### Project Information

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<th><strong>Project Acronym</strong></th>
<th>SETL</th>
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<td><strong>Project Title</strong></td>
<td>Student Experience Traffic Lighting</td>
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<tr>
<td><strong>Start Date</strong></td>
<td>1 March 2011</td>
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<td><strong>End Date</strong></td>
<td>31 August 2012</td>
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<td><a href="http://www.derby.ac.uk/sss/JISC-projects">www.derby.ac.uk/sss/JISC-projects</a></td>
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<td><strong>Programme Name</strong></td>
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### Case Study Name

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<thead>
<tr>
<th><strong>Case Study Title</strong></th>
<th>Engagement Analytics – scoping early indicators for spotting students ‘at risk’</th>
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<tbody>
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<td><strong>Date</strong></td>
<td>31 August 2012</td>
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</table>
### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1 - Executive Summary</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Section 2 – Research Ethics</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>Section 3 – Approach</strong></td>
<td>4</td>
</tr>
<tr>
<td>3.1 Research Methodology – Service Design</td>
<td>4</td>
</tr>
<tr>
<td>3.2 Literature Review</td>
<td>5</td>
</tr>
<tr>
<td>3.3 Focus Groups</td>
<td>6</td>
</tr>
<tr>
<td>3.4 Engagement Analytics (Figure 1 Diagram)</td>
<td>7</td>
</tr>
<tr>
<td>3.5 Data Mining</td>
<td>8</td>
</tr>
<tr>
<td>3.6 Desk-based Statistical Research</td>
<td>9</td>
</tr>
<tr>
<td><strong>Section 4 - Technical Development</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>Section 5 – Implementation</strong> (Figure 2 Blueprint)</td>
<td>11</td>
</tr>
<tr>
<td><strong>Section 6 – Potential Pitfalls</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Section 7 – Measuring Success</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Section 8 – Benefits and Impact</strong></td>
<td>13</td>
</tr>
<tr>
<td><strong>Section 9 – Summary and Conclusions</strong></td>
<td>14</td>
</tr>
<tr>
<td><strong>Section 10 - Further information</strong></td>
<td>16</td>
</tr>
</tbody>
</table>
Acknowledgements - This project was conducted with support from the JISC Student Lifecycle Relationship Management (SLRM) funding stream. We wish to acknowledge the support of academic and administrative colleagues and especially the students at the University of Derby who provided of their time to help scope out the requirements for the indicators of engagement. We are very grateful to the guidance and direction given by Myles Danson, the JISC Programme Manager, Lauren Currie, our Critical Friend and Service Design expert, and the help and support given by the staff at CETIS, especially Sharon Perry.

SECTION 1 – Executive Summary

The University of Derby is a large and complex organisation with over 23,000 students and 2,600 staff. Being relatively successful with widening participation initiatives, Derby has a very diverse student body with fewer than 50% of students coming straight from school. The student population contains an above the average number of students who are ‘first in family’, those carrying caring responsibilities (hence we attract a lot of locally-based applicants), students who declare a disability, many of whom have support plans in place and also a significant number of mature students, who may be returning to learning after many years outside of the education sector. Factors such as these are known to predispose students to be more likely to have a depressed student performance and retention rate (Bowl 2003). Indicators of engagement can help staff recognise where students from non-traditional backgrounds are falling away from their studies, failing to settle into their life at university or not achieving their full potential.

We applied service design and enhancement techniques to three aspects of the student lifecycle: induction, learning and teaching and pastoral care in order to improve retention, progression and completion through identification of early indicators of students ‘at risk’. Aspects of the student journey were mapped using service blueprinting, and student personas and storyboarding were employed to better understand how and when timely interactions and interventions could support and re-engage students.

The project has increased our understanding of operational processes as well as scoping out the data requirements for a ‘dashboard’ of indicators which will throw a light on student engagement, or the lack of it. This is in relation to both students’ academic studies and in their wider connection with university life. At the outset we anticipated that we would be scoping out the requirements for one data dashboard which would be of use to staff in a pastoral role, eg personal tutors. As the project progressed, it became apparent that there would be an appetite for a student-facing product also. It also became increasingly clear that different types of staff would require different sets of information and the shape of the product began to form. Ideally the data dashboard would be customisable and would offer the opportunity for staff to have meaningful conversations with students which would add value to the tutor/student relationship.

