



Project Document Cover Sheet

Project Information			
Project Acronym	DERBI		
Project Title	Development and Enhancement Review of Business Interfaces – SLRM Pre-registration to Teaching and Learning		
Start Date	29 June 2009	End Date	30 April 2010
Lead Institution	University of Derby		
Project Director	Sue Morrison		
Project Manager & contact details	Jean Mutton j.mutton@derby.ac.uk Tel: 01332 592299		
Partner Institutions			
Project Web URL	www.derby.ac.uk/experience/JISC-enrolment-project		
Programme Name (and number)	OSDEVA02 LIFECYCLE REL MAN		
Programme Manager	Myles Danson		

Document Name			
Document Title	Case Study		
Reporting Period			
Author(s) & project role	Sue Morrison, Project Leader Jean Mutton, Project Manager		
Date	2010_04_29	Filename	
URL			
Access	<input type="checkbox"/> Project and JISC internal		<input type="checkbox"/> General dissemination

Document History		
Version	Date	Comments
1.1	2010_04_29	



**STUDENT LIFE CYCLE RELATIONSHIP
MANAGEMENT**

DERBI – Development and Enhancement Review of Business Interfaces

CASE STUDY

Authors:

Sue Morrison, Senior Assistant Registrar
(Student Experience)

Jean Mutton, Project Manager

April 2010

Table of Contents

Executive Summary	Page 2
Introduction	Page 3
Methodology	Page 4
Scope	Page 5
Theoretical Underpinning	Page 6
Research	Page 6
Artefacts	Page 9
Application of Technology	Page 10
Qualified and quantified impact of interventions	Page 11
Appendices (see Final Report)	

Executive Summary

Service design as an approach, where the end-user is the main focus and co-producer of the service is a relatively new concept to the higher education sector. In the current climate, it is not so much about the product, but how the user interfaces with it that matters. We were keen to review the whole student experience of the transition from applicant to enrolment as we saw this early encounter with the university as pivotal in building good student relations.

This study has found that, as in many large complex organisations, there are many disparate actors, systems and processes involved in the service delivery and too often staff work in silos with little or no understanding of the personal impact of the student journey. Our approach to break down these barriers was to engage the end-users, both staff and students, to draw up a service design blueprint (Appendix A), using Visio, viewed entirely from the student perspective. These student

'touchpoints' were analysed and using 'swim lanes', all front and back stage operations were identified and the interoperability of the nature of the service was laid out, for the first time, in its entirety.

The technique has proved a powerful tool in engaging not only staff involved in the processes but also management, who can see clearly, in diagrammatic form, both the complexity of the system and how it holds together. The identification of fail and wait points has proved a very powerful approach to focusing effort on enhancements where the biggest impact will be made to the felt student experience. The blueprint has also fostered empathy, and has helped staff to understand the role others have to play in delivering the service. In developing a new, holistic, service enhancement plan we have been able to say that we have planned and mapped out improvements and interventions with the key stakeholders. However, the fundamental change has been in rather than assuming that what we knew, or thought we knew, would be best for the students, we have actively sought their input as end-user designers and co-producers of their own student experience.

Introduction

The student transition, when an individual's status changes from an applicant to a student, is considered to be a significant point in student relationship management, especially the point of enrolment. If a student has a poor experience early on in their relationship with the university, they may not be in a position to take their custom elsewhere (there is a whole separate debate about students as customers), but a single 'moment of truth' may colour their student experience, and an early negative impact can affect student retention, academic engagement and achievement, and result in poor feedback in surveys such as the National Student Survey, as well as an increase in complaints. Students will be less likely to want to be ambassadors for their university, or recommended it to their friends and family. From a staff perspective, enrolment can be a very stressful time due to the sheer volume of students passing through the various stages, both at faculty level (where programme induction and advice on module selection takes place) and in central departments, such as Finance, and the Student Records and Fees Unit (SRF) which manages student enrolment at Derby. The cost to academic and administrative staff time in dealing with problems and queries arising out of issues around enrolment has not been calculated, but feedback tells us that there is too much 'fire-fighting'. Precious resource is diverted to solve on-the-spot problems which improvements to the system would alleviate, enabling more time to be dedicated to providing a better service.

