



**JISC Studies on good practice and technology-supported approaches in recruitment and admissions**

**Study 3:  
Good practice in supporting learners throughout application to and induction in higher education, and in the use of technology to support this**

**Janet Strivens**

**Rob Ward**

**Simon Grant**

**Steve Porter**

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## Executive Summary

The aims of this study were to:

1. identify, investigate and report upon good practice in supporting learners throughout the process of application to and induction into higher education;
2. seek to establish where there are opportunities to improve support through the use of or further development of technology and through better integration of current technological solutions to provide a seamless service to the user.

We were also asked to consider transition into employment alongside transition into HE and also to explore the opportunities made available by technology (especially any web services) used in the broader HR and recruitment world.

Data were gathered mainly through telephone interviews. Key respondents were used to identify good practice in schools and colleges. A structured set of questions was used with school and college respondents (see Appendix C)

The Information, Advice and Guidance (IAG) literature was consulted to develop a useable model of the different stages of the process under investigation. Five stages were identified:

1. Supporting learners in becoming more self-aware;
2. Making sure they have accessible and comprehensive information about opportunities ;
3. Supporting them in evaluating the information and making decisions;
4. Supporting them in presenting themselves to institutions;
5. Supporting them in understanding the nature of the HE experience and in particular HE learning.

Within each stage we considered the information needs (primarily of the learner but also of supporting tutors/advisers); processes which support the learner in using the information, current technology being used in relation to this stage and actual and potential web services.

Each stage is illustrated with quotes from interviewees and/or more detailed examples of technology and/or practice.

We found much appropriate use of existing technology to support good-quality human-delivered IAG practice. This was most developed in relation to our Stages 1 and 2 but interesting innovative practice was also found in relation to Stages 3, 4 and 5. In Stages 3 and 5, "Web 2.0" technology was beginning to be used to extend the applicant's social networks and as a substitute for direct experience.

A major constraint was the inability of most systems currently being used to exchange data. Often commercial interests militate against such interoperability. An additional problem in Stage 1 are the IPR issues associated with careers/learning styles inventories.

Exploring the broader HR/recruitment world revealed similarities and differences. The process was generally less open than that delivered by UCAS. A concern to limit the expensive and unreliable human contribution to screening applications was balanced by an acknowledgement that “you can’t expect to do everything remotely” when dealing with an organisation’s most important resource, its staff. Nevertheless there was limited interest in the ‘rich picture’ potential of e-portfolios.

In terms of web services, we identified as specific to the e-application process the interaction between the sets of information from two other areas which are not specific to e-applications: information about the characteristics of individuals and information about the characteristics of opportunities (including their providers). The key role of this service would be the automatic use of personal information to filter the mass of available opportunity information, making it easier for the applicant to be aware of relevant opportunities without information overload. We call this service genre “Opportunities relevant to an individual”.

## Recommendations:

- Institutions should be encouraged to provide for the collection and management of any available information about learners which is identified as relevant to the application processes described in this report. This may be stored in, or managed through, an institutional information system primarily for administration (MIS, Student Information System, etc.), an information system for teaching and learning (VLE etc.), or an institutionally-provided e-portfolio system of whatever kind. Wherever the information is held, it should be made available, as appropriate, to:
  - (a) learners themselves for the purposes of reflection and review;
  - (b) advisers to help ensure appropriate and accurate advice;
  - (c) search services to enable them to personalise search results according to the characteristics / profiles of learners;
  - (d) opportunity providers.

It should be made as clear as possible that all provision of information to people other than the learner shall be in accordance with the wishes and permission of the learner or learner's agents.

- Institutions should be encouraged to motivate systems / tools providers to ensure that information entered in one system is available for use in other systems as appropriate and allowed by the learner or learner's agents. Schools and colleges should be encouraged to use tools / services which are designed to be interoperable (as with my-iPlan / Area Prospectus in Wolverhampton).
- As far as possible, all learning opportunities (including vocational training e.g. modern apprenticeships as well as further and higher education courses) should make use of the XCRI (Exchanging Course-Related Information) standard for representation.
- The possibilities of using existing or alternative social messaging services to allow both chatrooms / messaging between peers and on-line 'mentors' with IAG expertise should be explored further.
- The benefits for HEIs and learners of developing virtual contact between prospective applicants / accepted applicants prior to actual entry should be explored further.
- JISC should consider sponsoring work using the service genre taking the individual characteristics / profile to use in search services to filter results to provide more closely matched opportunities.

The following recommendations should be passed to UCAS for their consideration:

- With the permission of applicants, student data on UCAS Track should be made available in an aggregated form to schools. Schools could register for Track as they do for Apply.
- UCAS should consider a screening mechanism to alert applicants (and schools) to 'illogical' choices (e.g. choosing a CI offer which has a higher grade requirement than their CF offer).
- UCAS should consider making more institution-specific data freely available, for example the relationship between the stated entry requirements of an HEI and the actual offers made; those HEIs to which applications from a specific school or college are most successful; and which HEIs are most popular with applicants from a specific school or college.
- UCAS could consider sponsoring a survey of 'selecting' courses (i.e. with high levels of applicants per place) to find ways of using technology to reduce tutor workload while maintaining equity in the admissions process.

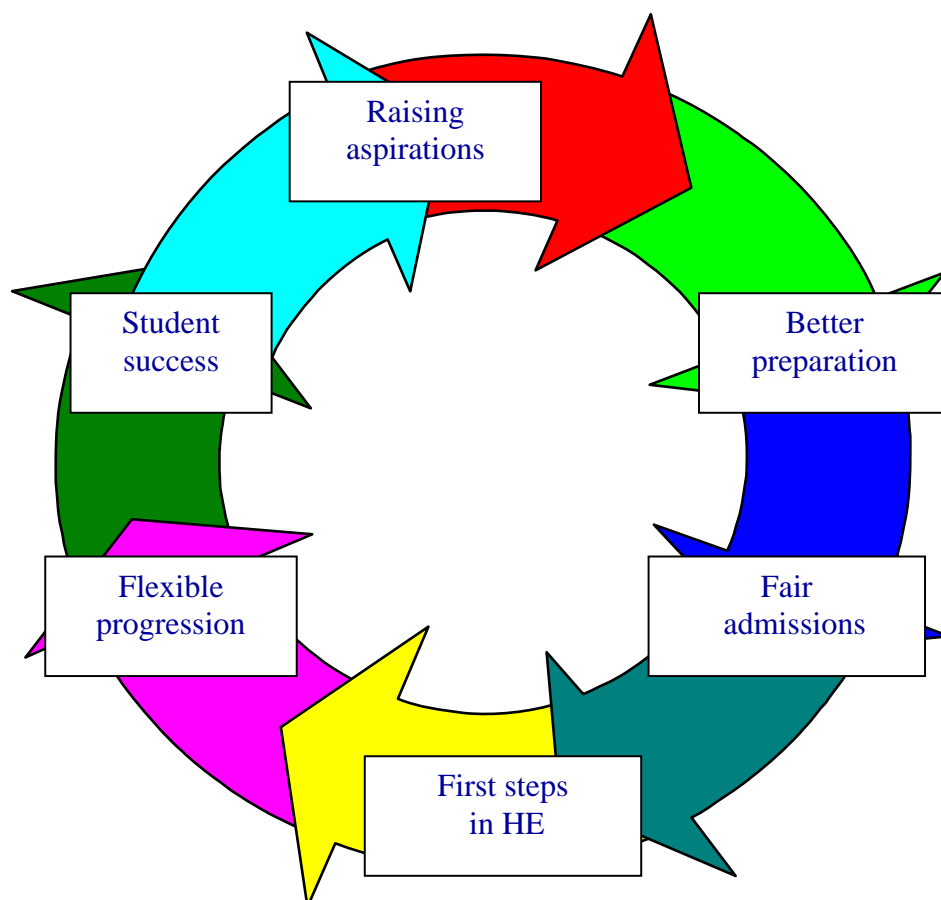
## Section One: Introduction

- 1.1 The aim of this study was to identify, investigate and report upon good practice in supporting learners throughout the process of application to and induction into higher education, with a view to making recommendations on how to improve learner support throughout this process. Central to the effectiveness and efficiency of this support is the use of technology. Currently a range of technology is available, targeting different aspects of the process and with different level of requirement for tutor intervention. This project aimed to identify current good practice at each stage of the process from the experiences of users, both staff and learners; and seek to establish where there are opportunities to improve support through the use of or further development of technology and through better integration of current technological solutions to provide a seamless service to the user.
- 1.2 The report is organised into six sections. Section One briefly describes the methodology used including the nature of the sample of respondents and sets out some key features of the context for the report. Section Two outlines current frameworks used in careers guidance and how they have been drawn on in structuring this report. Section Three contains the main body of findings from schools, colleges, universities and other agencies involved in 14-19 transitions. It is further subdivided into the five 'stages of the applicant life-cycle' we have used as our framework. Section Four deals with services for unsuccessful applicants. Section Five reports findings in relation to graduate recruiters. Section Six deals with the information architecture related to application and transition processes, setting the context for the service genre proposal which accompanies this report.
- 1.3 The project methodology was as follows:
  - A survey of literature, websites and existing professional networks to identify current 'good practice' provision, with specific attention to technological support and the tools and services utilised;
  - Identification and telephone interviewing of key stakeholders in a range of schools, colleges, universities and recruiting organisations;
  - Accessing a small sample of applicants on-site to explore their experience of a technology-support application / induction process;
  - Consideration of the business processes and services relevant to these areas, relating these also to other areas of practice;
  - Close examination of the e-Framework web site to compare the possible web services identified above with those proposed by others.
- 1.4 A total of fifteen schools and colleges, seven universities, two local authorities, four other educational organisations and two suppliers of educational software agreed to give detailed information in person or by telephone interview (see Appendix A). In addition to these, two graduate employers, two online recruiters, a careers guidance and vacancy notification agency, a developer of professional development systems for employees and the Chief Executive of the Association of Graduate Recruiters were also interviewed.
- 1.5 The model of the applicant process developed throughout this study was based on the applicant life-cycle phases defined in our proposal: pre-enquirer → enquirer

→ pre-applicant → applicant → post-applicant → pre-student → new student<sup>1</sup>. This in turn draws from the Student Life Cycle model developed by HEFCE to underpin widening participation strategies and endorsed by Layer (2003): this initially broke down the possible stages of engagement an HEI could have with a learner so as to help them succeed into the following stages (HEFCE, 2001):

- Aspiration Raising
- Pre-entry support
- Welcoming and induction
- In-course support
- Employability

This cycle was further developed in the later draft HEFCE Strategic Plan (HEFCE 2003) as below:

