

JISC

Demonstrating Enhanced Learner Information for Admissions (DELIA)

Final report

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Executive Summary

DELIA was one of three projects funded by JISC in March 2007 under the eLearning Capital Programme to investigate and demonstrate work with the UK HE undergraduate admissions process and to build on the work of earlier Reference Model projects, working with key sector partners such as UCAS. DELIA aimed to conduct a wider investigation into UK Higher Education Institutions' current and potential use of information not currently available to them through the UCAS Apply system, including the use of ePortfolios and structured Entry Profiles.

The project set out to explore and extend the demonstrators and workflows produced by the eP4LL project, investigating how productively these could be linked to improved course entry information in order to support transparency in university admissions and facilitate fair and appropriate decision making. Although we were aiming at a learner focus, we realised that our primary 'users' were in fact HE admissions staff rather than students or applicants.

We expected to show how an improved information flow could support applicants, beginning with provision of improved and standardised Course Entry Profiles, through applications incorporating structured personal statements and references supported by candidate ePortfolios, feedback and informed induction to improve retention.

Early results from project work made clear that a focus on quality, content and use of Entry Profiles was needed before progress in other areas could be made. Through workshops with HEI admissions staff and dialogue with working groups at the Supporting for Professionalism in Admissions (SPA) programme and the Delivery Partnership Entry Profile group we drafted a set of Good Practice guidelines which we submitted to UCAS for consideration.

Following stakeholder workshops to elicit user requirements we drew up a specification for a demonstrator built in collaboration with UCAS, showing how the XCRi-CAP standard could be used to support institutions' publication and re-use of Entry Profile information. We expect the overall layered architecture which resulted to set a pattern for future JISC project work with UCAS.

Through workshop and dissemination activity (both formal and informal), DELIA has helped to raise awareness in the admissions community of the potential power and use of Entry Profiles, rather than seeing them as additional documentation whose development is mandated by policy. Coupled with the XCRi-CAP work, DELIA has helped to specify how Entry Profiles can be re-used, which supports staff in the coherent management of their courses information, while promoting process improvement in this domain. In particular this work may lead to HEI business cases in favour of the integration of Entry Profile creation within eProspectus processes and in the context of holistic content management systems.

The project's experience suggests that HEIs would welcome a service-oriented approach to the relationship between the HEI and UCAS. We gathered significant anecdotal evidence of discontent with the proprietary methods used by UCAS to collect information, requiring creation of new material or re-keying of existing information, rather than integration with existing or modified systems within HEIs

DELIA concentrated exclusively on undergraduate admissions via UCAS; however we recognise that many of the processes may be equally valid in other contexts, including direct entry admissions.

Background

DELIA was one of three projects funded by JISC in March 2007 under the eLearning Capital Programme eLearning and eAdministration themes¹ to investigate and demonstrate work with the UK HE undergraduate admissions process following the work of the eP4LL ePortfolio Reference Model² and XCRI³ projects. The overall programme activity was for technical underpinning of developments to support learning and teaching, and the request from JISC was for Demonstrator projects implementing the reference models developed under the earlier programme⁴, working with key sector partners such as UCAS.

The other funded project in the programme was led by the University of Wolverhampton. PortisHEad (ePortfolios in Successful HE Admissions)⁵ adopted a case study approach to build on the work of the ePortfolio for Lifelong Learning (eP4LL) ePortfolio reference model project, and undertook to implement a practical working model using an established ePortfolio system (PebblePad) to demonstrate a real-life pilot version of the web services developed by eP4LL, including use of structured Entry Profiles.

Starting at the same time as DELIA, the complementary ADoM (Admissions Domain Map) project⁶, also led by the University of Nottingham Centre for International ePortfolio Development, aimed to produce a domain map specifically for UK undergraduate admissions to HE and provide a map of current admissions practice with a view to supporting good practice and encouraging the move to eAdmissions. This was planned as a baseline for DELIA.

DELIA aimed to conduct a wider investigation into institutions' current and potential use of information not currently available to them through UCAS Apply, including the use of ePortfolios and structured Entry Profiles. It was therefore anticipated from an early stage that all three projects would work closely together to inform each other, with PortisHEad's practical case study approach as a possible test bed for new technology and ideas.

