ALT-C 2010

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Placing the student at the heart of the process: using student lifecycle relationship management and service design techniques to enhance the student experience

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The Higher Education (HE) sector is currently under increasing pressure to respond to challenges from a number of quarters. Aside from the obvious economic factors, student expectations are also changing, particularly with regard to Information and Communication Technology (ICT). So how can the HE sector meet these changing (and challenging) expectations? One approach is to focus on the small-scale efforts that can be made to improve an institution’s effectiveness in enhancing the student experience.

This paper describes how using techniques traditionally associated with customer relationship management in the commercial sector can be used in conjunction with the student lifecycle to meet the changing expectations of the student. It should be considered as an early announcement of the research from several of the JISC Relationship Management Programme projects, which have been trialling service design as an approach to Student Lifecycle Relationship Management (SLRM). Examples of some of the small-scale technological changes made are also provided. This approach places the student firmly at the heart of the process and may help institutions be more flexible, efficient and effective.

Keywords: business process, re-engineering, challenges for education, changing services, design, distance learning, early announcement, early research, efficiency, JISC, learner expectations, learner voice, mitigating risk, process streamlining, quality improvement, responding to change, social networking, service design, student lifecycle relationship management

I. Introduction

The Higher Education (HE) sector is currently under increasing pressure to respond to challenges from a number of quarters. These include: reduced Government funding leading to a diversification of funding sources; changing demographics producing a more diverse student base; increased competition as a result of local and international challenges; and rapidly changing technologies; to name but a few. There is also an expectation that universities can adapt quickly enough to meet the changing needs of students, employers, and the community.

Student expectations regarding Information and Communication Technology (ICT) are also changing. Many students are early adopters of new technologies and expect the education sector to be equally adept in the provision and use of such technologies. This presents yet another challenge: in that whilst the rapidly changing technology base – from physical hardware (such as the iPad) to web applications (Twitter, for example) - can easily be adopted at an individual level, it becomes harder to scale this up at an institutional level. Yet there is great potential for universities to exploit these new technologies and the expertise that many students already have in this area.

So how can the HE sector meet these changing expectations? One approach is to look to the commercial sector for strategies. For example, many institutions have started to adopt Customer Relationship Management (CRM) to help manage their relationships with external customers, such as employers and enterprise agencies. As students also clearly exhibit certain customer attributes, such as paying for a service and expecting higher levels of choice, quality and experience, it therefore seems appropriate to apply commercial techniques, such as service design, to selected stages of the student lifecycle. By adopting this Student Lifecycle Relationship Management (SLRM) approach and placing the student firmly at the heart of the process, it is anticipated that the “overall quality of the student experience, the efficiency and
effectiveness of [institutions’] administrative processes and relationships [will contribute] to adding business value and delivering success” (Chambers and Paull, 2008).

This paper describes how service design techniques have been used to improve the student experience at several stages of the student lifecycle (specifically pre-enrolment, enrolment and induction). It should be considered as an early announcement of some of the research conducted by several of the projects on the JISC Relationship Management Programme (July 2009 to April 2010). The Programme consisted of two strands across HE and Further Education (FE) institutions: one focused on Business Community Engagement Customer Relationship Management (BCE CRM) and the other focused on SLRM. Whilst there are some elements of overlap between the two strands, this paper concentrates solely on the projects in the SLRM strand. Further information on the Programme is available from http://www.jisc.ac.uk/whatwedo/programmes/bce/relationshipmanagement.aspx and a full report will be published in late 2010.

2. Background

A student will come into contact with many different ICT systems during their journey through the student lifecycle – from integrated institutional software systems, such as Management Information Systems (MIS), portals, and Virtual Learning Environments (VLEs), to web-based applications, such as webmail and online registration. By identifying the interface points with these different systems and reviewing the operational processes from a student perspective, it is possible to make improvements that will benefit both the student and the institution (JISC, 2009).