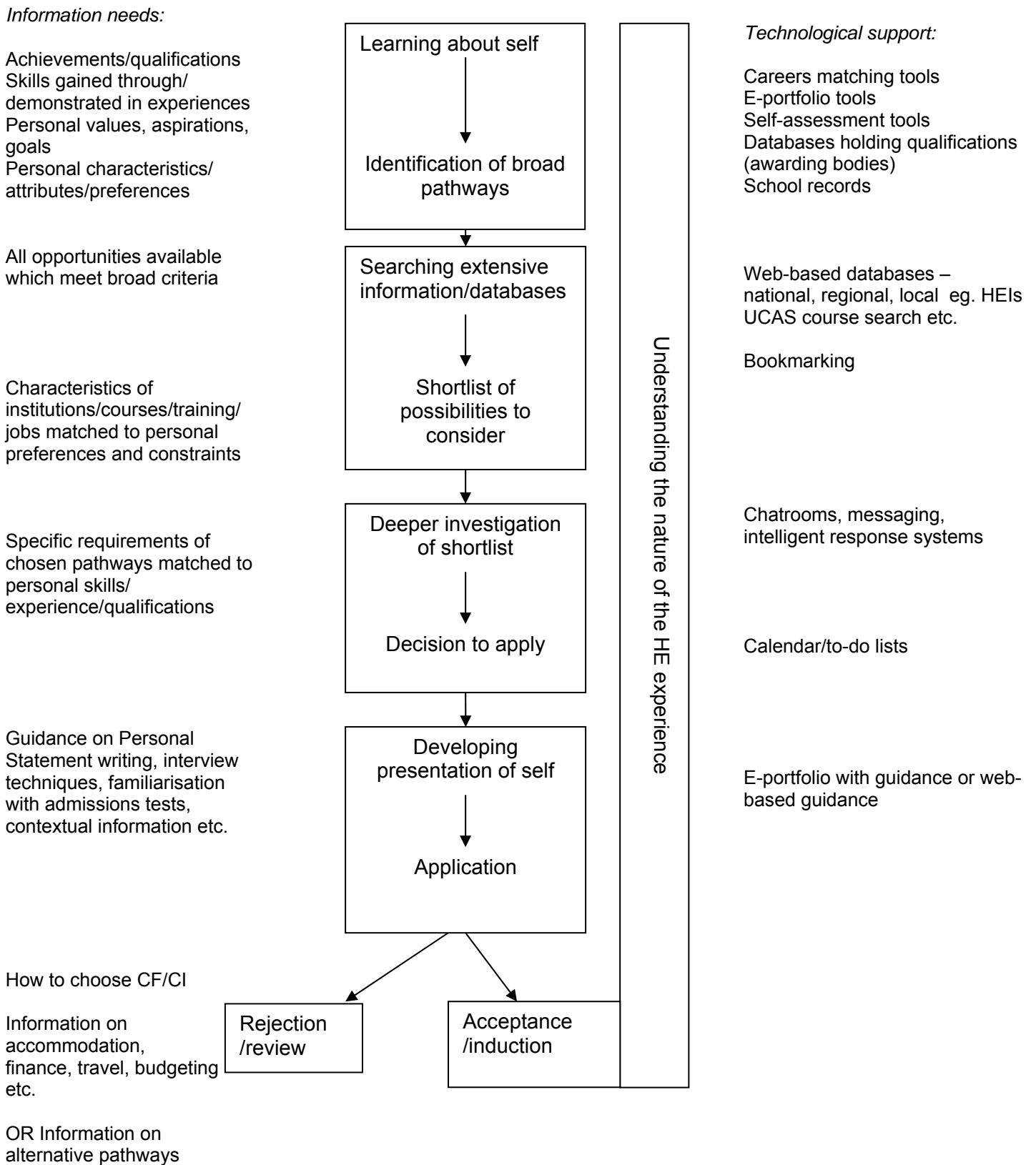


**Fig.1 Student Life Cycle Model** (devised by Prof. Geoff Layer) (Source: HEFCE Strategic Plan, July 2003)

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<sup>1</sup> Pre-enquirer = school/college learner receiving aspiration- and awareness-raising via programmes such as Aimhigher; enquirer = learner at point of first contact with HEI; pre-applicant = learner in research phase; applicant = completing the application; post-applicant = between sending application and receiving final exam results; pre-student = preparing to go to HE; new student = engaged in the HEI's induction programme

**Fig.2 Process model of applicant life-cycle as used in this report**



It should be noted that:

- the process model of the applicant life-cycle proposed here is likely to be considerably longer than the time devoted to the application process per se (i.e. normally from 1 September<sup>2</sup> during the academic year immediately preceding that for which an HE place is sought);
- the phases are not necessarily sequential and indeed are more likely to be overlapping and iterative.

1.6 Applicant support includes wider opportunities for learner development, and involves the arrangements for the administrative organisation of the new curriculum, for example through the development of area-wide prospectuses and Common Application Forms, increasingly available electronically. Current and anticipated changes for applicant support have implications. These relate to changes in the post-14 curriculum, in the broader strategies for the delivery of the emerging curricula, for example as manifest in the Gilbert Report (2006), *2020 Vision: Report of the Teaching and Learning in 2020 Review Group*<sup>3</sup> and the proposals contained within this for:

- regular “learning conversations” with teachers so that pupils get into the habit of thinking about their learning and how to make progress;
- the allocation of a “learning guide” — a teacher or classroom assistant to monitor their progress – for all pupils.

1.7 The process of applying to HE has added considerations:

- The UCAS system continues to evolve. The ‘Apply’ online application, now in its second full year of operation and with a usage rate of 98.5%, is liked by learners and teachers. The ‘Track’ online information system keeps learners up to date with the progress of their application and, for those with no offers by 18 March, ‘Extra’ allows the learner to progress their application. All these aspects of the system are satisfactory. A change to a post-qualification application (PQA) system is a possibility by 2012. UCAS has made significant changes to the online data transfer system and all institutions have to move from MARVIN to HERCULES by September 2007. This has led to some problems for HEI admissions staff (as reported in the press) and for some learners during Clearing. The extent of the problem for learners is not yet clear and there has been no effect on the main Route A or Route B application processes. UCAS has been closely involved with the e-Portfolio reference model development, raising the possibility of more tailored and individualised applications.
- A further developing trend is the use of specific admissions tests by some more competitive courses for applicants. These include UKCAT and BMAT for medicine-related courses and LNAT for Law. The Thinking Skills Assessment

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2 UCAS Apply opens mid-June for starting to complete the application, but applications cannot be submitted before September 1<sup>st</sup>.

3 See <http://publications.teachernet.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DFES-04255-2006&>

(TSA) is being used by some Cambridge colleges. The tests are intended to provide more evidence which selectors for competitive courses can use to make offers, and some tests are designed to provide predictive validity<sup>4</sup>.

- HEIs are working towards implementing the recommendations of the Schwartz report on fair admissions; eg. by defining admissions criteria for each course which give details of what a learner has to achieve to gain a place. Producing these “Entry Profiles” is a well-established UCAS initiative which is still developing: typically Entry Profiles are held on the HEI websites and linked from UCAS Course Search. UCAS is urging more detail on the *decision-making process* to be included in addition to required entry qualifications and skills, for example, if admissions tests are used, whether this is to decide whom to interview or as part of the overall holistic assessment.

1.8 The world of HE is itself undergoing significant changes and is likely to continue to do so, most notably in the vision proposed in the Leitch Review<sup>5</sup>. In order to become a world leader in skills by 2020, this identified the need to double attainment at most levels of skill, and emphasised more vocationally oriented and work-based provision. The development of a more distributed learner population, alongside the traditional institutionally based cohorts, also has implications for learner support.

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4 See <http://www.spa.ac.uk> for details of all tests now in use.

5 See [http://www.hm-treasury.gov.uk/independent\\_reviews/leitch\\_review/review\\_leitch\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm)

## Section Two: Practitioner frameworks for conceptualising the application / admissions / transition process.

- 2.1 The most widely used IAG framework in the UK has evolved from the DOTS model originally developed by Bill Law and Tony Watts of the National Institute for Careers Education and Counselling (Law & Watts 1977; Watts *et al* 1996 chs. 3 &12). DOTS stands for Decision Learning; Opportunity Awareness; Transition Learning; and Self Awareness. The ordering below is the more rational ordering used in this report of SODT.<sup>6</sup>
- 2.2 Dimensions of Self Awareness (S) might include:
- identifying personal values and attitudes; understanding the significance of different contexts to the adoption of different value sets and different identities;
  - understanding one's own motivations, aspirations and interests;
  - identifying one's own skills and achievements and understanding the importance of providing evidence for these;
  - recognising and valuing skills and attributes developed from extracurricular experience, and understanding the extent to which these might transfer into different contexts / occupations;
  - assessment of strengths and weaknesses;
  - evaluating the impact of external influences on personal views, attitudes, behaviour and career plans and responding appropriately;
  - identifying goals for development.
- 2.3 Dimensions of Opportunity Awareness (O) might include:
- researching and exploring options available (jobs, courses, careers);
  - using and critically evaluating main information sources to find course and institutional information (including the demand for, and requirements of courses), company information, and employment opportunities;
  - developing knowledge of a range of work and study opportunities that takes into account their educational and other experience, the structure of the labour market and an understanding of how to maximise their opportunities within it;
  - developing knowledge of the specialised careers, courses, work experience opportunities and employment trends related to their area(s) of interest;
- 2.4 Dimensions of Decision Learning (D) might include:
- prioritising personal factors that will affect an individual's career decision;
  - taking financial factors into consideration when making decisions about the future;
  - understanding decision making styles and using the appropriate strategy for making decisions about a career and choice of work;

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6 Here we also note the National Academy for Gifted and Talented Youth (NAGTY) perspective on Careers Education and Guidance, which uses the acronym MOAT (me, options, action, transition) itself closely related to DOTS. See [http://www.nagty.ac.uk/student\\_academy/careers/documents/parents\\_carers\\_careers\\_guidance.doc](http://www.nagty.ac.uk/student_academy/careers/documents/parents_carers_careers_guidance.doc)

- understanding of strategies for making and implementing sound career decisions that incorporate contingencies and could be progressively developed for future re-use;
- making informed choices about careers and jobs which are likely to suit the individual, using own criteria and the outcomes of information, advice and guidance;
- understanding that any context has its own culture and values which may or may not be suitable to the individual, and that those values and that culture may not be the same as the culture and values explicitly claimed in public communications from that organisation;
- devising a realistic plan with time bounded goals, which is flexible and able to cope with uncertainty; that is conducive to exploiting serendipitous chances, and which draws on accurate and detailed knowledge of opportunities;
- implementing action to progress own career / educational development.

2.5 Dimensions of Transition Learning (T) might include:

- knowledge of the recruitment and selection methods used by opportunity providers;
- using presentation skills for effective marketing of oneself;
- understanding how recruitment procedures work for effective promotion of oneself through applications, in interviews and at assessment centres;
- tailoring written / verbal self-presentation effectively to directly meet expectations of particular opportunities and different personal situations;
- meeting the challenge of integrating into a new culture, while retaining core values. This requires an awareness of one's own values, and sensitivity to other cultures, as well as openness to personal development in the area of values.