We have called this approach ‘engagement analytics’ as we looked to go beyond the ‘hard data’ capture of ‘learning analytics’ already in use around the sector (this may include footfall in the library, access to the virtual learning environment (VLE), attendance monitoring, etc). In viewing the student experience going beyond the classroom, we worked with a range of stakeholders to take account of engagement indicators relating to a student’s sense of ‘habitus’ or belonging, which can play just as important a part in their overall felt student experience, such as being a student...
rep, volunteering, transfers between modules or subjects of study, time out, resilience and preparedness for study, etc.

Through this work, the project has informed wider policy discussions regarding student perceptions of engagement, value added, non-continuation, non-completion, achievement, efficiency, business intelligence, the data journey and quality standards. The outcomes of the SETL project will be of value to members of the wider higher education community who are designing and enhancing services to students; seeking to engage students as co-designers of their own experience, and those seeking to develop effective approaches to identify and support students at risk of withdrawal, non-completion or not progressing at the pace intended at enrolment.

SECTION 2 – Research Ethics

There had been some discussion quite early on in the Project Steering Group about the need to seek approval from the University’s research ethics committee. This was a bit of a grey area for the project, as, normally, student feedback (satisfaction surveys etc), is gathered without any additional informed consent. However as it became clear that there would be a need for a series of one-to-one interviews, it was agreed that approval would have to be sought. This proved problematic as the requirements of the ethics approval mechanisms necessitated a clear overview of not only the range of subjects to be invited to contribute but also among other things a more detailed consideration of the areas of questioning, which did not sit comfortably with the service design approach. Eventually approval was granted but this was quite late on in the life of the project (March 2012) and meant that some time was lost.

SECTION 3 – Approach

3.1 Research Methodology – Service Design

“In analytical thinking, emotion is seen as an impediment to logic and making the right choices. In design, products without an emotional component are lifeless and do not connect with people. Emotion needs to be thoughtfully included in design decisions”. (Saffer 2010)

SETL has built upon the success of the previous JISC Development and Review of Business Interfaces (DERBI) project, which reported in July 2010. That work broke new ground in the use of service design approaches to define current delivery and develop service enhancement around the student transition into higher education (HE). DERBI led to changes in processes and relationship management, and resulted in significant enhancement to the student experience as evidenced by student satisfaction scores, and other metrics such as timing around queuing. Out of this work, the project team produced a Guide to Service Design for Further and Higher Education, (Baranova et al, 2009).

Our SETL Project Steering Group, led by a Dean of Faculty and with representation from each faculty and relevant department, including IT, Student Services, Registry, Statistic Unit and the Students’ Union, met regularly throughout the life of the project. This not only ensured inclusivity but also eased communications with the wider university. By taking this holistic approach and without any one area having a particular agenda we were able to allow the development of a set of requirements to grow organically, following service design practice: Discover – Define – Develop – Deliver. However, this approach is largely at odds with current received project management practice and in an environment where staff groups are used to being led to a particular business improvement outcome, there were significant challenges
along the way. Rather than begin the work with a clear determination of what was needed, we took a different journey – one through abstraction, rather than one which took us directly from A to B, or built on what we already had or could access. There was a challenge in communicating this truth to staff and there were quite a few ‘hold your nerve’ moments when it became apparent that we did not have any particular goals other than the broad brief of wanting to offer the right support to students at the right time. We already had existing systems to gather some engagement data, but we did not just look to make the ‘wrong thing righter’ (Seddon, 2008). Instead, we watched, listened and looked at what really matters to the end-users, be they staff or students. It was not always a comfortable journey and we did not always end up where we thought we would be, but we ended up with a richer product and a shift in thinking about how we approach our student relationships.

Research was conducted with key stakeholders using a variety of methods: - Quantitative and Qualitative evaluation of data to identify students ‘at risk’; staff and student focus groups; one - to - one interviews; development of student personas; storyboarding; service blueprinting; pilot/trialling; video and audio feedback; outcomes from staff and student questionnaires; process reviews and mapping of student communications.