The work for DELIA was developed from two earlier JISC projects, 'Specifying an ePortfolio'⁷, funded under the MLEs for Lifelong Learning programme, and eP4LL. Both these projects were led by the University of Nottingham and involved a degree of collaboration with UCAS. The project also planned to draw on work for the XCRI (eXchanging Course-Related Information) project and explore use of the emerging standard that came from it. Just before the project began, JISC funded three supporting studies into UK HE admissions: Good Practice in Supporting Learners into Higher Education⁸, Good Practice in the Provision of Feedback to Applicants⁹ and Mechanisms for Assessing the Fairness and Effectiveness of Selection Processes in Admissions to HE¹⁰, which also provided baseline information for DELIA.

All this work in the admissions domain was intended to support developing practice in HE following the Schwartz report on Fair Admissions to HE (2004)¹¹, which reflected the need for:

¹ <http://www.jisc.ac.uk/whatwedo/programmes/elearningcapital/admissions.aspx>

² <http://www.nottingham.ac.uk/eportfolio/ep4ll>

³ <http://www.jisc.ac.uk/whatwedo/programmes/elearningframework/refmmu.aspx>

⁴ <http://www.jisc.ac.uk/whatwedo/programmes/elearningframework/refmodels05.aspx>

⁵ <http://www.portisheadproject.org/>

⁶ <http://www.nottingham.ac.uk/eportfolio/adom/index.shtml>

⁷ <http://www.jisc.ac.uk/whatwedo/programmes/buildmlehefe/nottingham.aspx>

⁸ <http://www.jisc.ac.uk/whatwedo/programmes/elearningcapital/admissions/applicantsupportstudy.aspx>

⁹ <http://www.jisc.ac.uk/whatwedo/programmes/elearningcapital/admissions/feedbackstudy.aspx>

¹⁰ <http://www.jisc.ac.uk/whatwedo/programmes/elearningcapital/admissions/fairnessstudy.aspx>

¹¹ <http://www.admissions-review.org.uk/downloads/finalreport.pdf>

- Enhanced information about applicants across a range of scenarios (from the highly competitive to widening participation) to enable admissions staff to identify the most appropriate students with the most aptitude and potential to succeed
- Better information about course entry requirements for applicants, to enable them to match themselves better to courses and write more informed personal statements which contain the information which admissions staff actually want – course entry profiles being currently extremely variable in scope, quality and usefulness
- Professionalising of admissions – transparent processes and streamlined, efficient administration.

Aims and Objectives

DELIA's overall aim was to explore and extend the demonstrators and workflows produced by the eP4LL reference model project, investigating how productively these can be linked to improved course entry information to support transparency in admissions and facilitate fair and appropriate decision making.

The original objectives, as stated in the project plan, were to:

- Support development of structured course entry profiles within the guidelines being developed by the SPA programme and explore their use and benefits to applicants structuring personal statements (including drawing on ePortfolio evidence) and to referees
This remained a fundamental objective of the project
- Scope and demonstrate the kinds of electronic assistance, using a service-oriented approach, that would be required to make course entry profiles linked to structured personal statements and references work, thereby demystifying admissions for a wider range of applicants, supporting transparency for HEIs and improving administrative processes for admissions staff
What we learned about the priority needs of admissions practitioners meant that although we maintained this objective, its importance within our programme of work was reduced.
- Explore the nature and use of pre-assessment in a variety of disciplines
We developed an understanding of the range and nature of pre-assessment and entry tests being used, but in the light of the extensive work done by SPA in this area were advised to steer this project away from this
- Explore the business processes needed by admissions staff in HEIs to handle enhanced applicant information
Some of this study of business processes became absorbed into the work of the ADoM project, which has examined a variety of business process practice in HEIs ranging from the 'traditional' to the more forward looking, and encapsulated and expressed these in its knowledge base. However this investigative work for ADoM has also informed our thinking about DELIA and helped to baseline what we have proposed to admissions practitioners, which has as a result been more grounded in reality and less 'blue skies' in nature.
- Carry out prototyping work which will provide a vehicle for requirements engineering in the entry profile space. Requirements and suggested structures will be fed into the XCRI schema development process through the XCRI support project

Prototyping work has focused on Entry Profiles and the interaction between HEIs and UCAS. We planned to develop a seamless cross-programme demonstrator which took in demonstrator work for all three projects (ADoM, DELIA and PortisHEad); while this is not available as a single entity, we have presented the three sets of demonstrators in such a way that it has been clear to audiences that these represent aspects of an end-to-end process which can be implemented either in its entirety or as separate modules, depending on user capacity and requirements.