2.6 In schools the National Framework for Careers Education and Guidance in England 11-19 (2003), whilst non-statutory, acknowledges the importance of the DOTS model and itself identifies similar components under the headings of:

- self-development (understanding themselves and the influences upon them);
- career exploration (investigating opportunities in learning and work); and
- career management (making and adjusting plans to manage change and transition).<sup>7</sup>

2.7 Finally, the Government's own End-to-End Review of Careers Education and Guidance (DfES, 2005),<sup>8</sup> whilst noting the lack of a common understanding of what 'the term "careers education and guidance" means across the education, business and careers communities', itself emphasised the National Framework as a basis for development.

2.8 In developing our model of how technology could support the learner at each stage of the 'applicant life-cycle' we will refer back to these models, while noting that:

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7 See <http://www.teachernet.gov.uk/doc/6009/DFES-0163-2003.pdf>

8 See <http://dev.cegnet.co.uk/files/CEGNET001/resources/704.doc>

- neither DOTS nor the National Framework necessarily represents a logical order. To achieve the aims of choice and implementation, a learner approaching a career decision would first need to raise their self-awareness, i.e. their abilities, interests, values and motivations, plus whatever other aspects of "self" seemed relevant. Then they would look for information about what opportunities were available to them, i.e. jobs, self-employment, voluntary work, further study. They would try to relate what they discover about themselves to what they now know about the opportunities, and a short list of possible options would emerge. Having to decide between them would mean decision learning. Having decided they would need to use the right tactics to get the job, or get on a course, i.e., understanding the importance of "self-marketing" through CVs, applications, how to present a positive image at interviews. A more 'rational' order is therefore SODT.
- Learners / students / graduates themselves will not necessarily move through any such process in the most rational sequence, but more likely one which meets their own needs, and is more iterative. For example, a learner might try to write a CV (transition learning) and discover they are unable to identify what experience they might have that would interest an employer (self-awareness) and so would need to complete an earlier 'stage' of the model. This rethinking further emphasises a 'social constructionist' approach, i.e. that people create their own reality and give particular prominence to the interconnectedness of the individual and their environment rather than separate the two concepts. It also suggests that 'dimensions' rather than 'stages' would provide a more accurate conceptualisation.

2.9 In addition, McCash (2006) has argued that the model itself is in essence based upon old 'matching approaches' and takes insufficient account of the complexities of careers development learning or of the complexity of self-in-environment relationships (as opposed to self and environment relationships) in current circumstances (for example, in considering how a graduate may grow a non-graduate job into a niche graduate job (Elias and Purcell 2004). This is perhaps less applicable to the transition into HE, where scope for modifying the educational environment by the entrant is unlikely. However his emphasis on students as career researchers has particular relevance to the delivery of information through the electronic medium. As the End to End review itself notes:

'The delivery of careers information on the Connexions Direct website has opened up opportunities for schools and young people who are able to access information directly and at a time of their choosing, thereby maximising self learning.' (DfES 2005, p37)<sup>9</sup>

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9 The report also noted that 'over 5,000 young people contact Connexions Direct every week and over 50% of these enquiries are about careers and learning. In May 2005 there were almost 5000 daily visits to the Connexions Direct website with young people spending an average of over 18 minutes using the site. The most popular feature on the website is the Jobs4U careers database with 32% of visitors accessing this part of the site.' (DfES 2005, p32)

## Section Three: From pre-enquirer to post-applicant

3.0.1 This section focuses on the stages of our 'applicant life-cycle' from the early stage of raising the learner's awareness of his / her preferences, aspirations and personal characteristics through to the point where the application has been made and a decision is awaited. While recognizing, as mentioned before, that the 'stages' as represented here are not necessarily linear and may well be iterative, we have elaborated them below in what seems to be a rational order:

1. Supporting learners in becoming more self-aware:
  - recognizing their own achievements, skills and qualities
  - understanding their own (developing) preferences, motivations and values
  - constructing their own goals;
2. Making sure they have accessible and comprehensive information about various pathways (location of institutions, course offerings, course requirements etc.)
3. In relation to a shortlist they might consider, supporting them in evaluating the information about the characteristics and requirements of different pathways / institutions;
4. Supporting them in presenting themselves to institutions;
5. Supporting them in understanding the nature of the HE experience and in particular HE learning.

3.0.2 Under each heading we will refer back to the practitioners' frameworks presented in Section Two; we will consider the **information needs**, primarily of the learner but also the information needed by systems which support the learner; appropriate **support processes** and strategies, and the extent to technology could in principle support or substitute for human delivery; and **options for systems** to hold or supply the relevant information. Each section will then be illustrated by findings from our survey. Finally **actual and possible web services and tools** will be discussed.

### 3.1 Supporting learners in becoming more self-aware

3.1.1 This stage is about raising the self-awareness of learners. It is the 'S' of the DOTS model and the first stage of the National Framework.

#### 3.1.1 Information requirements

3.1.1.1 There is a range of information which could be used at this stage, including a certain amount of 'hard' information about the learner's achievements so far. Most specifically this will be information about the learner's examination / assessment results and/or qualifications. The use of this information could be seen as a 'reality check' on the learner's aspirations, relating to both under- and over-estimations of capabilities. Much of this information will have been generated within the school / college and is likely to be held in the institution's MIS system, although where the learner has an e-portfolio there may be links to this and there may also be records of unaccredited achievements. Where the learner has already achieved qualifications. information will be also held by the awarding body.

3.1.1.2 The main focus of information at this stage is however on 'soft' information - preferences, motivations, goals as one sub-set and perhaps also skills, personal qualities and attributes as a second sub-set. This information may not be stored anywhere or even, in a sense, exist until the need for it becomes apparent. It is the kind of information that interviewers try to bring out, that graduate application forms ask about and that the UCAS Personal Statement represents. However, these are all examples of this type of information 'in presentation'. Prior to presenting (or using any such information in decision-making) it may have to be generated through a pedagogical / advisory process or series of learning activities.

### **3.1.2 Supporting process**

3.1.2.1 Typically learners are supported in generating information about themselves – one might say constructing their identity - through what is generally known as the PSHE (Personal, Social and Health Education) curriculum in schools. Good practice starts early, by Year 9 (age 14) at the latest,<sup>10</sup> often in relation to decisions which have to be made about GCSE subjects. Activities can be divided into two main sorts: answering questionnaires / inventories / personal audits which ask questions to establish a pattern of the learner's preferences, motivations and goals and about their perceptions of their personal qualities; and reflecting on experiences (especially work experience placements) through a series of structured questions, raising awareness of what they found enjoyable, easy, challenging etc. Self-assessment is then grounded in real experience rather than being a set of answers to hypothetical questions.

3.1.2.2 Both sorts of activities are typically mediated through a personal tutor or careers teacher with skills in helping learners to recall and piece together their reflections and draw out the learning about the self. However there are instances of technological support for both activities. The questionnaire / inventory approach lends itself to on-line completion since answers can be quickly scored and the system can present the learner with an instant interpretation or a set of suggestions<sup>11</sup>. Different approaches have been noted, ranging from using activities / inventories based on a clear psychometric / theoretical framework to using those drawn from classroom experience. Depending on the nature of the underlying framework and its purpose, these might be aimed at developing awareness of career goals, preferred subjects of study, preferred approaches to learning, personal values etc.

3.1.2.3 There are fewer examples of technological support for the second type of activity, but systems developed from the DfES Progress File materials usually include a section to guide the learner in reflecting on work experience and other extracurricular activities and identifying what they have gained, what they have achieved and what they have learned about themselves.

3.1.2.4 Ideally, all the information generated through these activities would be recorded in an accessible, editable place and format, to aid recall and reflection and give the learner a synoptic view of him or herself. One teacher in our survey whose school used both FastTomato and the Oldham Progress File holding separate information in separate

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10 Though note the recent statutory requirement to provide careers education from Year 7 in state schools.

11 On widely-used social networking sites such as Bebo, exchanging questionnaires between friends is a common activity: clearly young people like to know how their friends see them!

lessons bemoaned the lack of a single product. Deficiencies in this stage will be a limiting factor on progress in the other ones.

### **3.1.3 Options for holding this information**

3.1.3.1 Information about the learner is held in several places, but these places tend not to allow easy access, partly for very good reasons of data protection. At present, to be assured that such information is available, a learner has to place it explicitly in some kind of information system accessible to others. E-portfolio systems and e-recruitment systems have been widely used for this purpose: any system where the learner places his or her information expressly to be read by others by-passes the data protection considerations which apply to information which has been gathered for other purposes.

3.1.3.2 As there is little standardisation at present amongst user-driven e-portfolio and e-PDP systems, it is difficult to generalise on exactly what information is held by them. However, particularly for children of school age, there are quite a number of databases in which personal information appears or may appear. Information about these databases and their characteristics (from a privacy-concerned viewpoint) may be found through a web site called Database Masterclass,<sup>12</sup> a Daily Telegraph article,<sup>13</sup> and the website of Action on Rights for Children.<sup>14</sup>

3.1.3.3 Based in the USA, the Schools Interoperability Framework (SIF)<sup>15</sup> illustrates much of the information that schools might hold on individual pupils. In the UK each region is different in what it actually collects/holds: information may be held by:

- schools – including that relevant to the Schools Census<sup>16</sup> and National Pupil Database;
- UCAS
- the Connexions<sup>17</sup> service;
- colleges – including that required by the Learning and Skills Council;<sup>18</sup>
- universities – including that required by Higher Education Statistics Agency;<sup>19</sup>
- employers – on their HR systems;
- recruitment companies and online job services;
- professional development bodies;
- services run by local or regional government agencies e.g. Careers Northwest<sup>20</sup> or Careers Wales Online<sup>21</sup>

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12 See: <http://www.databasemasterclass.blogspot.com/>

13 See: <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/01/16/ngov216.xml>

14 See: <http://www.arch-ed.org/issues/databases/databases.htm>

15 See: <http://www.sifinfo.org/>

16 See: <http://www.standards.dfes.gov.uk/giftedandtalented/identification/census/>

17 See: <http://www.connexions.gov.uk/>

18 See: <http://www.lsc.gov.uk/>

19 See: <http://www.hesa.ac.uk/>

20 See: <http://www.careersnorthwest.com/>

- individuals – on any other e-portfolio, personal development or networking system they might use.

3.1.3.4 Some of this information mainly serves administrative purposes, and some may serve pedagogic or developmental purposes that do not specifically support applications. Unfortunately, there is not enough coherence or consistency in the kind of information currently held to enable useful services. Nor is there much coherence in the purposes or motives for which the information is held.

3.1.3.5 From a data protection point of view, to be useful to e-applications, the purpose of supporting applicants would have to be covered in the reasons given for collecting and holding the data. For minors, the position is further complicated by the question of access by those in a parental capacity, which is normally allowed.