We worked with teams of staff to put together a set of student personas. By introducing their ‘student’ to the group and answering questions about motivation, expectations etc, they were encouraged to think more about the student’s backstory and what they would be bringing to their student journey as individuals.

“It’s been hard at times, but the thing that keeps me going is knowing how far I’ve come. I’m not stupid and I can do this, despite what people tried to tell me before I came back to education after twenty-something years out”

Stage Two Student, 2012

These personas were then used in further work on storyboarding students’ experiences of leaving university – what hoops they had to jump through and their emotional journey leading up to and after the point where they made their decision to go. This led is us to review how we support students through this process, capture information about their decision and, crucially, what we do with the data. We collaborated with staff at Nottingham Trent University who were concluding a three year project on retention and engagement (the HERE project). Their work had focused on student ‘doubters’ and what made the difference in the decision to stay or leave and how staff could support students through this often difficult time. We also conducted a sector analysis of the withdrawal process for those institutions in the University’s benchmark group and others in the local area, using ‘mystery shopping’ techniques. The report analysed how accessible the withdrawal information is for students who wish to leave that university. From the report’s findings, there were only a few examples of good practice and, in general, we concluded that the accessibility of information about leaving was unsatisfactory across Derby’s benchmark group.

3.2 Literature Review & Sector Analysis

In order to set the project within the context of work that has already been completed on the subjects of engagement, retention and withdrawal, a review of the academic literature was necessary. This review was roughly 3,500 words and included over 50 works from a variety of authors.

In summary, the vast and complex range of literature on the subject is written from numerous different perspectives. The most well-known authors are probably Vincent Tinto (1975, 1987 & 1993) and Mantz Yorke & Bernard Longden (2004 & 2008). Whereas some authors have focused on broad national statistical data surrounding
retention, others have used general social and educational theories to try and explain successful strategies for retention. Various other authors have used case studies exploring reasons for withdrawals, withdrawal-predictions and also preventative learning and teaching practices.

It is very clear from the range of literature that student withdrawal and retention is seen as relevant in every aspect of the student experience. It is quite clear that neither adopting one unique approach nor improving one single area can provide a solution to better student retention; a number of different but complementary approaches and issues must be addressed in order to solve the problem (Siegel, 2011). Within some of the University’s collaborative work with Liverpool Hope University, the transition from FE to HE was highlighted as a particularly important focus area for this subject: how students adapt throughout their first year is seen as essential to determining how they will progress throughout their whole degree (Elander et al., 2009 & Norton et al., 2011).

3.3 Focus Groups

One of the most important parts of the project’s research was to conduct research, in groups and in one-to-ones, with students and staff from academic, support and administration roles. Consultation with these groups of stakeholders unearthed a number of key messages that the project was able to build upon.

The consultation with staff was probably simpler to conduct than with students. This was partly due to the complexities around research ethics, but also because staff were more readily available and willing through the project’s steering committee, with representation from all faculties within the University. These members of staff were used to gather interest in the project from colleagues and also to arrange suitable arrangements for focus groups. These focus groups took place both as stand alone workshops, but also as part of subject area and faculty meetings, in which up to an hour at a time was allocated for the project team to gather necessary feedback.

One of the messages consistently raised by staff is frustration that the different student data systems are not coordinated with one another. The University uses a variety of different record systems such as different variations of PeopleSoft, RMS and Serengeti to name but a few. Many departments also store their records on specific systems or databases that only they can access. This message is also backed up by the engagement analytics research which discovered that the entire student data desired for a possible dashboard is held across at least seven different IT systems.

We began by asking students what mattered to them and then we asked staff which data analytics they believe should be included in a student’s profile. Staff stated that having easy access to a more joined up ‘at a glance’ product was crucial to fully understand and appreciate at an individual level the core information about a student. For example, a profile that links up absences with access to the library and VLE would help a personal tutor see when a student is still engaging with a module’s learning resources, even in their absence from the lecture due to illness or a conflicting engagement. There were some concerns about how students would feel about this monitoring. However, there had been positive reactions to the introduction of the attendance monitoring pilot in 2009, which is now rolled out across the institution. Possibly because SETL was seen as a further development of that product, there have been no objections raised, other than accessing information which would normally fall under the protection of confidentiality (eg support plans, financial support etc).
Students were a key part of this research stage in the project; contact with these was done in a variety of focus groups and one-to-one discussions. The students involved were chosen in a variety of methods; some were chosen at random, some were suggested by a Student Liaison Officer who had some knowledge of their experiences, and others were recruited through a semi-selective process via the University’s Student Employment Agency.