Another factor which is impacted on directly by poor enrolment practices and procedures is data quality. At Derby we are unusual in that we capture a comprehensive range of data and information as part of our online enrolment (OLE), including biodemographic data, information on programme and module choice, and also fields required for the HESA return. The data collected has multiple uses as it is an integrated student record, finance and customer relations management system which links to the virtual learning environment, IT and library access, and halls of residence.

In the September 2009 enrolment 7243 students enrolled online (47%). This was a 25% increase from the previous year, where 5807 students completed OLE. There was a 12% increase in confirmed enrolments, from 12,743 in 2008 to 14,298 in 2009. We have run an annual survey following the main enrolment period in September

each year for the last five years. Although there has been steady state growth in the numbers engaging with OLE, the service standard has remained largely the same, although feedback from these and other surveys has shaped some developments and improvements to the service. In September 2009, returning students were asked whether their enrolment experience had improved from last year. Of the students who enrolled at Kedleston Road 36% rated their experience better than in 2008, 20% felt there was no difference, while 39% found it worse than last year.

However, despite some improvements to the service, there is still negative feedback from students and staff relating to a wide-ranging number of aspects of the process. The three areas that most students commented on were the organisation of the enrolment process, the time taken to complete enrolment, module selection and communication between the university and themselves. The following are examples of student frustrations:

"I enrolled online to make it easier but because I changed from joint honours to single honours I was sent the wrong enrolment time to attend and therefore I was sent back and forth explaining my situation to many people before anyone would enrol me. It took me very much longer than it should have done because nobody seemed to understand the situation."

"Communications between the university in any form, mail, email or telephone are still very poor and need a good deal of improvement. For example, I never receive any information through the post".

Open comments such as these, as well as analysis of the survey outcomes and other research outputs have all shaped the actions identified in the new 40 point service enhancement plan which was informed by outcomes arising from research undertaken on the project (Appendix H).

In responding to the project call the university saw the opportunity to address these issues as well as explore service design as a technique to improve processes; review the efficiency and effectiveness of the service, and engage all stakeholders in an appreciation of the complexity and diverse nature of the operation. In addition, the project has brought benefits in raising staff awareness to the possibilities afforded by applying service design techniques and tools which allow review and service enhancement from the end-user perspective to other areas of the business, e.g. finance, assessment, alumni relations, and academic quality-driven processes such as programme validation and re-validation.

Methodology

The approach adopted was one of inclusivity and research was conducted with key stakeholders using the following methods:

Primary research:

Staff focus groups

Student focus groups

One - to - one interviews

Pilot/trialling

Video feedback

Mystery shoppers

Timing techniques (queuing, time-cards etc)

Observation

Secondary research:

Outcomes from previous staff and student questionnaires
Selection of programme and subject area annual monitoring reports
Selection of External Examiners reports
Enrolment Planning Group minutes and action plans
Process reviews
Mapping of student communications

Appendix B gives the log of consultation with staff and students, and Appendix C is more detailed information about the focus groups – how they were conducted and key topics covered. Appendix I sets out a framework for the engagement of students in service design and enhancement, building on the culture of inclusivity already in place at Derby, and incorporating lessons learnt through participation in the project.

Scope

The project did not look to develop any new technological approaches to enrolment support, but reviewed where value could be delivered from a student experience perspective of the service design, intending primarily to focus on the experience of full time undergraduate new and returning students, at two enrolment points, September 2009 and January 2010. As the project progressed it became clear that the original scope of the project was too generic and ambitious in seeking to map out the experience of a range of student types. We have calculated that there are potentially more than 15 different faces to the student experience, including International, mature, part-time, collaborative, e-learning, etc. When we came to draw up the blueprint it was clear that the level of detail required made it necessary to refine the cohort to one particular type of student. The 'persona' we chose was a first year undergraduate student following the Joint Honours Scheme, this route through the student experience being fundamental to the design of the service and our thinking was that we could build on what we learned from this blueprint to map out the experience of other types of student. The two enrolment points identified were both explored but the short space of time between project approval and the September 2009 intake meant that there was little time for any major review planning. In January 2010, some limited interventions were explored: there were favourable responses from both staff and students to the introduction of a 'steps' guide which set out the sequence of operations needed to complete enrolment. We also trialled the use of plasma screens on which we showed information relating to orientation and induction activities, to improve the servicescape for students waiting in queues.