3.1.3.6 An ideal, apparently still quite a way off, would be to have a point of access for individuals to see all information relevant to themselves on any identified site, somewhat like the service now provided by Garlik, a company that provides products and services related to personal information<sup>22</sup>. (It currently offers a free service to find what information is held about one in various places, including a credit report.) This could be linked into a distributed e-portfolio system, so that individuals could then moderate the display of any of that information to third parties.

3.1.3.7 Architecture related to this has for some years also been proposed by Eidentity, a small consultancy with innovative ideas about personal information brokerage<sup>23</sup>.

*Box 1: Examples from our survey of practice related to Stage 1*

“The primary level of support is from personal tutors. All prospective students have interviews, during which the continuity of IAG support pre- and post-16 will be stressed...A member of the teaching staff has the remit to liaise with personal tutors and students and review personal statements and achievement; this person also liaises with the subject teachers to get subject reports” (General FE College)

“In the Year 12 tutorial programme , personal tutor and guest speakers raise *aspiration* for HE at early stage in term” (Sixth Form College)

“The Career Management Course is the same for all AS learners and has 7 modules:

- introduction to post-18 options;
- HE choices;
- UCAS and the HE application;
- IT-based career-matching (using ‘Adult Directions’ program);
- non-IT resources;
- student finance;
- target-setting and action-planning.” (Sixth Form College)

“The use of targets for learning (TFL) which involves each learner having an individual interview, twice a year, in every year from Y7 – Y11 inclusive. This helps learners develop and set realistic targets and make more realistic choices about their careers and post-16

21 See: <http://www.careerswales.com/>

22 See: <http://www.garlik.com/>

23 See: <http://www.edentity.co.uk/>

options" (11-16 School)

"Learners all have personal research time during which they would use the KUDOS package, the Connexions Jobs For You website, Fast Tomato. These activities would take place during careers lessons, at lunch-time, after school and at home." (11-16 School)

"The school is a very heavy user of Fast Tomato from Year 7, revisiting every year. We also use the Oldham Progress File for work experience / enterprise skills: it would be better to have one product with a bit more space for the Personal Statement and Key Skills" (11-18 School)

*Some schools invest a great deal of resources and training into making sure their tutorial systems work well:*

"Tutors specialize on Y12 or Y13; they don't follow the same group of students through from Y12 to Y13. Tutors receive training, particularly new tutors." (11-18 School)

"Students are allocated to tutor groups with 24 specialist tutors who are responsible for supporting their studies. Tutors receive specific tutor training with INSET refreshers and regular tutors' meetings...there is also a Student Services (SS) resource area staffed by specialist, career-trained support staff." (Sixth Form College)

"33 specialist tutors with 2-4 tutor groups each and 2 hours remission (to include short group sessions) per group – so a total allocation of about 4 hours per week per group. Tutors begin with enrolment guidance then take the students through the 2 yr programme. The tutor is the learning manager and chief adviser for the student. Tutors carry out target-setting and review (called minimum expected grade review, MEG). Tutorial blocks: 10-15 mins 2/ wk. each student has entitlement to at least 2 individual interviews/ yr, more if deemed necessary.

"The specialist tutor team ...can attend conferences, report back with information. They have an annual training day and regular meetings. Guidance Managers (3) support new tutors. Attendance at conferences/training is supported through the College's CPD budget." (Sixth Form College)

"Each tutor has 9 hrs/ fortnight timetabled time for tutorials with students. Each student has an entitlement to a half-termly individual meeting with their tutor and should also have 1 hr/ fortnight with their tutor either in small groups or individually (*this is a huge resource for tutorial time compared to many schools*). There are 6 specialist tutors involved and although tutors do not receive specific training they are supported through regular weekly tutors' meetings plus more frequent informal support. The tutorial system is new and it is already evident that it gives better IAG for learners, partly by taking advantage of the expertise of new staff who bring experiences from outside. Previously there were 17 6<sup>th</sup> form tutors and this was unwieldy; 6 allows better communication." (11-18 school)

"The IAG team has NVQ L3 and 4 IAG qualifications; another staff member is training for NVQ at present." (College of General FE)

*Box 2: Examples of technology supporting Stage 1 currently in use in our survey schools and colleges*

**FastTomato**<sup>24</sup> is a web-based tool to support career planning and management in the broadest sense. It is a product of the Morrisby Organisation<sup>25</sup> who develop and supply psychometric tests. Currently about one third of schools and colleges in England use the tool, with Kudos (see below) being the chief competitor (in 60% of schools). It has a set of four main assessments:

- Career interests (which yields 20 matching jobs)
- Social / learning style
- My situation (12 factors which 'hold people back')
- My priorities – a personal values questionnaire

*Career interests* is the fundamental assessment (a user has to do this assessment if the matching function is to work). The assessment is based on a three-factor model (people / data / things) which allows matching to cut across job families.

The *social / learning assessment* is based on the work of John Holland – the Holland matching system which yields 6 personality types, intended to identify 'interaction style'. (However it is not standardised for the UK, for women or for ethnic minorities, so it is not without problems.)

*My situation* is based on 12 factors which hold people back (and are most motivating for them?) and yields a profile which can be sent to an advisory tutor to alert them to issues.

**City of Nottingham Passportfolio**<sup>26</sup> will replace the original City of Nottingham Passport which was available to city schools through Nottingham City Council and used by over 4000 students. The new version, Passportfolio, has moved to be the responsibility of Connexions and is going out to the whole county. There are three zones in Passportfolio:

- The Achievement Zone
- The Reviewing Zone
- The Presentation Zone.

The *Achievement Zone* is similar to the old CNP. It allows for recording of assessed achievements, personal achievements, Key Skills, employability skills and enterprise skills. It holds a record of work experience.

The *Reviewing Zone* is new. It contains a careers planning process with different interactive quizzes, tasks / activities and links to other resources. Some of the interactive quizzes come from the old DfES Progress File materials, some have been adapted from classroom activities and some from AimHigher materials (Aim Higher is a sponsor). It follows a Connexions planning process: thinking about themselves generally, their personal qualities, multiple intelligences, values etc.

The *Presentation Zone* is again similar to CNP, any information from other zones can be transferred into it. It holds the Common Application Form (to FE) and ILP. There is not a direct link to the UCAS Personal Statement but there are different types of prompts which

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24 See <http://www.fasttomato.com/>

25 See <http://www.morrisby.com/>

26 See <http://www.nottinghamschools.co.uk/eduweb/schools/schools-template.aspx?id=1323>

can be added to by activities they can do.

**ProgressFile**<sup>27</sup> is an adaptation of the DfES paper based system to enable pupils to analyse, record and monitor their strengths and achievements, and plan their learning. The application was piloted in Oldham, but is now seeing widespread use by LEAs across the North of England. It has a Work Experience section allowing the user to record a work placement and reflect on it.

**Adult Directions**<sup>28</sup> and **Kudos**<sup>29</sup>, both from Cascaid<sup>30</sup>, are career matching databases supplied as CDs where the user answers a series of questions about what they like and dislike in their work. They are then given a list of suitable careers that their answers have matched them to. Kudos is aimed at 13-19-year-olds and Cascaid claims that 80% of UK secondary schools use it.

**my-iPlan**<sup>31</sup> is a web-based Individual learning Plan (ILP) tool developed in a partnership between NordAnglia eLearning and Wolverhampton Learning Partnership, widely used across Wolverhampton Local Authority (and also in Worcestershire). my-iPlan starts out by pre-populating a database with data from Capita's SIMS, or other schools MIS software. my-iPlan and the Wolverhampton Area Prospectus<sup>32</sup> work together (both are NordAnglia eLearning products). It provides an information-exchange system containing secure and validated summative data, a record of prior attainment and progress and review.

### **3.1.4 Actual and possible web services and tools**

- 3.1.4.1 There are different groups of services to consider. Firstly, there are services which could support the collecting of "hard" information about qualifications etc. and their presentation to the learner. These might include services for transferring learner achievement information, including transcript-type information, between different interested parties. In general, this area is one where there is plenty of awareness already, and attention is being given to such services. Bodies and initiatives such as Managing Information Across Partners (MIAP)<sup>33</sup> and the Learner Achievement Record<sup>34</sup> are relevant, as are all the many approaches to the transfer of learner information generally between schools and colleges, as well as other services relevant to e-administration. There is nothing here specific to e-admissions.
- 3.1.4.2 For allowing such information to be readily seen by learners, many systems have addressed this, largely in the context of e-portfolio, e-PDP or e-ILP systems. Some progress has been made towards services based on open standards, but these tend to be the exceptions with information typically only readily seen either if it has been

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27 See [http://www.myprogressfile.com/\(1lnajxbxfki0ppicehgdnp\)/index.aspx](http://www.myprogressfile.com/(1lnajxbxfki0ppicehgdnp)/index.aspx)

28 See <http://www.cascaid.co.uk/website/viewProdList.do?prod=6>

29 See <http://www.cascaid.co.uk/website/viewProdList.do?prod=1>

30 See <http://www.cascaid.co.uk/website/about.jsp?area=1&nav=0>

31 See <https://www.my-iplan.com/>

32 See <http://www.area-prospectus.com>

33 See <http://www.miap.gov.uk/>

34 See [http://www.qca.org.uk/18510\\_18513.html](http://www.qca.org.uk/18510_18513.html)

input by the learners, or from an MIS or student information system within the learner's current institution. The challenges are shared by all e-portfolio technology, and, again, are not particular to e-admissions.

- 3.1.4.3 More generally this is part of the challenge of allowing people (in this case, learners) to see any information that is held about themselves through a single “portal”. There are several issues with this, including privacy, data protection and security, which themselves are associated with possible web services.
- 3.1.4.4 Secondly, there are services relevant to “softer” information about learners. This area is highly relevant to e-portfolio and e-PDP tools generally, and any relevant services would be shared with those domains.
- 3.1.4.5 Questionnaire and assessment service providers too could work towards constructing web service APIs which can allow learners to evidence claims by linking to results *in situ*, and also linking to other tools which learners might be using. For example a web service could be devised for allowing profiles built up on FastTomato to be seen on my-iPlan. In general, high-value (“high-stakes”) assessment information suggests itself for being held by the awarding body, to ensure integrity and security; while information with lower stakes could be stored and reproduced by an e-portfolio or similar system. Again, this may lead to differences in the security-related services that are needed.