Throughout consultation with the students, the focus of discussion was about their experiences rather than their opinions on a potential dashboard as we did not want their input to be clouded by any prescription of what the end product would be or what it would look like. Rather we were interested in what really mattered to them and their student experience.

There was a wide variety of experiences but a few common messages came out of this process. In particular, assessment came across as a major focus of concern for students. This was a particular issue for those who were doubting whether they should stay, or leave, or transfer, with feelings of not being able to cope with the workload or being unsure about whether they would be ‘good enough’. Many others also felt unsatisfied with their course because it was not how it had been portrayed during the application stage and/or it was not as challenging as they had expected; students expected to, and wanted to, work hard for their degree.

With regards to the social and personal side of university life, some students also spoke of feeling rooted and connected to the university community in the early stages, whilst others felt it had taken them some time, often several months, before they had ‘settled in’.

“I found it really difficult to go through the first few weeks; you feel like you’re living a whole new life, you have to take care of yourself, your studies, your finances, and so on. As all of these things fell on me in one day, it felt quite overwhelming”

New student, Stage One, 2011

It was also noted that activities and/or friends separate from one’s course were also useful in providing some sort of break from their studies. The overall theme of the students’ comments and feedback during this stage of the research was that they were most driven and motivated when they could see for themselves their own academic, social and personal development. This led to the idea that there should be a student-facing dashboard which may include a base-line self-assessment element so that they could see how far they had travelled on their own student journey. We also discussed the possibility of including some form of individual measure of attainment or engagement against that of the cohort so that each could get a sense of how ‘well’ they were doing vis a vis fellow students. However as this could have a very negative rather than a positive effect on a student’s well-being and confidence it would have to be very thoroughly thought through before implementation.

3.4 Engagement Analytics

The analytics diagram was created quite early on in the project to facilitate a better and more holistic understanding of the student experience in relation to the concept of engagement. The diagram was initially drawn up to capture the different influences on a student’s decision of whether to stay or withdraw, however it soon became a method of also interpreting the importance of each analytic, as well as how each related to one another. The process of creating the diagram was useful to stakeholders in the project to critically think and reflect upon the concept of engagement and try to relate it to particular students that they have assisted
previously. Additionally, this also fed well into the literature review, providing real experiences to relate to when discussing the definition of engagement.

Ultimately, the diagram was a useful tool in the early stages of the project to visualise what any end-product (staff or student data dashboard) might look like. It also highlighted the problems that would arise with the collection of student data surrounding each of the analytics.

*Figure 1: Engagement Analytics Diagram*

![Engagement Analytics Diagram](image)

3.5 Data Mining

How student data was or could be used in the project hinged around the question ‘who owns the data?’ and for us fell into three categories:

1. To support project research, raw data was mined from the student records system and CRM database to inform statistical analysis of patterns of student behaviour around withdrawal and subject transfer;
2. The on-going use of live data held within the student record and other sources of information to make up the content of the engagement ‘dashboard’;
3. Where the data was held and how it could be accessed.

At Derby we already had a clause within our student contract (which every student signs up to at enrolment) which meant that we could access their information for any purposes which would be of benefit to them during their period of study and we had to remove some items from the original dashboard which would not be released for confidentiality reasons as detailed above. The harder to define areas of behaviour-type indicators and predisposed vulnerabilities (such as first in family or carers) could
often not be captured or drawn from any records system and so were lost to the dashboard.