- In collaboration with the PortisHEad project, propose a security model for UCAS which will provide essential facilitation for ePortfolio-based admissions.
Both this project and PortisHEad set this aim aside following discovery of current crucial limitations within the UCAS technical process, including the inability to include live URLs in candidates' personal statements.

At the start of the project we learned much more about the wider strategic objectives in the admissions domain, including the extent and scope of the work of the Delivery Partnership. We also established a working relationship with SPA work in Entry Profiles, which was the area that eventually became a focus for the project, which ran the risk in early months of suffering from 'project creep'. At a workshop for the UCAS Admissions Conference in 2008 we reformulated the project in the following, simpler terms:

What?

- Explore processes needed by admissions staff to define and handle enhanced applicant information
- Explore use, and support development of, structured Entry Profiles, including their benefits for applicants and for referees
- Scope and demonstrate electronic services that would make Entry Profiles linked to structured Personal Statements and references work, improving processes for Admissions staff
- Prototyping work to find out what IT support will best help admissions staff to process enhanced applicant information

Why?

- Support improved matching of applicants to courses
- Assist with subsequent effect on retention
- Investigate processes needed by HEI admission staff to handle new, enhanced applicant information
- Consider what changes might be needed at UCAS
- Clarify collective understanding of the changing admissions environment

How?

- Focus on 'intended practice'
- Analysing current practice for handling a range of 'extra' information sources currently in operation at the University of Nottingham and elsewhere
- Using a requirements engineering approach, building on the model developed in the ADoM project
- Working towards a new exemplification of Entry Profiles; provide an example implementation from the HEI viewpoint
- Produce good practice guidelines on Entry Profile creation and how to use structured information in decision-making.

Methodology

In the project plan we suggested that we would explore and extend the demonstrators and workflows from the eP4LL project to support personal profiling, and would then prototype service flows providing access to Course Entry Profiles for applicants, for support staff in FE and for referees. We planned to develop an SOA approach to the business processes from a number of departments using 'additional' information beyond that currently available through UCAS Apply, and testing for generic improvements.

In the event, much of the service flow and use case prototyping work was carried out within the ADoM project. We originally conceived the two projects as part of a homogeneous larger project, divided into two for practical and funding purposes. ADoM would carry out baselining and scope the domain: DELIA would then build on this to propose enhancements to the existing information flows and ways in which practitioners could make the best use of these. This meant that some research carried out by the team was equally useful to both projects. As the work progressed, the projects began to polarise more, and it became clear that ADoM had a much more technical focus and was as much about exploring how to create a domain map as about admissions, while DELIA was a more discursive project looking to shape intended practice.

We were clear from early in the project that although we were aiming at a learner focus, our primary 'users' were in fact HE admissions staff rather than students or applicants. We therefore planned to take a user requirements approach, and to carry out a series of requirements engineering workshops and interviews following and adapting the seven-view metamodel approach advocated by Jon Holt¹², beginning with the requirements view and heading towards the stakeholder view (this was explored further in ADoM). We expected to use formalised UML diagrams as part of this process.

Specific telephone and face-to-face interviews with practitioners were supplemented by regular update meetings with the Supporting Professionalism in Admissions programme (SPA)¹³, who shared their own findings and views with us and proved to be a valuable source of contact information, and wider contact with the sector via project team presence at national events including those held by the Delivery Partnership, SPA themselves, and UCAS.

For the demonstrator we used the accepted approach of drawing up initial user requirements and some business analysis which were developed into functional requirements, user stories and activity diagrams, using simple UML. From this we developed an overall layered architecture which we expect to set a pattern for future development when working with UCAS.

We modelled Entry Profiles in two ways within the demonstrator: in an XCRI XML document and in Java types. The overall approach can be seen in the technical documentation, available at <http://www.nottingham.ac.uk/eportfolio/delia/documents.shtml>.