The project looked at the overarching framework of the student transition from applicant to post-enrolment, but did not focus on operational issues or a failure to comply with the precepts of that framework, eg validation and/or curriculum build on the student records system, unless these aspects touched directly on the student experience. Areas which were directly relevant to the student experience were identified through process mapping techniques. However, the techniques learned as part of the project in service design mapping have been embraced by managers in the Quality Enhancement Department (QED) and the faculties, who are about to embark on a review with end-users of the processes supporting programme validation and re-validation, in a workshop format supported by members of the project team. This work is still in its planning stages, but there is already evidence

that the blueprinting approach, with its holistic approach to enable mapping of the front and back stage operations, above and below the line of visibility, will capture the essential complexity and interoperability of a cross-institutional function such as programme validation.

Derby has previously undertaken a project looking at enhancing the student experience of online and distance learners and this project dovetailed with the work being carried out by the Online Distance Learners Project Team.

Theoretical Underpinning

One of the first actions of the project was to employ an academic member of staff, as business consultant, who is an expert in service design, who has contributed both advice and guidance to the team as well as training sessions for staff in service design and service improvement techniques. Appendix G is a paper outlining the theoretical framework behind Derby's approach to service design and the production of the blueprint. In the longer term, it is the intention to submit articles to academic journals on the application of these principles, and also to present at relevant professional conferences.

Research

In 2006, Derby set out a three-year Student Experience Strategy (SES) which included, among other innovations, a dedicated focus on capturing the student voice. Student 'Feedback' campaigns were launched and a 'You Said It, We Did It' follow-up campaign to demonstrate to students and staff the actions taken arising from feedback has followed every survey. The SES has become a core strategy for the university and in 2009 a new three-year strategy was launched. The project was therefore very much the 'right time, right place' for Derby and the team were able to build upon a culture where there was an appetite for change and the student voice already had a platform.

One of the innovations which has proved successful in capturing student comments which we have used in the past is the Vigloo – a portable booth for groups or individual students to video their free comments or responses to set questions. This footage has been used in several ways including information for applicants, new students and has proved a particularly powerful tool when shared with managers. The project team decided to take this approach further and issued three students, one new and two returners, with video cameras to record their emotions, impressions and frustrations of their first four weeks of the semester. We employed eight 'mystery shoppers' through the university's Student Employment Agency (SEA), who gave us written and verbal feedback about their experience of the first four weeks of the semester, with a particular focus on enrolment. So, from the outset, the student voice was very much an integral part in guiding the service enhancement plan. Although the call for students to take part in the project went out through the SEA website, we were lucky in that we had a good mix of joint and single honours, new and returning students from each stage, although there were no post-graduate, sponsored or part-time students. It is anticipated that these other types and modes of study, giving rise to different student experiences, will be explored and mapped out in future activities.

Having a student on a year's placement working directly for project has also proved very valuable:

"I was really excited to have this opportunity to become involved in such an interesting project. As a student on work placement, I felt I could offer an honest and clear perspective on what enrolment is like for students. During various meetings and focus groups, I have felt confident to offer insights into the student experience behind enrolment as it is currently as I thought it important to make the university staff and academics realise what enrolment is really like for the student population. I have thoroughly enjoyed watching this project progress and unfold and I am eager to see the changes being put into place for when I go back to enrol as a student."

*Rachel Crane
Student Placement/Project Administrative Assistant*

In order to begin to define the process steps and student touchpoints which make up the journey from applicant to enrolled student, we commissioned two training sessions on the theory of service design and techniques for blueprinting from the project consultant. Using local knowledge, key staff from each of the critical areas were personally invited to attend one of these sessions. Following each session, these staff then worked with the Project Manager to map out the roles which they and their departments had in the student transition process. The interoperability of the processes began to emerge and the actors and actions, both above and below the line of end-user visibility, were mapped out and connections made. In the end three such workshops were held, between September and November 2009, to ensure that all relevant aspects of the service were captured.

The information gathered during these workshops was collated and captured in the blueprint, which has become the main artefact of the project. It is a living document and will be used to continue to refine the systems and processes it describes. The identification of the key fail and wait points, drawn from the end-user feedback, will enable the project team to drill down into these aspects of the service delivery and make recommendations to managers to focus resources to best effect. Staff not necessarily directly involved with the project were also invited and took back to their own workplaces the methods they learned in reviewing service design.