We explored how the university currently used any ‘hard’ data around learning analytics, and it transpired that there was student-related information readily available or which could fairly easily be made available such as:

- the Talis system which holds information on borrowing of books / journals down to student level, including information on which students have never borrowed a book or journal from our libraries. To get this data would be relatively easy although it would involve the purchase of software (Sybase).
- The Access Control Gate system (Sentry ISIS) in the library which holds information by student, again including which students have not been into the library for a period of time.
- e-Journals (Athens) – the licence requires us to track who is doing what so it may be possible to harvest this subject to a DPA review. Copyright-cleared resources (geared towards particular modules) could be examined at individual student level, but it would take considerable effort and a temporary holding database to translate the data.
- e-Submission – Cognos reports can be developed for e-submission statistics within Blackboard.
- Virtual Learning Environment (VLE) access – Cognos could be used to report on access to the Blackboard VLE by student. We learned that the student portal, University of Derby On-line (UDo) access did not go down to individual student level, just the number of hits monitored over a period of time to produce a trend graph.

3.6 Desk-based Statistical Research

One of the most important and enlightening areas of Derby-specific research that the project completed was through the desk-based statistical analysis. This stage of the project’s research looked at patterns of completion, non-progression and withdrawal across the university, but also more in detail at programme level. The research at programme level would obviously provide greater depth and richness to the project’s work, and nowhere else in the University was this so rich and yet varied than within the Joint Honours Scheme (JHS). With 35 subjects available to be combined, and with an enrolment of over 1,500 students, it was agreed that the project should, when using in-depth and detailed data, focus on one specific subject area. Further work could include more detailed statistical analysis to look at the risk of withdrawal, in particular by linking to some of the engagement points previously outlined.

A small sub-group of the project committee chose to focus on students from six different subject areas within JHS, in addition to all of the students on the much smaller and much more prescriptive JHS programme at the University’s campus in Buxton. The choice of subjects was a cross-section from the three faculties which the Derby site is split into, and their selection was influenced by a number of factors. For example, the sample groups needed to be fairly large to ensure a measure of statistical reliability, however one much smaller group was chosen to allow a comparison of the possible “close-knit” community that may be experienced by students in this area. Also influential in choosing the subject areas were their previous non-completion rates; to begin with however, the statistical research for JHS began by looking at withdrawals across the entire programme. By mapping all of the withdrawals from stage 1 (first year) of JHS across the entire academic year 2010/11, the project gained an interesting insight into the pattern of behaviour amongst those students who did withdraw.
This ‘calendar’ revealed that the numbers of students leaving the university was roughly equal across the two semesters, but with one fundamental difference. Throughout the autumn semester, the number of those withdrawing or being withdrawn rose steadily between September and early January. From January onwards until the end of the year, the number of withdrawals was not gradual but across a plateau with intense inclines concentrated around the dates of the assessment progress boards. Upon further investigation of the withdrawals featured in the calendar, a somewhat clear conclusion was drawn. The majority of students whose studies were terminated in the autumn semester took the decision to withdraw themselves. The majority of those students whose studies were terminated in the spring semester were mostly withdrawn by the University, for a lack of engagement or failure to progress across the year. This conclusion resonated in with what many authors have speculated throughout the literature on this subject; that the first semester, in particular the first few weeks, are essential for helping ground students for future success across the duration of their studies (Yorke 2008). Any end-product that the project may recommend would use these findings to target students more appropriately.

The next step of statistical research was conducted at a level of much greater detail. Using those focus subject areas already outlined, student profiles were analysed to provide data around completion, non-progression and withdrawal across a three year period, the time in which a full time student would be expected to complete a course within. The data series took all of those full time students who began on stage 1 of a JHS degree in September 2008, studying for a major or joint pathway in any of the six subject areas. Their status as of the end of the academic year 2010/11 was recorded in a series of graphs, each representing how many of those had, in each subject, completed in three years, were still in study or whose studies had been terminated. Across all of the focus, all of the students whose data was included seemed to be divided into the three categories almost equally; there was some slight variation to this but this was the general pattern.

In addition to these graphs, the report also looked at the types of degrees that were awarded to the third of students who had completed in the expected three years. Represented in similar graphs, the students were divided into three groups of completion; completed as they started, completed on a different JHS pathway and completed on a single honours programme. Like the initial completion ratios, this data across all of the subjects’ completed students was also divided almost equally into the three categories. Only one subject was an exception to this where no students had moved to that subject’s single honours degree, but the divide was still equal between those who had completed as they started, and those who completed on a different JHS pathway.