2.1 The student lifecycle

The student lifecycle can be described as the institutional stages through which a student will progress on their way through tertiary education. These stages can be defined in different ways, depending on the context in which the lifecycle is being used. For example, describing fewer stages that cover larger parts of the student journey may help senior management gain a strategic overview, whilst there may be more stages with greater detail where the focus is narrower (Chambers and Paull, 2008). Figure 1 shows the main stages of the student lifecycle (note that the lifecycle may have more stages at a higher level of detail, or less at a lower level).

- Application
- Pre-registration
- Registration
- Induction
- Teaching and learning processes
- Pastoral care
- Employability and careers service
- Graduation
- Alumni processes
- Marketing

Figure 1: Example of a Student Lifecycle (Chambers and Paull, 2008)
These stages can be broken down even further. For example, Chambers and Paull (2008) have split the “Pre-registration” stage into further sub-stages (see Figure 2).

### Figure 2. Pre-registration stage broken into further sub-stages (Chambers and Paull, 2008)

- Provision of further information about the school/department/course of study
- Application for and offer of accommodation
- Access to chat room facilities with other students with offers
- Provision of instructions for registration, induction and access to university facilities such as library and sports
- Provision of pre-entry log-ins to student portals

Using the student lifecycle as a framework may help to identify where small changes can be made at specific sub-stages. Focussing on smaller aspects of the student lifecycle ensures that an institution can be more agile in making further changes. Over time, this may have a positive, cumulative effect on the experience of both the institution and the student.

#### 2.2 Student Lifecycle Relationship Management (SLRM)

SLRM can help improve the quality of services provided to students as well as increase the efficiency of university processes and systems. Chambers and Paull (2008) describe SLRM as: “...the development of strategies, policies, and use of ICT, to support institutions, establish, build and manage relationships with students through a range or interactions and engagements they have with them across the lifecycle of their involvement with them...”

Some aspects of SLRM have been in existence for many years, such as policies and strategies around the application, pre-enrolment and alumni relationship stages of the student lifecycle. However, the focus has mainly been on developing policies and procedures to improve the institution’s administrative processes, rather than on understanding the student perspective. There is nothing wrong with this emphasis, as efficient university processes will also benefit the student. Nevertheless, making further improvements as a result of understanding the student viewpoint can have a positive impact on the institution and may even provide a competitive edge.

### 3. Method

The research being undertaken by the projects in the JISC Relationship Management Programme is now complete and qualitative data is in the process of being drawn out from the project case studies and reports.

Most of the projects have followed the same methodology. They each identified specific processes that could be improved at different sub-stages of the student lifecycle. The student perspective has been key, so data on student expectations and experience has been gathered via surveys (over 2000 completed responses were received across the SLRM strand), interviews, and focus groups (over 200 students across the strand). Similarly, staff members have also been approached to provide feedback. By using service design methodologies, more commonly found in the commercial sector, it has been possible to identify the ‘fail points’ or ‘blockages’, which signal where improvements need to be made. Modifications are then made
to the processes and tested via small-scale pilots designed to assess the impact of the changes made. The final stage is to obtain further feedback and make any further adjustments.

It is expected that by taking this iterative approach of gathering data, implementing change, assessing the impact, and making the necessary adjustments, both the student and the institution will benefit from an improved experience. Such small-scale agile implementations can be revisited on a regular basis and may result in the institution being able to respond more rapidly to challenges in the future.

3.1 Service design

There is little information on the use of service design methods to improve processes in education, despite some universities running modules on service design. It is also difficult to find a de facto definition of service design that is relevant to the education sector. The Copenhagen Institute of Interactive Design (2008) defines service design as: '...an emerging field focused on the creation of well thought through experiences using a combination of intangible and tangible mediums. It provides numerous benefits to the end user experience when applied to sectors such as retail, banking, transportation, and healthcare. Service design as a practice generally results in the design of systems and processes aimed at providing a holistic service to the user. This cross-disciplinary practice combines numerous skills in design, management and process engineering'.