## **3.2 Making sure learners have accessible and comprehensive information about available pathways**

- 3.2.0.1 This stage is about making information available to learners about the range of opportunities they might consider. It is the 'O' of the DOTS model and relates to 'career exploration' in the National Framework. There is of course an overlap with the previous stage, in that tools which help young people to identify careers they might consider are aimed at increasing their self-awareness but also give information about the careers they propose and general pathways available. For the purposes of this model we assume that the learners have already used such tools to help them focus their aspirations and identify broad goals. They are now ready to seek specific information about available pathways.
- 3.2.0.2 However it is worth noting that both our model and the existing infrastructure of systems like UCAS Apply which provide such specific information assume that the prime decision the learner *ought* to make is about *subject* or *discipline* of course or employment opportunity. All other considerations follow from this: geographical location of institution, financial considerations, full-time or part-time study and so on. There could be a tension here between the values of the information providers and the facilitators of career choice – tutors, careers advisers - and those of the learners themselves.

### **3.2.1 Information requirements**

- 3.2.1.1 The information required at this stage is about the opportunities available – both on the sheer availability of relevant opportunities, and then any further information which may be relevant to the learner about those opportunities and the bodies which provide them. This can come through a wide variety of media and in many forms. Traditionally, initial formal information about employment opportunities comes through advertisement or through an agency, while educational opportunities have often been mediated through prospectuses or guides. Both are also likely to be mediated informally (or passed on directly) through word of mouth (which can include messaging, e-mail and social networking sites). While such word-of-mouth information could be less accurate or reliable, it could also include information relevant to the applicant which the bodies themselves do not wish to have published.
- 3.2.1.2 A particular requirement for more sophisticated applications processes is information about the balance of supply and demand for an opportunity. If opportunities are in short supply, and applicants plentiful, the opportunity providers can be more exacting in what they ask of applicants. Conversely, if a particular kind of opportunity is plentiful, with not enough applicants to fill the available places, applicants can expect not to have to fulfil many requirements, and to have more information available about the opportunities.

### **3.2.2 Supporting processes**

- 3.2.2.1 The processes relating to this have a much simpler basis than the previous category relating to information about learners. Mostly, they involve the provision of information about opportunities on demand. There may be little interactivity or personalisation beyond a repeated cycle of search and feedback. While the main focus of the learner's activity in this stage (and therefore the technological support)

seems to be searching for information, because of the sheer quantity there must be some mechanism for discarding some opportunities in order to create the space to explore others further. Thus some aspects of decision-making are also involved. Tutors will typically be involved in filtering the results of students' searches. While this is obviously helpful it is also problematic: tutors bring both their own perceptions and an institutional perspective of what are appropriate pathways for students they teach. Ideally filter mechanisms would be applied to the data which use criteria supplied by the learner but which could also have some constraints built in or could use intelligent mechanisms to select increasingly more relevant opportunities as the learner makes choices.

3.2.2.2 A more sophisticated set of processes would be those that attempted to provide information on the basis of attributes of the learner. This would depend on the prior recording of the kind of information in the self-awareness section immediately above. To provide this personal information for personalising opportunity information, either information could be extracted from portfolios or other sources (as permission allowed), or there could be a sequence of interactive processes through which the learner supplied the information about him or herself which was needed to personalise the opportunity information supplied. (A completely different concept of personalisation relies instead on the fact that each person's network is unique and personal to them: this will be addressed within the next sub-section relating to evaluating information and reaching a decision).

3.2.2.3 There are two central challenges for information systems supporting the first approach to personalisation (using personal information to increase relevance of search results):

- the system should help the learner find the most appropriate information resources. This may need an iterative process in which the learner tries out searches with a support system, and refines the search based on the results or feedback received;
- the system should be able to take into account personal attributes and circumstances in the provision of opportunity information.

In any database query or search system, there are several levels of response to individual needs. At worst, a system does not allow some of the criteria which are important to the learner to be used in searches. For example, a learner might want to know whether crèche facilities are routinely available, and at what cost: this information may not have been gathered and represented in the database. Even if such information has been documented somewhere, perhaps in an FAQ list or incremental database of answers, there is still a very substantial challenge to allowing it to be used directly in the search process. The information would have to be represented in a searchable way, and the search terms made clear to the learner who is searching.

3.2.2.4 The more generally useful a system is designed to be, the more information it will need to hold relevant to criteria that the learner is searching for. For example, a course's retention rates might be an indication of whether it is a "good" place to go, beyond the more basic figures of historical applicant numbers and places offered. However, no general system can hold information to answer personal questions like "is this a place that takes people like me?" without accessing the personal information about what that individual is like. The learner's needs move from a

generic database from which information about specific opportunities can be drawn towards a database designed to help the user answer the question, “what suits me?”, i.e. a matching service. Any matching service needs to be provided with the ‘entry profile / person specification’ information and a user profile.

- 3.2.2.5 For HE, the UCAS Entry Profile initiative is a step in the direction of institutions being transparent about their requirements and the criteria they use to select if they have more candidates than places. However there are a range of problems: there is (as yet) no common vocabulary for describing skill / competency requirements; it is difficult to make sense of information about competition for places (including understanding the difference between selecting and recruiting institutions / courses); and there may be ‘hidden’ criteria for selection (which the institution itself may not be fully aware of). The development of a standard for eXchanging Course-Related Information (XCRI)<sup>35</sup> is another step towards transparency and the supply of information in a form which can potentially be used for matching against a user profile. The overall aim of XCRI is to define a vocabulary and appropriate technology bindings (e.g. XML, RDF) for describing course-related information that encompasses course marketing, course quality assurance, enrolment and reporting requirements. Currently there is considerable interest from stakeholders in applying the XCRI standard to express opportunities in 14-19 prospectuses.
- 3.2.2.6 It is probably much easier to allow information relevant to individuals to be retrieved as part of a process of verifying that a particular opportunity was in fact suitable, rather than at the point of selecting the opportunities to display in the first place. But this is essentially the same as what happens in current processes. The risk is still, as now, that the learner has to examine too many search results, with too great an expenditure of time, to be able, practically, to cover the field and find an optimal opportunity, or one near to optimal.
- 3.2.2.7 Somewhat better than simple search, a system may allow very detailed search based on all kinds of criteria, but this may require a lot of effort on the part of the learner. An incremental improvement might be to store criteria between searches – this could be done for web-based systems through cookies. The next stage up would be to have a profile of the learner's requirements, which was editable and able to be used in any queries.
- 3.2.2.8 An ideally usable system would be able to use relevant information about the learner which might be available from various sources, without it having to be re-entered by the learner. A system might learn in the process of search, so that the learner profile could be updated to provide more helpful results with minimal effort from the learner. It could allow “collaborative filtering”: for this the system needs the input of multiple user responses / feedback to build a behavioural profile as with books on Amazon's system.

### **3.2.3 Options for supplying this information**

- 3.2.3.1 Currently this information is spread around a range of sources. Generally speaking, the bulk database information needs to be supplied by the opportunities providers in

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<sup>35</sup> See <http://www.xcri.org/>

order to provide the search facility. The issue here is, who collects what information? UCAS is the national collector of information about HE opportunities, with links to individual institutions which hold their own databases of their programmes. LearnDirect collects information about broadly vocational / FE opportunities. Regional prospectuses provide information in some areas about post-16 opportunities. Information about Modern Apprenticeships seems more patchy: there is a website<sup>36</sup> which provides both generic and specific information about apprenticeships in different job areas but not specific availability information and another for Scotland<sup>37</sup> which potentially will supply this information but is still under development. Information can be local, such as in an Area Wide (14-19) Prospectus<sup>38-39</sup>. FastTomato allows institutions using it to input local data about job opportunities as well as being able to access national databases.

3.2.3.2 Other sites hold less 'official' information<sup>40</sup> with comments from current or past students, or recombine and re-present existing information<sup>41</sup>.

*Box 3: Examples from our survey of practice related to Stage 2*

"There is a mini-fair in February for highlighting apprenticeships etc., led by personal tutors and Connexions and involving local employers. This is open to all and both Y1 and Y2 students attend." (General FE College)

"Year 1 programme of support:

- In the second half of Term 2, the Connexions PA gives a session on researching employment and HE.
- Visits into college from student ambassadors from a local university.
- Researching career intentions and E Midlands HE Fair.
- Around Easter: HE taster courses at local HEIs." (Sixth Form College)

"School also has contact with a local company well versed in modern apprenticeships; the local Federation of Small Businesses visits school; for gap year students a rep. from 'Year in Industry' comes into school; other gap year visitors give useful contacts in UK and overseas." (11-18 School)

"Tutorial programme Y12, T2: students attend the local UCAS HE fair, tutorial sessions to discuss benefits of HE and receive IAG on course options." (Sixth Form College)

"Y1 T3: students examine the issues of researching courses and HEIs effectively; they have 2 or 3 half-day sessions for beginning the UCAS 'apply' process after the AS exams." (Sixth Form College)

*Box 4: Examples of technology supporting Stage 2 currently in use in our survey schools and colleges*

36 See <http://www.apprenticeships.org.uk/list/apprenticeshipsdirectory/>

37 See <http://www.mascot.uk.com/> and <http://www.scottish-enterprise.com/modernapprenticeships>

38 See <http://www.area-prospectus.com/Wolverhampton/home.aspx>

39 See <http://www.dfes.gov.uk/14-19/index.cfm?sid=27&pid=259&ctype=TEXT&ptype=Single>

40 See <http://www.unofficial-guides.com> and <http://www.hotcourses.com/>

41 See <http://www.opendays.com/>

"The college has a students' intranet which links to the Connexions site for careers information; they also have access to KUDOS, ECCTIS, the UCAS website, KAPLAN and Careers Watch. Students can find advice on writing personal statements, interview technique, HE advice etc. Students are given encouragement to use these resources via their tutorial sessions." (Sixth Form College)

"School uses websites extensively – UCAS, Push." (11-18 School)

"The UCAS website is widely used; the Stamford test (which is well regarded), Course Search and Entry Profiles." (Sixth Form College)

"The My Course page [of the student website] (which is also available in hardcopy) also brings together a whole range of useful websites – UCAS, hotcourses.com, opendays.com, unofficial-guides.com, coa.co.uk, 13to19-lancs.info, careers-portal.co.uk, yearoutgroup.org, etc, etc. Students are encouraged to use these to get a better picture of what the university / course they're interested in is like" (General FE College)

### **3.2.4 Actual and possible web services and tools**

- 3.2.4.1 Agencies that may hold such data are discussed above. The information gathered can vary widely, and the services needed to gather more extensive information may also be different. The effectiveness of search services depends vitally on the comprehensive nature of the data stored, and there are probably many web services which could contribute to the effective and efficient gathering and storage of this information, though this is a very general issue of much wider concern than e-admissions.
- 3.2.4.2 Assuming the information is gathered, and maintained, the obvious service to be offered is exposing the information to Web access. The database access itself does not need any new services. On the side of gathering the information, services developed and developing in conjunction with XCRI should allow institutions to expose their opportunities, and for this information to be gathered and presented by any number of different systems, to present to learners and their advisors. Among other things, holding information in this way would enable the user-facing systems to offer basic search followed up by retrieving extra information from the XCRI profile of the course.
- 3.2.4.3 If the service offered to learners is to include any kind of automatic personalisation, the services necessary immediately become more complex, as indicated in the main report. On top of services offering authentication and authorisation, relevant details of the learner would have to be passed to the search service, to enable tailoring of the results to the individual. This can only be effective in conjunction with standard attribute names.
- 3.2.4.4 Collaborative filtering, such as is done by Amazon, potentially resulting in recommendations like "people who applied for this course also applied for these other ones" could rely on anonymous data gathered automatically by agencies such as UCAS; on the other hand, any involvement of rating or recommendation would require appropriate services to collect or pass on the relevant information. At present

this kind of functionality is normally seen within a site, not across sites, though “Web 2.0” services like Digg<sup>42</sup> do rely on people sending their ratings across the Internet.