It was decided to look into this data more closely to explore the potential positive and negative effects of changing one’s programme of study. This work helped to provide evidence for and refine some of the engagement analytics featured in the diagram, and also how to define the primary, secondary and tertiary indicators of engagement. The report featured the same students whose data was used for the previous report, but this work excluded those still in study (live data was deemed to be not fit for purpose in this report). The aim was to map the types of changes that students had made to their programme of study against completion or withdrawal of their studies. The project team created and defined two opposing types of changes to study; a “specialised” change was one where the student was tweaking or focusing in one the subjects they had started on, and where no new subjects were being taken. A "non-specialised" change was where a student may have changed either part or all of their degree to a completely new subject, and where there was no visible refining of their degree’s focus.
What the work found was that, of the students who made a “non-specialised” change, the number of withdrawals was far higher than that of those who made no change at all. Interestingly, what the report also found was that, of the students who had made a “specialised” change, the number of withdrawals was far lower than those who had made no change at all. This work proved that different “types” of changes to study exist, and those different “types” of changes had different effects. When a student changes to redirect or refine the focus of their degree, even if only slightly, they are actually far more likely to complete their studies. When a student changes their degree to include a new subject, they were at a much more heightened risk of withdrawal.

All of these statistics provided evidence to help settle the debate about some of the original analytics featured in the diagram (Figure 1). The reports proved that the project must challenge the somewhat traditional view that any alteration to a student’s degree programme was negative, and they also helped to reassert the appreciation that needs to be given to each individual student journey.

“Academic staff have been able to highlight the support tools that they would wish to have at their disposal in the future, in order to both improve student support and more effectively monitor student performance. In particular, the project has drawn attention to ways in which better quality information could be shared about our Joint Honours students. Undoubtedly, if we can improve our systems for managing Joint Honours there will be collateral benefits for the support we can offer to students on single honours programmes.”

Ian Whitehead, Subject Leader for History

SECTION 4 - Technical Development

The project did not seek to develop a product but rather scope out requirements in response to a service design analysis of what staff want and need to know about student engagement in order to focus targeted support to those identified as being ‘at risk’. This may result in the development of a data warehouse, but other alternatives will be considered. It is not thought likely that any technological development will be in place by the end of the project but it is anticipated that there will be future development as part of the ongoing work in this area.

However, we commissioned a short report from an IT consultant who advised that an Oracle database could be developed which could have feeds for several systems, i.e. PeopleSoft, Tutorial Attendance, Library Management System (LMS), e-Submissions (VLE), etc. to produce a report for each course (to cover the Joint Honours Scheme) for each student that shows a traffic light icon (green, amber, red) for each of the indicators.

The system would be customable by groups of staff according to suit their needs and controlled online. Different users could set up their personal indicator view along with parameter validation, i.e. miss 4 tutorials indicator turns from green to amber, miss 8 tutorials and amber turns to red. These parameters could be changed depending upon the user’s requirement. This would be a positive attribute when presenting details of the system to different levels of user.

Academics and other staff could review the information as part of a dialogue with the student about their engagement and they could decide together on the most appropriate course of action.

SECTION 5 – Implementation
The objective of this project was to scope out the requirements of a data dashboard and this development is being taken forward with managers. Recommendations regarding further work, uncovered during the life of project, which the university could undertake to improve the experience of students, centred around issues such as communication, quick wins for use of existing data for retention and engagement purposes and procedures for withdrawal.

We are planning a major review of our withdrawal procedures and have begun the work by using service blueprinting to identify the student touchpoints and key fail and wait points. This work will continue during 2012/13 as an adjunct to the project.

**Figure 2: Withdrawal Process Service Blueprint**

The SETL project will run until 31 August 2012. Beyond this there is an institutional commitment to further the work by the development of a product and the next steps will be to design a proto-type (‘the 'look and feel’) with the end-users and then test and implement the data dashboard, starting a staff-facing view for personal tutors.