"I attended one of the Service Design workshops, and worked on the initial Blueprint for our enrolment process. It was really enlightening to place myself as the student and imagine the experience from their standpoint, rather than putting process first, which we do too often. After seeing the outcomes broken down into a service design plan with such tangible elements I can really see where I can apply this to other processes that my team work on"

*Beverley Matthews
Programme Advisory Service Co-ordinator*

Data collection was wide-ranging and included time-cards which students were asked to fill out to show wait times for various key stages of enrolment (self-service, confirmation, and collection of the ID card) during full-time enrolment week in September 2009. The data was analysed using a statistical technique called Weibull analysis. Figure 1 shows the outcomes for the confirmation of enrolment stage.

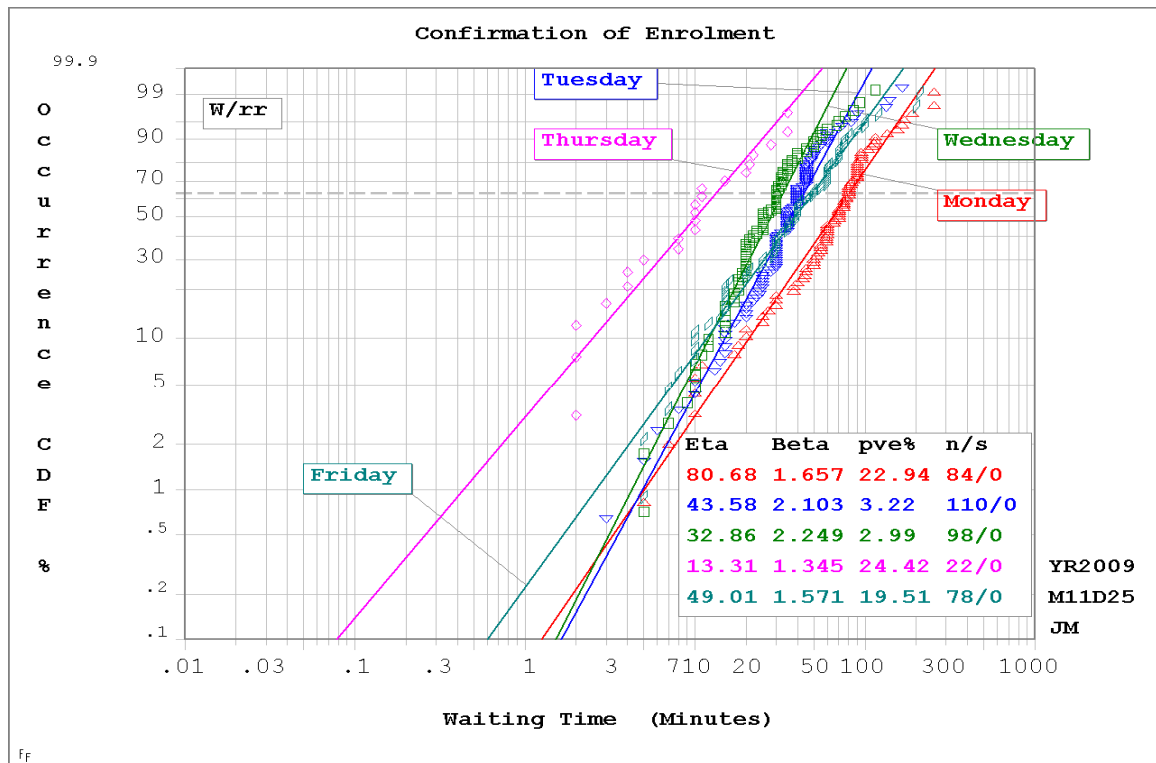


Figure 1: Weibull analysis of time taken to complete the confirmation of enrolment stage (Sept 2009)

Here, eta is the average time or duration in minutes (on a log scale) a student has had to wait for that part of the process, and beta is the consistency of that outcome. A high beta shows high consistency (low spread), where the process is under control and repeatable. A low beta shows low consistency (high spread) where students experience a large variation in duration. The graphs showed us that the experience of wait times varied greatly from day to day across the week, which we have determined is due in part to students and staff not adhering to the published schedule and turning up as and when, resulting in large queues not just for themselves, but also for students who have kept to a scheduled appointment time for their enrolment slot. One outcome of the project is to work more closely with staff in the faculties to foster an understanding of the impact of not adhering to schedules in such a pressured and complex undertaking as taking over 10,000 students through the enrolment process in the space of five days.