Implementation

Early research work was shared with the ADoM project. As the two partner HEIs (Nottingham and MMU) represented a contrast both in terms of the institutions themselves and their admissions practice, we began by holding workshops with admissions staff at both universities. At Nottingham, where admissions is largely centralised through a Centralised Decision Making (CDM) unit, we interviewed staff from English (as a selecting School), Engineering (as a recruiting School), and the School of Veterinary Medicine (this last was particularly interesting as the newest Veterinary Medicine school in the UK, with a Widening Participation brief, and admissions practice partly, but

¹² Described in: Jon Holt *A Pragmatic Guide to Business Process Modelling*, BCS 2005

¹³ <http://www.spa.ac.uk/>

not wholly, based on that used at the University's Medical School). MMU was, at this stage, in the process of converting from a decentralised to a centralised pattern of admissions, and was able to share the results of internal studies into existing practice with us. Alongside this, we carried out a study of the institutions' websites to get an idea of what they say they do, and gather a preliminary outline of the whole admissions process, including policies on Widening Participation. We then supplemented this with information gathered via the workshops.

Alongside this institution-focused work, we carried out a dialogue with Entry Profile working groups at SPA and the Delivery Partnership Entry Profile group chaired by Janet Graham, who provided a wealth of useful information about the current position, perception and progress of Entry Profiles.

Entry profiles

What is an Entry Profile?

Entry profiles are compiled by HEI staff and potential students can access them via Course Search on the UCAS website¹⁴. UCAS describes them to applicants as:

Entry Profiles provide details about courses, about the university or college offering each course, and about the information you need concerning their entry qualifications, selection criteria and admissions policy. This information is essential to enable you to make fully informed choices about entry to higher education.

Entry Profiles are compiled by staff at the university or college, who understand the kind of detail you need to know about their courses, and what kind of personal qualities, interests and experiences will be helpful for you to have, in order to be a successful student on the course you ultimately choose.

For advisers, they offer the following:

Courses vary enormously at different universities and colleges, even though the names of courses might be the same. Differences in course content, structure, the availability of optional modules, and the department's approach to learning and teaching can make the experience of studying a particular subject very different for students at different institutions, even before the size and location of the institution is taken into account. It is important, therefore, that applicants are fully informed about every aspect of the course and the institutions offering it before they apply, and that they know what kind of qualities are being sought in an applicant.

We recognise the potential of Entry Profiles to support applicants in searching for and matching themselves to courses; this continues in helping to formulate personal statements in applications, and for referees to structure references.

Political drivers for Entry Profiles

Entry Profiles have been an area of focus for the Delivery Partnership which was formed to implement reforms to the UK HE application process following the DfES-led Consultation on Improving the Higher Education Applications Process in May 2006¹⁵. In October 2007 Angela Smallwood gave a presentation on ePortfolios to a meeting of the Delivery Partnership Steering

¹⁴ <http://www.ucas.com/students/beforeyouapply/whattostudy/entryprofiles>

¹⁵ <http://www.universitiesuk.ac.uk/ABOUTUS/ASSOCIATEDORGANISATIONS/PARTNERSHIPS/Pages/AdmissionsDeliveryPartnership.aspx>

Group led by SPA and in November 2007 this group produced a briefing paper outlining the key messages and benefits for HEIs¹⁶; this set out a target for HEIs of making Entry Profiles available for 100% of courses by September 2009.

In February 2008 the project team completed a survey looking at a cross-section of existing Entry Profiles, with the aim of drawing up a set of Good Practice guidelines, including guidelines, examples and best practice principles. At this point the eventual aim was to demonstrate web services for Entry Profiles from within the UCAS site, drawing up business process models and an information flow. The plan for the demonstrator then was to use the exemplification Entry Profile that we intended to draw up and link this to the demonstrator built for the eP4LL project, fleshing that out using closer to real systems. We expected to connect Entry Profiles and feedback, incorporating Entry Profile production and usage diagrams into the flow, and then testing this with users at workshops. Use of structured references, linked to Entry Profiles, was also expected to form part of this landscape.

The Entry Profile survey concentrated on the personal qualities or 'person specification' part, the 'Application and Selection' (or similarly named) section of the Entry Profiles examined. The survey consisted of a review of Entry Profiles in the UCAS system as at the end of January 2008 for single subject courses in English, Law and Veterinary Science. The survey concentrated on five main areas:

- Structure from the UCAS template documentation (things stressed in the UCAS Entry Profiles template)
- Issues from the SPA Entry Profiles guidelines and the prioritised list of characteristics of fair admissions (a non-prioritised list of issues from the SPA documentation)
- Assessment of content of Application and Selection and similar sections
- Principles (a set of draft principles about Entry Profile content drawn from the survey, applying the principles of fair admissions)
- Statistics (a table of statistics on the Entry Profiles covered).