Service design is a relatively new discipline, so it is not surprising that 'many senior managers involved in the service sector are still unaware of the benefits that design can bring to their offerings and, as a result, many organisations are operating at a sub-optimum level' (Hollins, 2009). This statement could also be applied to the HE sector. Hollins (2009) also cites the example of the UK eUniversities Worldwide Limited (UKeU), which failed because customer requirements were not understood. He quotes from the Select Committee on Education and Skills (UK House of Commons, 2005), which concluded: 'there was no formal market research undertaken to assess either the level of demand, the nature of the demand or [critically] the type of e-learning required. There was no systematic evaluation of the markets... and no understanding of consumer demand'. Would service design have saved the UKeU? Of course, it is impossible to say, but it may have helped to mitigate some of the risks.

So pragmatically, how can service design be applied in the education sector? The first step is to focus on a specific process in the student lifecycle, for example, the way in which online enrolment is handled for distance learning students. It is important to remember that one process may consist of several inter-dependent sub-processes and that changes made to one aspect may affect others. It is also necessary to conduct research into both the student and staff expectations and experience of a particular process, in order to gain a balanced view.

Various techniques can be used, including surveys, video or written diaries, focus groups or interviews, and even 'mystery shoppers'. For example, a couple of the SLRM projects asked small numbers of students (typically two or three) to act as ‘mystery shoppers’ and describe their experience as they went through the enrolment process. Several of the projects also began by identifying and talking to those students who had had a negative experience, working on the premise that, according to Bill Gates, ‘your most unhappy customers are your greatest source of learning’.

Blueprinting (similar to process mapping) techniques are an integral part of service design and can be used at any stage to break down the process into its constituent stages (Hollins, 2009). This will help to identify the ‘fail points’ (or blockages) and ‘touch points’ (where the student interacts with the institution). ‘Fail points’ are a good indication of where improvements and changes need to be made. Blueprinting reveals the customer (or student) view of a process rather than the institutional view and provides a greater level of detail than flowcharts, for example (Baranova, 2009). Other process mapping techniques and soft systems methodologies can also be used to determine how students interact with the institution and to identify how and where improvements can be made. The process can then be redesigned. Techniques from the service industry can be adapted and implemented in the modified process. For example, some hairdressing salons use Short Message Service (SMS) to remind customers of appointments. The project at the University of Derby has been trialling the use of SMS to remind students about their system login.
It is not sufficient to simply change a process and then walk away, because ‘fail points’ may have been transferred from one place to another. It is also vital to assess whether the changes have actually improved the process or made it worse. This can be achieved by running a pilot, obtaining further feedback from students and staff alike and iterating through the cycle until the major difficulties have been ironed out. However, process improvement does not end there. Change is a certainty and, over time, there may be other challenges that will have an impact on a particular process. For example, there may be a change to the software used to handle online registration or students may expect to use a personal rather than institutional e-mail address. Therefore, the design and appropriateness of a process must be tested on a regular basis.

For the education sector, the service design methodology approach means that students are the core focus and that process (or service) improvement should be in response to their needs and expectations. (As a caveat, it should be noted that there may be occasional conflicts of interest between staff (or institutional) and student needs and expectations, which would then require further investigation).

3.2 The student voice

It may be considered inadvisable for an institution to assume that it knows what students want, particularly as student expectations change and universities have to evolve in order to respond to the various challenges they face. Nor is it sufficient to explore process improvement from an institution only perspective, because as most of these projects have shown, staff members do not always know what students want or expect.

Placing the student at the heart of the process and finding out about their experience and expectations may produce some surprising results. For example, one of the projects asked students how they felt about the buildings on campus. The university concerned believed that the peeling paint in some of its buildings gave it an air of ‘shabby chic’. However, the students surveyed saw the peeling paint as a sign of neglect. Although this may be considered a minor detail, first impressions count and may affect the number of students who decide to take courses there.

4. Examples of interventions to improve the student experience

This section gives examples of the technological interventions made by piloting small-scale changes to targeted processes in the student lifecycle by some of the JISC SLRM projects.

4.1 Take advantage of existing skills and technologies

Many students, before they even apply to university, are experienced in ICT - from mobile phones to e-mail – but there are also students who are not familiar with these technologies. When students start a university course, there is a large amount of information to absorb, from coping with a new environment to understanding what is required, and studying course materials. Additionally, they are often expected to quickly master e-learning technologies, such as VLEs. Those students, who struggle to effectively manage all these demands, may lose interest and leave their course.