We knew from both the student enrolment system and the numbers of students progressing through self-service enrolment on campus that the numbers managing to complete OLE remotely were lower than expected. In order to address queues and afford a better overall service, greater numbers need to engage with OLE before they get to campus. In trying to determine at what point students were dropping out of OLE, we hit a wall, in that the data was over-written on the student record system once the students had accessed their account on-line and completed enrolment. However, a few months into the project we discovered that one area, the team supporting the Joint Honours Scheme (JHS), had archived data they had collected on a daily basis during the two weeks prior to full time enrolment week. The team had monitored returning students accessing OLE, in order to provide targeted support and guidance to those who had halted their progress part way through. This data was analysed and we learned that a major fail point was the module or course selection (see Figure 2). For this particular cohort of students this may be because

the Joint Honours Scheme is more complex given the number of modules which can be selected, but other research (focus groups and surveys) have borne out that the lack of a module catalogue on-line is a major block to students completing OLE.

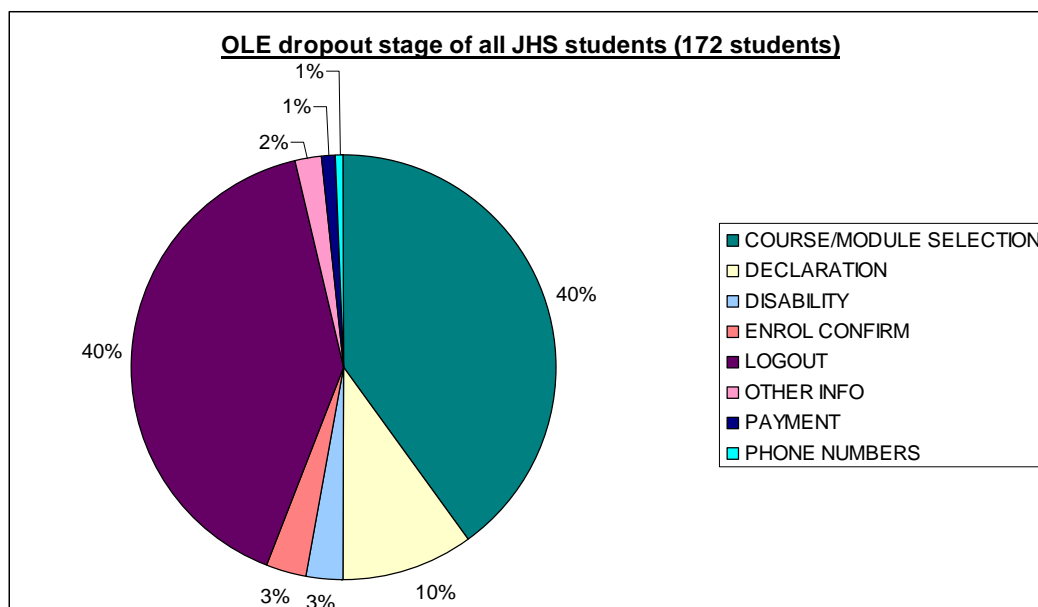


Figure 2: Reasons for ending OLE by JHS students (Sept 2009)

Artefacts

The principle artefact from the project has been the service blueprint (Appendix A). Here not only the process flow but also the front stage and back stage operations are set out, clearly showing the tangible and intangible evidence, actors and actions which relate to each student touchpoint. As the project progressed it became clear that we had been overambitious in determining what we could realistically map out over the lifetime of the project. At an early point in the project, we decided we had to drill down to just one cohort of students (first year students on the Joint Honours Scheme) in order to produce the level of detail required to be confident that we had captured all the touchpoints. It is the intention to use the technique to map out the experience of other types of students and modes of study, and there has been particular interest in drawing up a blueprint to show the experience of International, part-time and also professional and sponsored students. The latter is especially relevant to this funding stream and would place the employer as a key stakeholder in the design and implementation of the service, in line with the JISC business and community engagement programme.

It is intended to produce a rich media (video) professional discussion with the project team talking through the project planning and management. The list of topics to be covered include: how we managed the project in the complex organisation; project governance; confidentiality; interoperability; internal politics and engagement and the need for inclusiveness. We would also cover the importance of co-creation of the service; the need to challenge and question everything; the skill sets needed to undertake service design; how and why you cannot take a designed solution out of its context and expect to apply it elsewhere.