A number of positive points were noted, including expression of what is generally required and what is required for this particular course and information about what would not be needed. However there were also a number of negative points, including links to inappropriate sources, broken links, and just saying that they look at personal statements but not what they are looking for.

The survey results are at

http://www.nottingham.ac.uk/eportfolio/delia/files/EntryProfilesSurveyNotes_2008-02-04.doc.

We then drafted a Good Practice Guide for Entry Profile Creation: we initially intended to include outputs from process and information flow work, but this was at too early a stage for meaningful inclusion, so we therefore agreed to concentrate on content creation and considered a separate document on guidance and management. Our intention was to test this at a workshop, getting admissions staff to use it as a basis to write some example Entry Profiles. However we discovered at this point that UCAS was developing its own Good Practice guide for Entry Profiles: in May 2008 we therefore agreed to submit our material to UCAS for consideration and to incorporate it into their own guidance rather than publishing it independently. These were accompanied by a set of overview UML diagrams showing what we considered to be the current system for Entry Profile creation, intended as an aid to understanding the process¹⁷.

¹⁶ [http://www.aaps.ed.ac.uk/Committees/RASC/2007-08/20071204/PaperI\(Part2\)EntryProfiles.pdf](http://www.aaps.ed.ac.uk/Committees/RASC/2007-08/20071204/PaperI(Part2)EntryProfiles.pdf)

¹⁷ see <http://www.nottingham.ac.uk/eportfolio/delia/documents.shtml>

This work formed the basis for a paper presented to the UCAS Change User Group in February 2008¹⁸. We had expected a greater degree of support from this group but found that they were already under too much pressure in other areas to greet our ideas with much enthusiasm. Their interest was more in contextual data about school performance than in ePortfolio data; with credible performance data from schools, some HEIs would adjust offers in the light of school performance. They were concerned about transparency, and whether a structured Entry Profile would actually lead to structured Personal Statements. However they did offer the information that Personal Statements were often used for borderline applicants for any programme, where they felt the need to establish dialogue with a small group of applicants.

We were able to take into account information gained through work on the ADoM project: for example that the University of Manchester has a centralise system for all their courses data, and have integrated Entry Profile writing into the course validation process.

We distilled some of our thinking into a paper initially presented at the April 2008 meeting of the Centre's Advisory Group:

'Dream Scenario' paper: 'What are the implications for HE admissions data of current trends in institutional thinking about new technology?'¹⁹

This started with the 'dream scenario': *Online HE admissions, an applicant-centred course entry profile, providing prompts for a structured, customised personal statement with hot-links to ePortfolio evidence, fair and transparent administrative processes, feedback*, then went on to focus on a series of reality checks and proposed a bigger picture for technology to support prospective students, looking at the holistic assessment practice for borderline applicants and looking forward to the JISC Landscape Study. The suggested reworking of the DELIA project question from this became : what data do we need the HEI to have access to on admission, for the full range of its increasingly learner-centred processes, and, out of that, what data can/should be used for admissions? How much sense does it make to rethink the nature and purposes of admissions data from the whole institution's point of view? Readers were asked whether they thought admissions data would start to look different in the context of the complete student lifecycle approach.

This paper formed the basis of the first of two project consultation workshops with admissions practitioners.

First workshop

We held two development and dissemination workshops with admissions practitioners, the first in June 2008 and a second follow-up event in December 2008. The first was part of the requirements gathering process for the demonstrator, and the write-up of the day is at <http://www.nottingham.ac.uk/eportfolio/delia/files/Briefing.doc>. At the suggestion of Sarah Davies from JISC, we are refining the workshop format for use by other projects and will publicise this via the Centre website at <http://www.nottingham.ac.uk/eportfolio>.

UCAS

Following an internal reorganisation within UCAS, a central link staff member was appointed with responsibility to liaise with all the associated JISC projects. We met with UCAS and JISC in July 2008 to agree UCAS actions for the remainder of the project. These were agreed as:

- Provide any further information needed on existing and planned data categories and structures in the UCAS database
- UCAS response to our Best Practice Guide for Entry Profiles

¹⁸ (http://www.nottingham.ac.uk/eportfolio/delia/files/UCASChangeUserGroupPaper_v0.2.doc)

¹⁹ <http://www.nottingham.ac.uk/eportfolio/delia/files/Course%20Entry%20Profiles%20Apr08%205.4.doc>

- Investigate provision of automatic report in Web-link, on Entry Profile usage at course level
- Offer information flow for web service for Entry Profiles from within the UCAS web site. HEIs would receive Entry Profile Information as a web service. UCAS would build a demonstrator to consume Entry Profile information in a structured format: this would include a Business Process Model and a demonstrator to be constructed in a developmental and non-live area of the UCAS system.