There will be continuing of feed into linked on-going in-house projects such as the virtual orientation platform for new students, Business Intelligence project and a range of interventions to raise BME attainment.

**SECTION 6 – Potential pitfalls: the importance of contextualisation**

There is an inherent danger in making decisions about student progress and engagement on the basis of a set of statistics. The same picture presented for one student could have very different connotations for another. One thing the project has been very clear about is the need to set any information into context building on the special relationship between tutor and student. We learned this lesson from the implementation of our THELMA award-winning attendance monitoring scheme which has now been rolled out across the institution, but which ran into early difficulties in the design stage in 2008. Academic staff were reluctant to engage with a process which they saw could damage rather than enhance relationships by an automatic
notification being sent out to students who had missed lectures. This concern was
addressed by giving staff more control and the option to amend the data being sent
on-line through to the central team for follow-up. Once staff were able to set into
context the data with what they knew about the situation of any particular student,
such as illness or absence for other good cause, they could see the value in using
the attendance monitoring scheme to help students who may be at risk of dis-
engaging with their studies.

The dashboard will contain not only ‘hard’ data around learning analytics but will also
capture the ‘soft’ information which can be revealing about student behaviours and
other types of measures of engagement.

“Each student is an individual who brings with them individual challenges to
succeeding at and engaging with higher education. Considering the issue of
engagement from a service design perspective, shadowing students, working with
personas and story boarding allows us access to some of the personal journeys our
students take through their programme of study. This contextual information is the
‘other side’ of engagement, harder to define and certainly harder to measure in a
statistical sense but just as important to recognise to help a student to succeed.”
Clare Foyle, Statistics Team Leader.

SECTION 7 - Measuring Success

Measuring success is a challenge for a project which did not set out to produce a
product, but it is pleasing to report that there has been good engagement with the
project across the university. Over 100 staff and students have taken part in focus
groups workshops and the project steering group had consistently good attendance.

The project has been used as an impetus for numerous areas of research, such as a
review of the withdrawal process in-house. Also, the question of whether a “risk”
existed when a student changed their programme of study triggered a substantial
piece of research on this theme, using the institution’s Joint Honours Scheme as a
case study. This work has been taken up by the Scheme Leader and will inform a
deeper understanding of the behaviours of the JHS students (see Section 3).

During the life of the project we have made several useful networks across the
sector, both from attending and presenting at conferences and connections made via
Twitter, particularly the Service Design community and by word of mouth. There
have been positive responses to various conference presentations on the application
of Service Design in an HE environment, as exemplified through both the DERBI and
SETL projects.

The project has also allowed the university to further its experimentation with using
service design techniques to foster improvement across the student experience.
Having seen the impact of the DERBI project, staff were keen to take part in sessions,
one-to-ones and workshops which not only took the work of the project
forward but further evangelised the benefits of service design as a foundation stone
of effective business process review, using techniques such as service blueprinting,
personas, and storyboarding.

‘I’m a blueprinting convert. It’s such an enlightening process when you break down
the complex web we often weave ourselves in HE to what a student actually sees,
experiences and has to negotiate their way through. Blueprinting gives an often stark
visual representation of what we need to get right. Having the right cross section of
staff involved showed that some of the solutions were actually there under our noses
– we’d just never looked for them together before.’

Bev Matthews, JHS Team Leader
SECTION 8 - Benefits and Impact

The project has had a massive impact in changing the mindset of those involved. We are now working together across the University's 'community service'. So there has certainly been a change in thinking, if not yet significant changes to processes. In addition, changes have been triggered by the project, even though they were not part of it. For example how students thinking of leaving are supported through withdrawal: previously this was largely reactive in respect of advice and guidance from the University; now, we are reaching out to students who cannot rationalise their withdrawal from the course, which both helps the individual and gives us useful feedback for further action.

We now make more explicit reference to the softer side of Relationship Management, using a more personalised contact regime. This has positive implications for our OFFA agreement – and the QAA focus on the students' first year experience that we support more effectively – so we will have a much better approach to audit. From the whole University perspective this is an important spin off from the project with major policy implications.