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42 See <http://www.digg.com/>

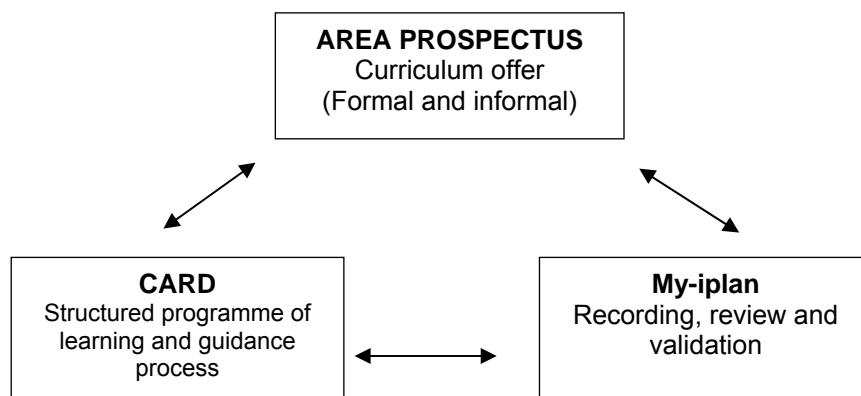
*Box 5: An LEA approach to providing opportunities*

The Wolverhampton 14-19 Development Team was a Phase 1 Pathfinder and DfES/ QCA see the locality as an exemplar of national best practice because of its area-based approach. Collaboration across all 14-19 providing institutions gives a greatly increased 14+ option choice to all learners; this applies to the informal non-examined curriculum (eg. HE taster days), as well as formal, courses. The greater the range of activities to which the learner can gain access, the better are minority interests catered for. The IAG philosophy means giving support to young people so that they have a genuine increase in access to opportunities to have real experiential learning in a range of environments; then they can reflect upon and review what they've achieved and redefine goals and targets as necessary. The process should be 11-19 so that younger learners can build the skills base which is necessary to be able to make well-informed choices at 14 and after 16 both for HE and employment with training.

The infrastructure has 7 strands:

1. **Curriculum framework:** the timetable can be liberating or restricting! The LEA's philosophy is to superimpose an agreed blocking TT system on top of individual institutions' own TTs (so not all TTs are identical); this provides a real choice of opportunities for learners wherever they study. It means that students do travel (out of 3000 6<sup>th</sup> form students in the city, 1600-1700 will travel each week).
2. **Curriculum models:** different formal and informal curriculum offers at 14+, including L2 and WBL options that are coherent 5 day learning packages.
3. **Area-prospectus.com:** this holds the whole 14-19 curriculum offer, formal and informal for the area and is online.
4. **My-iplan:** (see Box 2) an online ILP, developed and piloted in the city in 2005 and available for all from September 2007. It encourages learners to move forward incrementally: *it is learner-owned, reflective, formative and experiential.*
5. **CARD:** (Chose A Real Deal); an HE progression accord. CARD is seen as a way of turning the desire of the learner into the formal promise of an offer from HE if the learner completes the process of experiential learning specified in the CARD goals. CARD is now being turned into a universal progression promise, with LSC backing, for ALL learners at 19.

**NB:** the 3 IT entities are linked into an holistic process, which can be visualised thus:



6. **'Virtual workspace':** a city-wide VLE which creates linkages to already-existing software and uniquely has live online mentoring.
7. **The underpinning systems:** policies, procedures, finance, health and safety are all in place and made manifest to institutions through documentation.

### **3.3 Supporting learners in evaluating the information about the characteristics and requirements of shortlisted pathways / institutions**

3.3.0.1 This stage is about focusing in on possibilities, gaining more information about them and reaching a decision. It has elements of both the 'D' and the 'O' of the DOTS model: some decisions have already been taken but more information is now needed in order to reach a final decision about where to apply and what to apply for.

#### **3.3.1 Information requirements**

3.3.1.1 Arguably the kind of information now sought is much more personalised to the enquirer, idiosyncratic and personally relevant, difficult to predict by the institution (and also potentially not the sort of information the institution would want to circulate). This is a different concept of personalisation to that discussed above: it relies instead on the fact that each person's network is unique and personal to them. The information which the learner needs to inform their decision comes from a pool of rich information, some of which may be provided by institutions in their prospectuses or websites but other of which will come from within their social networks. The challenge is to broaden those networks to ensure a wide range of feedback / experience. The formal, structured aspect of this information is going to be either one-to-one advice or a reply to an email or a post on a message board. A tutor giving one-to-one advice ideally needs to know the learner well *or* needs access to rich information about the learner's characteristics, skills, achievements and so on. E-portfolio technology is useful here in providing the adviser with 'soft' information: asking the learner to provide this, perhaps on multiple occasions, is less effective as the learner may forget important details.

3.3.1.2 The information about opportunities each learner obtains through personal, informal channels can easily be different. It is quite difficult to evaluate this approach without further research: on the one hand, such variability of informal information would move away from fairness and objectivity; while on the other hand, one might argue that social networks filter information in a positive way, with the possibility of highlighting things that are of particular relevance to an individual. It is in this way that job vacancy information, as well as information about courses of study, is often brought to a particular person's attention.

3.3.1.3 If it has not already been supplied and processed in the context of the bulk provision of information, above, information will be needed at this stage about the relative supply and demand of opportunities and applicants, as it may well affect the strategy that applicants adopt, and their evaluation of the opportunities.

#### **3.3.2 Supporting processes**

3.3.2.1 Support is key at this stage. Many students will not be able to use the information they retrieve unaided. They will need help in interpreting the information they find, especially from institutional prospectuses which are often written in language targeted at a group which shares its cultural assumptions and can be expected to know the difference between, for example, Single and Joint Honours programmes. They may seek help from tutors or from their social networks.

- 3.3.2.2 Hence there is a shift in the kind of technology we can observe being currently used, towards social networking tools which allow communication, storage and retrieval of information. This includes chatrooms and messaging facilities allowing peer-to-peer interaction but there are also examples of 'mentoring' roles where users can post queries to be answered by 'experts', tutors, careers advisers or admissions tutors. Tutors can use the same technology to send group emails as reminders of deadlines etc.
- 3.3.2.3 These tools are useful because through them learners can find people who have had a relevant experience and talk to them to help develop a rich picture of the pathway they are considering. The pictures will inevitably be partial<sup>43</sup> – nobody can be an impartial supplier of rich experience – but perhaps learners expect this partiality from their peers and are more capable of using others' experiences to help them form their own judgements. It is possibly more of a problem where tutors contribute to the 'rich picture' because they have also had experiences which colour their understanding but students expect impartiality from them, thus their contributions may carry more weight.
- 3.3.2.4 Receiving institutions also contribute information at this stage, beyond that which is available through generic databases. The simplest way of doing this is by offering the facility to email the course tutor / HR department with specific queries. However many institutions have developed an intelligent "Virtual Adviser" service designed to respond to the majority of queries (even when asked in free text), with the facility to re-direct queries which are not recognised by the system to a human adviser. Many of such queries will ultimately be built back into the system. The advantage of these systems is clearly that they provide a way of making information instantly accessible and 'personal' to the applicant while reducing the human costs to the institution of providing it.

*Box 6: Examples from our survey of practice related to Stage 3*

"Students ask the Head of Careers to translate prospectuses which he feels are written with lots of assumptions. He sees more vocational students wanting to go to HE – they really struggle with the prospectuses." (General FE College)

"Assembly in Y2 T2 on giving IAG on making CF/ CI choices...All learners are inducted into the UCAS process and given full IAG about HE in Y12. The college is confident that those learners who decide not to complete the application process have had the information and skills development to be able to make an informed decision. The college tutors know the status of each student's decision-making through Y13 and can advise accordingly. Each student is counselled every 2-3 weeks" (Sixth Form College)

"The college has considered a system called 'B-live', an interactive system which is sponsored by employers. It allows students to send receive targeted emails from

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43 For example, a recent posting on [www.unofficial-guides.com](http://www.unofficial-guides.com) from a disenchanted student who lasted two weeks at her chosen university before leaving: *Honest opinion from a 'normal' comprehensive school girl from south wales ...I went in confident and unbiased thinking no way would there be any class difference, not nowadays. I hated it! ...The atmosphere and social life was crap, the general impression i got was a load of very over protected children being let off the leash for the first time...So anybody considering it not from the typical grammar/public/boarding school people that I was surrounded by, as long as you're not naive about the culture shock, i'm sure you'll be fine. Otherwise I wouldn't touch the place with a bargepole.*

employers. If use of the system grows pre-16 locally, the College may consider using this.” (Sixth Form College)

”Students attend the Connexions/ UCAS convention at the University of Worcester in March.” (11-18 School)

The University of Bradford’s ‘Junior University’ gives a face-to-face experience to local potential applicants on Saturdays: the new Head of the Learner Development Unit is considering how this concept could be expanded virtually.

*Box 7: Examples of technology supporting Stage 3 currently in use in our survey schools and colleges:*

“Students have direct links to software such as the WEX database and the UCAS website from Y9 onwards via a VLE. They each have their own site which allows open discussion. This improves decision-making because it’s informed and based on acquired skills.” (Local Authority)

Wolverhampton Local Authority’s Virtual Workspace allows prospective applicants to ask for explanations by email, post queries and exchange information with each other and with informed tutors, careers advisers or Connexions mentors. An e-guidance pilot project has been running in two schools since February 2006 to explore the feasibility of Connexions Personal Advisers offering online IAG services to schools. The evaluation report noted: *‘Take-up has been excellent at both schools especially with female learners...PAs involved in the project are excited by what has been achieved so far and are enthusiastic about continuing to work in the Virtual-Workspace. A whole year group were able to communicate with their PAs and received individual guidance, within a few weeks, and this would not have been possible without the on-line service. Learners were able to communicate in language and styles on-line that they were comfortable with.’* However challenges were also noted: *‘learners expect instant replies to their messages...some learners pose very complex questions in their messages which require a lot of research to answer...discussion threads need to be carefully managed, posters may need to be challenged about misconceptions in order to guide and not mislead the other users on the message board.’*

HEIs are developing crossover services for applicants, linking awareness-raising and guidance to services concerned with recruitment and retention. Among others, the University of Teesside has a Virtual Adviser on its website which gives immediate answers to over 90% of applicants’ questions and refers those it cannot answer to a human adviser. Anglia Ruskin University and the University of Birmingham have similar systems.