We also discussed development of a security model allowing a link from the UCAS personal statement to an ePortfolio, but this proved to be impractical.

Story of the UCAS demonstrator

As we experienced some difficulty in explaining to UCAS the scope of what we wanted to do, the team developed a 'Mickey Mouse' outline specification to facilitate discussions (outline diagram at <http://www.nottingham.ac.uk/eportfolio/delia/files/sum.gif>), which was then implemented as a demonstration version using an Access database as a substitute for HEI and UCAS input, and a dummy XML file in place of what would eventually be a web service.

We aimed to explore efficient methods for exchanging Entry Profile data between member institutions and UCAS that would enable both parties to make effective use and reuse of the data. The premise was that if the Entry Profile comes from the HEI, it remains more under HEI control and can be reused internally (if in standard format, XCRI) to support consistency and better quality data across the institution. Therefore it would not just be about communication with UCAS, but also promote an SOA approach. We would do this by investigating the provision of an Entry Profile service at an HEI that would permit consumption by UCAS, and an information flow via a web service for Entry Profiles from within the UCAS site, so that an HEI could re-capture any data their staff had keyed into Web-link. This would help to overcome a perceived barrier to Entry Profile development and maintenance: that the considerable effort required to input the necessary data does not produce a source that can easily be used for an HEI's own course information requirements.

However at this point we encountered an issue within UCAS: as they had planned their own internal Entry Profiles Development Project we had to ensure that the two projects would have synergies, rather than overlaps. At a meeting with UCAS in September we agreed that DELIA would be developing business models that could inform the UCAS project, that it would not link to UCAS live systems, and that it could offer a springboard for UCAS's own work by acting as a focus for discussions with HEIs and assist with development of user requirements. We also had to make it clear that experience arising from the demonstrator work would not in any way commit the UCAS project to any particular technical solution, but would nonetheless inform technical aspects of that project. Furthermore, we agreed to take care to manage expectation in exposing HEIs to the DELIA demonstrator, in order to avoid future development being seen as an excuse to delay setting up Entry Profiles under the current system. We agreed to be clear and realistic about the timescale of any live UCAS developments: by showing how HEIs could in future make effective use for their own purposes of data already entered into Entry Profiles, we could actually remove a reason for any delay in data entry.

A particular difficulty in producing a technically, rather than conceptually, useful demonstrator was that the data structures and proposed content for Entry Profiles under a new UCAS model to be implemented as part of its course management redesign project were not yet defined. It was impractical and not very useful to use the existing structures, which we knew to be complex and to have a finite and short life. Therefore we worked with UCAS staff to produce a generic and not definitive Entry Profile structure that would be sufficient for the construction of a demonstrator.

UCAS were able to take this and use it to brief and appoint a developer, who then developed a fuller version of the specification. We agreed that the demonstrator would clearly be proof of concept: while it would include an interactive user interface, it would not link to any live systems, rather being supported by a separate small database. This was worked up into a version which we were able to demonstrate incrementally, first to admissions staff at a workshop/showcase event in December 2008, where it was received with enthusiasm. A fuller version was developed for the UCAS Data Matters conference in January 2009, although the web services behind the demonstrator were still dummies and not functional. This wider audience was also very enthusiastic, and further demonstrations were given at the 2009 UCAS Admissions Conference and at the 2009 JISC conference as part of a workshop on the JISC eAdmissions work. The demonstrator can be viewed at <http://research.ucas.com/delia/>.

As part of the investigation of the requirements for the demonstrator we attempted to obtain sample Entry Profiles from institutions for onward transmission to UCAS. We quickly discovered that institutions in general do not hold their own copies of Entry Profiles, but purely supply them to UCAS through keying them into the Web-link interface. This illustrates a central issue in the current arrangements for Entry Profiles: HEIs effectively do not own them and cannot re-use the information that they have supplied to UCAS. The demonstrator was intended to show how this situation could be improved. If HEIs could re-use the Entry Profile information, perhaps they would then have greater motivation to complete them and to improve their quality.