But what if it were possible to reduce this risk? One approach is to help prospective students become familiar with university systems at the pre-registration stage of the student lifecycle, i.e. before they enrol on a course. As well as reducing any stress associated with acquiring the necessary technical skills in the early months of study, it may also encourage students to feel part of the institution at an early stage. Conversion rates from applicant to student may improve, as well as student retention.

For example, Goldsmiths has some ad hoc arrangements in place for prospective students to talk to staff using Facebook and other social networks (Goldsmiths, University of London, 2010). However, on examining whether this approach could be made more effective, the project team discovered that the difficulty does not necessarily lie in whether a student can access such software, but in which social networking service to use. For example, whilst Facebook is well known in the UK and America (400 million users in February 2010 (Facebook, 2010)), this is not the case in other parts of the world, where Orkut (South America and India, 80-100 million (The Economic Times, 2009)) or Qzone (China, 376
Swansea University has taken a more unusual approach to understanding the student’s experience of the pre-enrolment stage of the student lifecycle. The project team has been assessing how students ‘feel’ about the transition from home to the University and during the enrolment process. Focusing on the emotional aspects, such as stress or anxiety, can help to identify potential ‘fail points’ in the process and identify areas where improvements can be made. The project team obtained feedback from surveys and focus groups and from work being done by an MA student regarding the use of social networking sites by students at the pre-registration stage (Swansea University, 2010). Prospective students already use such sites to make friends, organise events and ask questions of their peers, rather than going through more formal channels. As a result of the project at Swansea University, students unable to obtain university accommodation were encouraged to use Facebook to make contact with each other and set up house-hunting groups (personal conversation with Swansea University Project Team, 2009).

4.2 Ensure all students have access to support, advice and guidance

The diversification of the student base means that the universities must cater for those who do not fall into the category of ‘traditional on-campus student’. Students can be work-based, lifelong (or part-time) or distance learners and they all need access to the support and orientation information offered to full-time on-campus students during the induction stage of the student lifecycle. They may also require additional support and expect to be able to choose the format in which they receive such information.

Distance learners, by their very nature, may feel isolated and may find it harder to develop relationships with their peers or staff. The University of East London has run several pilots to test improvements being made at the induction and orientation stages of the student lifecycle. In order to ensure parity of experience between distance and on-campus students, the University has been running a pilot to inform distance learners of the support and guidance that is available to them from Student Services, such as careers, disability, and health. On-campus students can be made aware of these services via notice boards, personal conversations, and access to support staff. For distance learners, much of this awareness raising must be done virtually, so automated welcome e-mails containing important information, such as web-links to support service information, are now being sent to recently enrolled distance learners. Various web statistics are being monitored to test the success of this approach (results not available at time of writing). However, one of the unforeseen benefits has been improvements to the institution’s administrative process (University of East London, 2010).

The establishment of positive staff-student relationships is being tested by a second pilot project. Processes have been put in place to enable tutors to contact and welcome distance learners before they receive their first assessment. Prior to this pilot, the first contact a student had with a tutor was via feedback from their first assessment. If feedback was negative, this had the potential to adversely affect the staff-student relationship. When members of staff were asked about the best format for this initial contact (telephone call or e-mail), e-mail was identified as the preferred option. However, on closer analysis, it became apparent that this was based more on the perception of increased workload and time commitment rather than on the potential benefits for the student. In order to alleviate some of the fears that staff members had, policies have been put in place to assist with time management (scheduling of calls) and scripts to provide a focus and consistency during the call (University of East London, 2010). The success of this approach for the students has not yet been documented, however it is hoped that distance learners will now feel part of the institution and be confident enough to discuss problems at an early stage.
4.3 Improve the ‘servicescape’

On-campus students can spend plenty of time queuing during the registration or enrolment stage of the student lifecycle. This may be unavoidable to some extent, although efforts can be made to ameliorate the process. However, students at Kingston College did not consider queuing too onerous (personal conversation with the Kingston College Project Team, 2009), perhaps because it gives them a chance to meet other students on the same course and interact socially.

