

**Student Satisfaction**

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, 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 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.

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

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, posters and flyers 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 differ between schools of study, 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.
Although there were some criticisms about the restrictions of the bursary, students we spoke with understand why these are in place, and some students 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. More research here, comparing the impacts of cash versus targeted bursaries would be a fruitful area to examine.

**References**

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


HESA data from

[http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141](http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141)