In December 2008 we held a second consultation workshop [add invitation letter?] with admissions practitioners. This was intended as an event to allow UCAS to showcase and validate the demonstrator planned and developed as a result of requirements gathered at the earlier event, and also to explore whether practitioner thinking had changed significantly in the intervening period. We also wanted to offer a group of people working actively in the field the opportunity to contribute to the conclusions and recommendations of this report through discussion of the following issues: what kind of people might best use ePortfolios for admissions? Are ePortfolios going to be useful in Admissions? (PortisHEad had tried to answer this second question using a case study approach, but as this had to be aborted the question was never answered.) We found, however, that thinking had not moved on much, not helped by the fact that while the same institutions had been invited to send staff, the people who attended were not all the same as had been to the earlier event; as they were not familiar with the project we had to re-explain a lot of our early thinking.

We aimed to promote a view of the bigger picture, showing that a fully electronic system is possible via ePortfolio and Apply (corresponding to full electronic enrolment). We also wanted to demonstrate a generic system that could be implementable using a modular approach, where it is possible for institutions to pick and choose bits they want.

Outputs and Results

An overview of the Demonstrator is given in the presentation at <http://www.nottingham.ac.uk/eportfolio/delia/files/Presentation%20v1.2.pdf>. Further details are in the technical report at <http://www.nottingham.ac.uk/eportfolio/delia/files/Interim%20Development%20Report.doc>. The Demonstrator itself is available at <http://research.ucas.com/delia/>.

We are using Archimate to produce a Service Usage Model from the Demonstrator for submission to the e-Framework.

Other project outputs are available from the project website at <http://www.nottingham.ac.uk/eportfolio/delia/documents.shtml> . These include copies of presentations, the Entry Profile survey materials and set of UML diagrams, copies of papers and workshop materials.

We have welcomed opportunities for integrating the DELIA demonstrator with those from the ADoM, PortisHEad and EFIFA projects. So far we have had the opportunity to show these as a related (but not joined-up) sequence:

- How ePortfolio uses an Entry Profile for creating a Personal Statement
- Sample rich Personal Statement using ePortfolio
- Demonstration of PortisHEad formfill tool
- Demonstration of institutional use of DELIA to send Entry Profile data to UCAS and back

Outcomes

DELIA has 'political' significance as it represents a successful collaboration with UCAS in the context of a JISC project, with a tangible set of outputs which are available to the community.

Our work in the DELIA project has helped to support the use of XCRi in the standardisation of course advertising information. Through our dissemination activities there is a better appreciation of the strength of using XCRi formatted data, including Entry Profiles data, for the aggregation and publication of courses information. The projects are helping to break down the silos that have existed between different types of courses information, as staff in HEIs work towards the integration and re-use of their data.

Through workshop and dissemination activity (both formal and informal), DELIA has helped to raise awareness in the admissions community of the potential power and use of Entry Profiles, rather than seeing them as additional documentation whose development is mandated by policy. Coupled with the XCRi-CAP work, DELIA has helped to specify how Entry Profiles can be re-used, which supports staff in the coherent management of their courses information, while promoting process improvement in this domain. In particular this work may lead to HEI business cases in favour of the integration of Entry Profile creation within eProspectus processes and in the context of holistic content management systems. While this argument might seem to be a technical one focused on cost effectiveness, it is important to view it as part of the HEI's function to know about and manage its courses, in a way that will enable it to manage its information and modify its curricula for the benefit of learners seeking to study these learning opportunities.

Conclusions

We are aware that for 90% of UK undergraduate HE admissions institutions have no need for additional information beyond what they already receive. However if this information is available, there is potential to carry it through to inform and support induction, and thereby potentially improve retention rates. The 10% of special cases where enhanced information can make a crucial difference include borderline applicants and applicants for over-subscribed courses, as well as for those with a less conventional background, especially Widening Participation students.

While JISC has been working in eAdministration for some time, this was one of a small number of initial projects which aimed to bridge the eLearning and eAdministration domains. It was a challenge

for us to remain learner focused while working in an area where the user is actually Admissions staff rather than students directly.

This was a very broad project which we had to wind back as it progressed, so that we finally focused on the demonstrator work with UCAS which now needs to be broadened out again in any continuation projects.