Application of technology

Key learning points from the SRLM project at Derby includes the potential application of technology for planning and scheduling induction programmes for students. The project has identified issues with elements of induction being planned in silos and the student experience therefore not being one which hangs together as a coherent programme. This disjointedness has implications for timetabling, staff scheduling, communication to students, offering elements of induction more virtually, facilitating online student debate etc.

The Customer Relationship Management functionality for enrolled students is currently a Marketing Department-led development. Exploiting the functionality for current students would enable us to be more sophisticated in developing an understanding of student groups and to personalise communications. For example to link student bio-demo data and programme/module registration data with survey feedback, and questions asked through web-based support systems like Derby's 'Ask Me' (<http://ask.derby.ac.uk/current>) viewed alongside the extent to which students link through to web materials sent in email newsletters (currently we are using Quba mail, rather than CRM so there is no linking available) would provide valuable insights.

One key recommendation from the project is that continuing students are engaged in decision making about module choices in the Spring Semester for the next academic year, rather than focusing registration in September. This requires an online module catalogue (not yet available), starting to use functionality in our student record system to capture pre-enrolment module data, automating registration for core modules where students have met pre-requisites and accumulated sufficient credit. This would further benefit from virtual academic guidance, rather than reliance on group lectures, face to face 1:1 sessions or module choice fairs. The recent introduction at Derby of the virtual networking platform WIMBA classroom will help to support this development.

We have looked at data auditing as a peripheral part of the SLRM project; ensuring that data is correct to make online enrolment right first time. There is potential for a system of exception reporting and communication with students about gaps or inconsistencies in data. This is something we have looked at previously and are capable of rolling out with the right drive behind it.

In the project we have looked at managing demand as an approach to improving the service. Derby has used online enrolment for several years and we are making a series of recommendations about further improvements. Not all universities have OLE and therefore do not have that option. One of the points of improvement at Derby is having a focus on the support for students during OLE in August. At the moment we deliver the service through phone and email. There are ways to use different technology to improve this service, eg issue of usernames and passwords is a fail point for us (over 6,000 were re-issued in September) and we are addressing this by using student communications to prompt re-sets for existing students, as well as working with our technical colleagues to develop a procedure to text the numbers out to new students.

The use of networking tools such as blogging and Twitter have been a fresh approach for us, but have proved effective in sending out notices, referencing important information and sparking debate, and now have an established place as an aid to project management.

We used Visio as a relatively simple mapping tool to draw up the blueprint. We have also explored a commercial product called Triaster which affords additional functionality, such as the production of job descriptions for key 'actors' in the process, and file-sharing capabilities, but we want to explore the licence-free tool, ArchiMate, which also builds on from Visio.

Qualified and quantified impact of interventions

This is difficult to assess at this stage given that the majority of the interventions will take place in September 2010 or later so the full impact may not be known until post-Sept 2011. Key interventions planned for Sept 2010 include:

- Introduction of an enrolment 'guide' for all new students, with information about the benefits of enrolment and including a site map;
- Working with the Customer Service Manager for DSRL Ltd, the company which runs the halls of residence, on the welcome packs which students receive when they move into halls, outlining the three key activities they need to do to aid orientation, and to complete enrolment (being attend programme welcome meeting where they will confirm their module choices with their tutors; pastoral support inductions where they will meet their faculty Student Liaison Officer, their Union reps and other support service staff, and also their dedicated enrolment slot);
- Tying in the use of colour-coded flags with the 'guide';
- Jargon-busting and review of all communications;
- Introduction of customised t-shirts for all staff supporting enrolment to aid visibility;
- Introduction of texting for key messages such as ID numbers and passwords;
- Change the layout of the rooms used for enrolment to aid flow through and queue management;
- Addressing the servicescape – including use of plasma screens showing information about the university etc
- Staff training to ensure that staff build up specialist knowledge in particular areas to provide better service;
- Putting trained staff into key areas which are current fail points such as 'meet and greet';
- Improvements to the OLE screens drawing on end-user feedback to foster better engagement and data capture;
- Smoothing the service by looking to move as much activity outside of full-time enrolment week as possible.

The current and potential impact of student lifecycle management systems on the key stakeholders/future plans is detailed in the service enhancement plan (Appendix H), one crucial element of which is the definition and clarification of student minimum entitlement of the service delivery against which the service will be evaluated in the future. This will be a major focus for further work arising from this project.