Alongside the SETL project, the project team have been leading on other in-house projects around the student experience, which have complemented this work. The Pre-arrival Project (PREP) has taken a service design approach to scope out the requirements for a new service delivery of pre-arrival information, tailored to meet the needs of new and prospective students whilst recognising the varying, individual attributes which each and every student will bring to their life and their studies. Any pre-arrival resource which a student encounters must relate directly to on-campus support and preparedness in readiness for teaching and learning, which lends a direct link into the SETL project. The research for PREP looked at current practice, both at Derby and across the sector, and took into account feedback from various sources, and is now being implemented as part of a new service delivery in September 2012 in parallel with a review of the student experience of induction.

More recently, there has been an increased intensity to focus on the needs of our Black and Minority Ethnic (BME) students and a desk-based scoping project has resulted in a three-year action plan which will be taken forward with effect from September 2012 to improve the attainment, progression and achievement of the BME student population at Derby. Some of these recommendations have arisen from work undertaken as part of the SETL project.

SECTION 9 – Summary and Conclusions

The University of Derby, in common with the rest of the sector, has a wealth of information about students held in many different ways. Some of it is easily accessible such as student and attendance records, some is held on other IT systems, either centrally or locally managed, and some is held in hard copy only by individuals or departments. There is also information which would throw light on levels of engagement which have been devised for other purposes - the Higher Education Achievement Record (HEAR) is a transcript for students which they receive when they graduate, along with their certificate, to demonstrate their engagement with extra-curricular activities such as volunteering or being student rep. We are exploring how this information could also be accessed to form part of the complete student record on an on-going basis.

End-users, be they different groups of staff or students, would need to be able to customise the sets of information they wished to see which could be on a personal student data page or for trend analysis. For instance, for Programme Leaders, it
would also be useful to present the data by each student, module, programme, stage, etc.

In scoping out the requirements for a full data warehouse, the following criteria have been identified as playing a part in monitoring student engagement:

1. Attendance – at all types of session.
2. Engagement – students interaction in tutorials and seminars.
3. Grade profile – particularly flagging up where grades do not fit an expected pattern.
4. Outstanding referrals or deferrals.
5. Review of performance in formative assessments - would help to pick up those students struggling.
6. Access to course resources. (Virtual Learning Environment)
7. Access to the library or e-access
8. Support plan.
9. Counselling session for pastoral care eg with their Student Liaison Officer.
10. Late arrival at the start of the year
11. Attendance at induction sessions.
12. Engagement as a student rep or ambassador.
13. Entry qualifications/UCAS points.
14. Background – eg home student or international.
15. Commitments outside of university (eg work or childcare)
16. Timetable – shape of their day especially evening lectures.
17. Immediate notification of a missed assessment deadline or exam - at module level.
18. Extenuating circumstances – and deadlines for deferred work.
19. Volunteering or other role.
20. Do they live locally or commute?
21. Age profile
22. Have they taken a break of studies at any point?
23. Status - full time or part time
24. Did they begin their studies at the start of the academic year or at some other point?
25. Subject or programme transfers.
26. Complaints
27. UCAS, Clearing or direct entrant
28. Application to the Access to Learning Fund
29. Access to the careers service.

This list is not comprehensive, but some of this information is readily available. There are key indicators which are easy to access and others which are not. It is anticipated that 80% of the return could be accomplished from 20% of the effort. It would then take a further 80% of effort to achieve the final 20% return. However, with minimal effort a system could be devised to report on some of the most obvious indicators, i.e. attendance, Library usage, etc. to produce a simple system or the base for a more complex system. The business need is to find the point where the system would have sufficient data to produce tangible evidence to support meaningful conversations with students and add value to their student experience, even if it is not a complete picture of all possible indicators.

“We are good at offering support – academic and personal/pastoral; but there are always those we miss, the ones at risk who don’t access what is available until it’s
too late. These are the students that this approach will help us to identify at an early stage; whether that is to support their continuing journey with us, or to offer appropriate guidance as they move on. In an ever-changing environment, academics need every tool available to help them offer the most appropriate and effective, individualised support; but in a time-efficient and user-friendly manner.”

Sally-Anne Cassella, Senior Academic Counsellor, Joint Honours Scheme

SECTION 10 – Further Information


10.2 Key references


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