We started the project with the expectation that we were going to explore how to effectively process ePortfolio for UK HEI admissions. However it soon became clear to us that there is not yet a broad base of practitioner support for this. We found that the admissions domain is highly procedural and political, and that practitioners feel burdened by the volume of change in expectations and practice imposed on them by what they see as many external bodies (SPA, the Delivery Partnership, Government policy and agenda...)

Collaboration with UCAS has been an issue for the project. Early interest and enthusiasm was not translated into concrete action, despite our early request for specific developer input. This improved following the appointment of Geoff Ramshaw with the specific remit to collaborate with JISC projects. His perseverance and enthusiasm yielded results and enabled us to make contact with other staff within UCAS we had previously not had direct access to. Development work for the demonstrator was carried out by an external contractor: part of the outcome of this project has been to pave the way for UCAS to support this way of working for other projects, including EFIFA.

We were able to showcase the project's work at the UCAS Data Matters conference at the beginning of 2009, and the outcomes of this workshop allowed us to express the following conclusions about Entry Profiles:

- 1) Entry Profiles should cover ALL the course advertising information, and in particular the differences between a course and its rivals.
- (2) It is a particular boon to have a good interoperable tool, if information has to be repeated.
- (3) Integration of creation of Entry Profiles into the flow of information from validation processes is flagged. This suggests a coherent flow:

idea > curriculum design > validation > marketing > to UCAS

all of which could be based on and produced alongside the core documentation during the design and validation processes, thereby integrating marketing functions with curriculum design and validation. Integration of the all the processes that produce courses information of all types should enable much of the information to be repurposed, using tools designed for this approach and maintaining the quality and consistency of all the information produced. Entry Profiles produced for UCAS would then become merely one part of the generality of course advertising information, rather than a major differentiated task. This work flow should be carefully designed and managed.

- (4) Integration in this way makes UCAS one of several potential publishing routes: others include paper prospectuses, online prospectuses.
- (5) Entry Profile structure should be standardised for ease of integration in interoperable services, for example to provide services that allow learners to compare Entry Profiles for different courses.
- (6) Using a CMS makes things a lot easier.

(7) We recognise that there are some areas we cannot easily address through DELIA: these include getting academic staff to write material, and issues to do with resource and time requirements.

Implications and recommendations

The project's experience suggests that HEIs would welcome a service oriented approach to the relationship between the HEI and UCAS. We gathered significant anecdotal evidence of discontent with the proprietary methods used by UCAS to collect information, requiring creation of new material or re-keying of existing information, rather than integration with existing or modified systems within HEIs. Mitigating this point is the realisation by many staff that production of integrated, cost effective and efficient systems for work flows across organisations requires technical, resource and operational staff management throughout the processes and functions, problems which are difficult and time consuming to address.

DELIA concentrated exclusively on undergraduate admissions via UCAS; however we recognise that many of the processes may be equally valid in other contexts, including direct entry admissions. There is also further work to be done on how processes could be reusable in the context of MIAP services. There may be a use for a web service offering an authenticated qualification service that can be used by anyone; institutions may find this useful to support direct entry. If an Awarding Body could provide a link to FE colleges with authenticated data this could go into candidate's ePortfolios. We are, however, aware that the Learner Record being developed under the MIAP programme could supersede this.

Integration with the outcomes of PortisHEad and EFIFA suggests how DELIA outputs can fit into a bigger picture; we are aware that there is still a lot of work to be done on Entry Profiles and Information, Advice and Guidance (IAG). By joining with other tools such as the JOSEPH IAG and the XCRI course discovery tools, the potential to improve support for preparation, application and induction could be increased. The danger that we see in this larger landscape is that people start to think in terms of 'one-stop shops' and attempt to control the whole landscape rather than their own part of it. We would recommend, rather, identification of a complex network of information nodes, produced by bespoke systems for specific internal purposes, but with external interfaces linked by information and communication standards. These could then be integrated, aggregated and re-published in novel ways by service delivery points. This 'ecosystem' approach is gradually emerging and beginning to be explored in a number of projects and locations, not purely in the area of admissions.

Admissions staff have voiced a clear demand for the capacity for applicants to use multiple personal statements in Apply.

Finally, we recognise the need to define and promote *good quality* Entry Profiles rather than Entry Profiles *per se*.