These systems can be found at <http://www.anglia.ac.uk/ruskin/en/home.html> and <http://connect2.askadmissions.net/connect2images/bham/vaimages/bhammiddle.html>

Nottingham Connexions’ Passportfolio includes a messaging facility for learners and tutors to use.

”There is a staff shared area where files of students’ activities are stored, also details of student attendance, attitude and effort grades and KS grades. It also generates reports electronically. LAT (Learning Achievement Tracker, a Government system) is also on the staff shared area to track the previous Y13 students. Tutors need to be IT-literate.” (11-18 School)

“‘Team’ – a commercial software package for e-registration which can be used to manage behaviour and rewards; the teacher can add comments which can go onto the CV / personal statement / reference. “ (Sixth Form College)

"Tutors use 'Prosolution' to report details of student attendance. Details of careers interviews and records of subject reviews are recorded on 'Progress'. 'Exchange' is an internal college network for staff to access information etc." (Sixth Form College)

### **3.3.4 Actual and possible web services and tools**

- 3.3.4.1 At this stage, the raw information about opportunities is assumed to have been gathered and consulted. Relevant services shift their focus to the support process, and described above are two possibilities, firstly of help in an official capacity from tutors and other advisors, and secondly of getting extra information from peers and via social networks.
- 3.3.4.2 To get reliable advice from advisors, the advisors need to be well-informed, particularly about the learner's situation and preferences. This means that any relevant information which has been recorded about the learner (by themselves or others) needs to be made available. Inside a single institution this is unlikely to be a great problem, but across institutional boundaries there is again a need for personal information to be served securely, and according to the learner's wishes. Advisors need to securely authenticate themselves; learners need to be able to give permission to specific advisors.
- 3.3.4.3 The situation with peer networks is rather different. People in any case use social networks as a source of information, suggestions, and feedback. But as peer networks are so common, people will already have strategies for evaluating any peer advice: the advice of some friends will be more trusted, others less so. When dealing with known peers, everyone has some kind of internal rating and filtering system in their own heads as part of human nature. Thus, the services that are required here are mainly do to with enabling the networks.
- 3.3.4.4. A further consideration comes from viewing advisors as members of a social network. It is easy (and well known) for advisors to give advice based on their own experience, which may not be impartial, but be partially based on their own peer network. One extra way of evaluating the advice of advisors would be for the learners to rate the quality of their advice.

## **3.4 Supporting applicants in presenting themselves to institutions**

3.4.0.1 This stage fits with the Transition Learning (T) dimension of the DOTS model. Having made the decision about which opportunity to target, the applicant must gain acceptance from the institution, course or employer.

### **3.4.1 Information requirements**

3.4.1.1 At this stage the learner / applicant has some general information requirements which are common to a range of plans and projects rather than specific to achieving a place in HE or a job, mainly tasks to be undertaken and timescales. These can of course be supported through technology which stores details of tasks to be undertaken and issues timely reminders of when to undertake tasks. It is important to remember the role of such generic functionality when considering more specific applications.

3.4.1.2 The specific information which the learner needs at this point is the 'person specification' relating to the job or course requirements related to the HE course, to be matched against his or her own achievements, experience and/or qualifications.

### **3.4.2 Supporting processes**

3.4.2.1 There has been a gradual process of increasing the transparency of the 'person spec' for HE courses. UCAS introduced the concept of Entry Profiles in 1998 which were intended to spell out what was required in a successful applicant in more detail than the customary A-level grades or UCAS points. However, the format of Entry Profiles was initially left up to the individual HEI, and often to individual departments. This creates problems for any attempt to use technology to 'match' course requirements to individual applicant profiles. Currently, UCAS Personal Statements are typically constructed by applicants over a period of time with a good deal of monitoring and advice from tutors aimed at maximizing the applicant's impact through careful selection of their accounts of achievements and motivation.

3.4.2.2 There is a dilemma here for tutors and technologists. The process of creating a job application or UCAS Personal Statement can be modelled and technology can help the applicant with detailed guidance through each stage of the process of selecting and presenting the best evidence. There is little sign at present of either employers or admissions tutors showing much interest in looking beyond the applicant's *account* of their achievements to the evidence itself, beyond the qualification that might be relevant / necessary. This is mainly due to time constraints but may also be because of a lack of familiarity in dealing with and assessing direct evidence. Instead they rely on the applicant's account of that evidence (although it is not hard to envisage that some 'selecting' courses/HEIs may become keener to use real, valid evidence rather than self-declared experience). Detailed guidance mediated through experienced tutors may 'improve' the application towards a common standard which weakens both the personal voice of the applicant and the power of the application to discriminate between applicants (where this is necessary)<sup>44</sup>.

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44 Personal Statements will be reviewed at UCAS by plagiarism software from this year for entry 2008 onwards and the HEIs informed if chunks of text have been lifted from the Internet.

### 3.4.3 Options for technological support of this stage

- 3.4.3.1 There is plenty of both paper- and web-based guidance around to help applicants complete Personal Statements<sup>45</sup>. As suggested above, there is now a need to move from a text statement to a statement with embedded evidential links, as assumed in the ePRM and exemplified in several e-portfolio products already on the market. This is not purely a question of providing better information for admissions tutors and recruiters to make their selections: as has already been suggested, there is very little evidence so far of any enthusiasm from the potential consumers (although the need to differentiate between increasingly similar applications might prompt a different reaction). There is also an argument that the fact of having to produce the evidence for any claims has a positive qualitative effect on the account offered by the individual of their skills, qualities and experience<sup>46</sup>.

*Box 8: Examples from our survey of practice related to Stage 4*

“On the My Course page and within the careers tutorials programme there is a step-by-step guide to creating a Personal Statement.” (General FE College) (NB A student interviewed from this college who intended to do a social work degree had found and used a specialist vocational website to guide her Personal Statement rather than the advice provided by the college).

“HEIs such as University of Cardiff come to school to discuss interview technique, how to apply etc.” (11-18 School)

“Y13 programme: Early in T1, HE speakers come into school to reinforce interview and personal statement preparation.” (11-18 School)

“Y2 students have ‘Skills for Success’ programme – interview skills, portfolio management course (part of enrichment).” (Sixth Form College)

“Tutors and the careers teacher deliver sessions for Y10-11 on application skills (how to complete application forms, interview skills and ‘mock’ interviews etc.) in preparation for the 16+ transition. Learners all have personal research time built into the tutorial timetable.” (11-16 School)

“In Y11, the 2 Connexions PAs do individual interviews with more disaffected learners; they do group work to reinforce the work done by the careers teacher (eg. application skills, small group interviews, CV preparation).” (11-16 School)

“All through Y12, there is a common theme of skills development and general extramural enrichment so applicants can construct a good portfolio of evidence for preparing their UCAS personal statement; applicants can use summer break to build on this.” (Sixth Form College)

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45 See for example <http://www.coa.co.uk/> for a handbook called *40 Successful Personal Statements for UCAS Applicants*:

46 An interesting parallel can be drawn with Wikipedia. Despite the apparent absence of a peer-review mechanism for monitoring the quality of contributions to this site, knowledgeable commentators have claimed that the quality of information in most areas is comparable to that from more academically-approved sources. This could be partly because there is an expectation that contributors will cite evidence for what they state, which acts as a social control mechanism in raising quality.

### **3.4.4 Actual and possible web services and tools**

- 3.4.4.1 For any application, there are routine and bureaucratic aspects of the process and of the information required by the institution. Support for these aspects may involve firstly ensuring that learners remember to take appropriate actions at appropriate times, and secondly providing “hard”, fixed, or validated information either directly to the institution applied to, or to the learner when filling in the appropriate forms. Services here might include calendars, reminders, task lists, or project planning services on the one hand, and portfolio services on the other.
- 3.4.4.2 The receiving institution may want to verify “hard” information of this kind, and the systems holding the information may allow this, perhaps (as in the case of my-iPlan) through attestation by a named responsible adult. The alternative approach, not yet implemented widely, would be for all this kind of information to be held at the institution of origin, and to be served on demand to anyone authorised who wants to verify it. Transcripts can be verified using this kind of approach.
- 3.4.4.3 The concepts from the ePRM (see below) are most relevant to the task of creating text to add to an application. Work on XCRI includes services that allow institutions to publish structured course information, along with entry profiles or requirements. Part of these profiles could be seen as structured personal statements, and this is how they have been viewed by the ePRM project. Every course could specify its own set of headings or questions that it wanted applicants to answer in free text form. Services can be envisaged which retrieve the required headings and present them to the learner for completion.
- 3.4.4.4 This mirrors electronic practice in the recruitment sector, where businesses such as WCN<sup>47</sup> help applicants apply to several employers by allowing reuse of information previously presented to other employers. While they call one component of their system “WebSAF”, suggesting a standard application form, in reality their clients, the employers who are recruiting, can ask for any information from applicants. It is when two employers ask the same questions that information can be reused. Naturally, many questions are standard, and this standard data matches well to the “hard” information envisaged here for applications for courses: personal details, qualifications, work experience, etc. It is easy to imagine this same kind of approach allowing reuse of information across applications to various HEIs, while at the same time allowing each HEI to ask their own specific questions.
- 3.4.4.5 The verification of this kind of textual information is different from verifying “hard” or fixed information, probably relying less on secure and fixed administrative processes, and more on constructing convincing text. However, as recently publicised examples point out, plagiarism is a risk, and a plagiarism detection service may be useful (see footnote 44, p.35).

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47 See <http://www.wcn.co.uk/>

### **3.5 Supporting learners in understanding the nature of the HE experience (in particular, HE learning)**

3.5.0.1 This stage can also be seen as the 'T' of the DOTS model, to do with successful transitions. The clearest focus on this stage is when the learner actually enters the next stage i.e. on induction into the HE institution. However, current practice in widening participation raises the importance of this stage: it is believed that the earlier learners can be introduced to some kind of experience of HE, the easier it is to raise aspirations and overcome cultural barriers to progression. Thus, AimHigher programmes introduce even children of primary school age to HE environments. Certainly, throughout the applicant life-cycle which is the focus of this report, institutions are constantly seeking opportunities to give learners a range of experiences of HE: residential courses, visits, invited speakers from HE, former students and so on. On their part, many HEIs are also striving to co-operate and make 'the HE experience' more accessible through re-designed Open Days, 'Junior University', taster course and virtual campus tours.

Focussing specifically on HE learning, this stage is about moving learners towards a more self-directed, less supported style of learning.