If a particular aspect of the process cannot be improved, then it may be possible to make improvements to the environment (or ‘servicescape’) in which it takes place. The University of Derby has been examining the environments in which enrolment takes place. One of these sites is simply a corridor. Whilst queuing may be unavoidable, efforts can be made to enhance the student experience and to benefit from a captive audience. Again, borrowing from solutions used in the service sector, Derby is considering installing plasma screens in this area to provide information on the University (in a similar way to the small advertising and information screens in banks and post offices). This may benefit both the student, who receives useful information and the institution, which is able to disseminate important information in an engaging way (personal conversation with the University of Derby Project Team, 2009).

5. Evaluation

The SLRM projects in the JISC Relationship Management Programme have focussed on making small-scale changes that may have a big impact on the student experience. They have concentrated on small aspects of the student lifecycle to identify areas for improvement and applied service design techniques to home in on the actual issues. Running such small pilots that implement SLRM techniques can help to meet changing expectations, enhance the student experience and may lead to improved retention, grades and cost-effectiveness. Is it possible successfully to use commercial sector techniques and solutions in the education sector? At this stage, it is too early to tell. However, the University of Derby has found that the “blueprint has been widely recognised as a valuable tool to plot out a highly complex student experience and business process and combine this with a clear focus for enhancement effort through identifying fail and wait points”. They also found that “interest in the application of service design and enhancement techniques grew exponentially at Derby as the project developed” (University of Derby, 2010).

Some of the improvements being piloted by the projects described in the preceding section have involved the use of technology outside of the institution’s control and this raises issues around the social ownership of technology. Do students want to receive SMS messages from their institution or do they consider this an unsolicited intrusion? Is the use or monitoring of social networking sites by universities in order to improve the student experience considered to be an imposition on the student’s digital world? (Whilst these issues are of interest, they are outside the scope of this paper).

All of the interventions mentioned above involve ICT in its broadest sense. In other words, technology is being used to improve the communication of information to students. Chambers and Paull (2008) state that the “key drivers of change in student relationship management are the changing expectations of students of their higher education experience, and the way in which they communicate with an institution”. This puts the emphasis on the way in which the student communicates with the institution, but perhaps it is the way in which the institution communicates with the student that is key.

6. Conclusion

The current funding situation means that institutions need to become more cost-effective. Therefore, making the most of the systems already in place, improving processes, and ensuring that the student has a valuable experience may help achieve this goal. This aim is also in line with that of the Government, which states in the Higher Ambitions Report (UK Department for Business Innovation and Skills, 2009) that “…students’ own assessments of the service they receive at university should be central to our judgement of the success of our higher education system. Their choices and expectations should play an important part in
shaping the courses universities provide and in encouraging universities to adapt and improve their service.” It also states that by being more flexible and responsive to the needs of students, the sector can “respond to the changing modes and models of higher education provision” (UK Department for Business Innovation and Skills, 2009).

Using service design techniques in conjunction with the student lifecycle to improve the student experience is very much in its infancy. It also raises many questions around the commodification of education (and ensuring that the views of staff and other stakeholders are also included), a more balanced and effective outcome may be achieved. This paper has already described examples of conflict between staff perceptions and student perceptions, but by exploring these issues further, it is possible to find solutions that benefit both parties.

The SLRM approach may help institutions be more flexible, efficient and effective, and so improve the overall quality of the student experience. Therefore, “applying the principles of Service Design [amongst other techniques] may be an effective way to examine how to improve the student experience and advance the efficiency of the related administrative processes at the same time” (JISC, 2009). Perhaps the key is simply to understand student expectations and provide agile solutions that can easily be updated to meet future challenges.

7. References


Goldsmiths, University of London. 2010. GoSLuRP Draft Case Study (the final version of this report will be publicly available in late 2010).


Swansea University. 2010. EITM Draft Case Study (the final version of this report will be publicly available in late 2010).


University of Derby. 2010. DERBI - Development and Enhancement Review of Business Interfaces: Final Report (this report will be publicly available in late 2010).

University of East London. 2010. CABLE Draft Case Study (the final version of this report will be publicly available in late 2010).