#### ***3.5.1 Information requirements / supporting processes***

3.5.1.1 It is difficult in this stage to separate out the information from the process. While recognition of the importance of students developing realistic prior expectations and feeling comfortable in an HE has grown, it is difficult to judge which methods are most successful. HEIs themselves differ enormously in ways which are not easy to make apparent to naïve applicants. Visits of any sort are expensive and schools and colleges are obviously likely to capitalise on local links, at the risk of restricting their students' choices. However, judging by the practice discovered in our survey, the conviction remains that some kind of 'real' experience is valuable. It is hugely difficult to abstract from such experiences the key informational factors which really matter to influence students' expectations, in order to attempt to convey them through virtual means.

3.5.1.2 Many universities now have virtual campus tours on their websites. Most prospectuses are illustrated with vignettes of students talking about their (always wonderful) experiences and some universities are attempting to use this idea on their websites, although this is still usually in the form of a static picture with text rather than a video clip. The crossover between marketing and guidance may create some tension here: however HEIs do want to retain the students they attract so they have an interest in developing realistic expectations.

3.5.1.3 It may be that the most crucial factor which determines whether a student will continue to a successful outcome having once entered HE is whether he or she can cope with the demands of HE learning. While accepting that there are differences in the amount of support given by different HEIs and on different courses, generally students in HE need to be more independent, seek out guidance when they need it, become more assertive and learn to use each other to support their learning. The close guidance given on many 'A'-level courses coupled with a relative lack of groupwork is arguably not the best preparation for this.

- 3.5.1.4 There are programmes which address this issue. Both the Certificate of Personal Effectiveness (CoPE) offered by ASDAN<sup>48</sup> and the Curriculum Enrichment Programme (Open College North West)<sup>49</sup> are ‘enrichment’ awards aimed at giving sixth-formers an experience of working and learning together with more independence than within the standard curriculum. Both earn UCAS points in relation to Key Skills. The difficulty with both is finding time in the crowded Year 12/13 curriculum for students to participate.
- 3.5.1.5 Within the JISC Managed Learning Environments for Lifelong Learning (MLE4LLL) Programme the TransPortALL project focussed on the transition of a group of ‘returning’ learners from an FE College where they completed Years 0 and 1 of a degree programme, into Years 2 and 3 of the programme within the linked university. The culture shock was apparent, with the outstanding feature being the relative lack of support for their studies. The project team made a series of recommendations<sup>50</sup> aimed at supporting transitions from more- to less-supported learning environments.
- 3.5.1.6 Another JISC project directly relating to helping students understand the HE experience is the Learning Matrix<sup>51</sup>, (one of the Regional Pilot Projects for Distributed eLearning). This project set out to provide services to allow pre-HE and other students to discover learning packages offered by learning provider institutions, register on courses and access resources. The learning packages offered were chosen to enhance the students’ knowledge of or preparedness for Higher Education courses. Services included placing outcomes for each student in a “progress file” which could later form the basis for an e-portfolio. An authorisation and authentication infrastructure based on Shibboleth architecture was implemented to give students access to resources with a single sign-on.

*Box 9: Examples from our survey of practice related to Stage 5*

The **University of Bradford** has several kinds of provision for pre-entry; a Junior University every Saturday on campus to raise aspirations in the local area and progression modules for pre-applicants. They want to extend the Junior University idea virtually, to include more distant students, and would use existing students to moderate Google groups. They already use Google groups and a tool called openWiki, they want to get Moodle and use that too. They want to get the pre-entry students to engage with a group of fellow potential students which is less scary than making friends in real life, but then they can meet face-to-face when they arrive and already know each other. In the Learner Development Unit there is an email-based help facility for existing students through the website and they’d like to open this up to prospective students.

The **University of Portsmouth** runs a membership scheme for 11-16 year olds. Members get the chance to visit the University and take part in events and workshops. There is a magazine which members are encouraged to contribute to, with advice on different careers and courses, revision hints and exam stress tips as well as film and music reviews and features on events at the University and in the city, and a supporting website at <http://www.upforitclub.org.uk/>. This contains profiles of current students and graduates. The site is not interactive but encourages emails, hosts competitions and has a facility for

48 See <http://www.asdan.org.uk/>

49 See <http://www.ocnw.com/Qualifications/CustomisedAwards/tabid/79/Default.aspx>

50 See <http://www.liv.ac.uk/~cjl/files/Recommendations.doc>

51 See <http://www.thelearningmatrix.ac.uk/project/index.htm>

sending e-cards.

The **University of Wolverhampton** has a website called 'Sharpen up your Skills' at <http://www.wlv.ac.uk/skills> This contains a wide range of support / advice material, accessible to any user.

The **University of Aberdeen** currently has a project starting to think about providing a support service to pre-students – those who have provisionally accepted or confirmed entry. The project is internal and aims to provide some form of 'virtual buddy' support to orientate and best prepare students from five weeks before freshers' week through the first half session. Retention is a major driver, and along with the Centre for Learning and Teaching the project will involve input from one of their colleges and Student Recruitment and Marketing.

At the **University of the West of England (UWE)**, the Central Admissions (CA) team work on an account manager approach so that specified UWE CA staff take the applicant right through the application process. The CA outreach team work in schools and colleges and at the UCAS fairs in a similar way to Aimhigher. For pre-16 learners this is an aspiration-raising process. At post-16 there is a much more focused approach; the University works with 200 targeted schools and colleges mostly in the South West, with priority to the 'top 20' in the multiple deprivation index. When prospective applicants make contact with the University via open days or phone calls, their email addresses are noted and the university begins a relationship with them at that point. Records start at 1<sup>st</sup> enquiry and include UCAS data, personal and achievement data. The new development programme will also feed data into the student's portfolio. Students are sent a series of e-bulletins, each relevant to that stage of the application process (eg. later e-bulletins focus on accommodation, fees and finance, etc.). These will include links to appropriate web-pages. The University rarely completely rejects its CFs at Confirmation & Clearing so it can begin collecting student information before the courses start. During June and July applicants are sent e-forms which get their personal information and other administrative details onto the UWE system. This means the induction period can be used for the 'fun stuff'!

Induction begins with the induction weekend when there is much entertainment in a festival atmosphere but also practical help available to move boxes etc. The Vice-Chancellor walks the campus talking to parents and new students to reassure and advise. Induction week follows and involves registration, introduction to the library and study support (and how to use them) but also activities designed to help making friends. Freshers meet their teachers and get their timetables. This week involves the whole university; CA has the students' data; Marketing organises the event; faculties provide course-specific IAG and 2<sup>nd</sup> / 3<sup>rd</sup> year students are involved as ambassadors.

At **De Montfort University**, there are various marketing, recruitment, advisory and transition support teams and initiatives designed to offer information, advice and support throughout the enquiry / application / enrolment cycle. These include:

- the Enquiry Centre, handling all enquiries to the University via telephone, email and drop-in visitors. It offers campus tours throughout the year and drop-in Tuesdays staffed by current students for enquirers and applicants to come and have a campus tour and chat to current students (the focus is on student life / non-academic aspects of university life);
- the Transitions team which is part of Student Services. They work with a smaller number of local schools and colleges which involves a higher level of 1-2-1 interactions with students who need additional transition support.

Overall they aim to encourage as many people as possible to visit the campus and experience the environment first hand. Focussing specifically on the use of technology

within these teams:

- new multimedia presentations being developed to present the usual guidance information in a more interactive, animated way;
- video diaries, pod casting etc. on the website: the Business School already have pod casts online and this is an area they really need to grow, especially international students who normally can't visit at all.

"The Head of Careers thinks that there is an increasing trend of not visiting, even for Open Days, which concerns him. Also a trend of students choosing [their local university] as the familiar option (and because their friends are going) rather than, say, Manchester which might suit them better. Another year or two of the career planning process might have helped them look beyond the locality to broader opportunities." (General FE College)

"There is a students' visit to a redbrick university" (11-18 School)

"Residential courses in HEIs financed by school; prospective medicine applicants visit University of Keele for a 1-day conference; students attend the Oxford and Cambridge conference at Cheltenham racecourse in March; students attend open days at Oxford and Cambridge in the summer." (11-18 School)

"The Y11 students have a 2-week 6<sup>th</sup> form induction during July; the first week is for general study skills development; the second, a residential at University of Bristol." (11-18 School)

"Once the UCAS application has gone, the IAG team gives advice on student finance supported by Aimhigher." (General FE College)

"AimHigher: activities delivered / funded by AimHigher include theatre group visits, trip to Universities of Aston and Worcester for modern languages." (11-16 School)

'All the information and instructions for CoPE have been incorporated into the guidance website, but they would welcome an e-portfolio tool to collect the evidence (currently paper-based). This also gains the students their KS qualifications' (11-18 School)

"Y10 and 11 learners who complete the enrichment programme can achieve the ASDAN L2 award. The basis of the Personal Development curriculum is the ASDAN CoPE award at L3; this enables learners to create their own PD curriculum relevant for HE progression. This is being piloted at present in one school." (Local Authority)

### **3.5.2 Actual and possible web services and tools**

3.5.2.1 This aspect of admissions is by nature more purely educational and less administrative, and thus less amenable to the use of administrative-type services. General services useful in e-learning already include communication tools such as chatrooms where learners can try out their developing understanding in the context of their peers. It might be appropriate to leave scope here for communications to be allowed to go through social networking systems of the learner's choice, rather than expecting them necessarily always to use systems provided by their educational institution.

3.5.2.2 When in the new institution, services could be envisaged to support peer mentoring to help with induction. Whether mentoring of new learners being inducted is peer-based or tutor-based, it might also be facilitated by the provision of information from the old institution to the new one. Services to transfer administrative information are

already deployed in the schools sector (e.g. SIF,<sup>52</sup> discussed above) and it is relatively easy to see these being extended to include transfer of information to HEIs. However transfer of administrative information can at best only provide the background for peer mentoring and other related services.

3.5.2.3 In effect, the services required at this stage have been covered above in other sections.

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52 See: <http://www.sifinfo.org/>

## **Section Four: Supporting reconsideration of options following rejection**

- 4.1 When an applicant is refused a job or a place on a course, the reasons can be divided into two categories: either the applicant has not matched the essential aspects of the personal specification / entry profile or s/he has matched the specification but so have many other applicants. In this case other factors come into play. The amount and relevance of previous experience is an important consideration both in job applications and in admissions to highly selective course / institutions. This is usually (but not always) regarded as a fair criterion on which to differentiate candidates. Hence careers advisers tell candidates for highly selective courses to target relevant work-experience opportunities.
- 4.2 Decision-makers in universities and industry have become much more sensitised to the problems of other criteria for differentiation, not just because they may be discriminatory and therefore illegal but also because they recognise that candidates with the greatest potential but disadvantaged by gender, ethnic origin, social class and other cultural factors affecting aspiration may not be easily identifiable when compared to their age peers from more favourable cultural backgrounds. Nevertheless there are no secure and agreed methods for measuring potential separated out from achievement (though some admissions tests claim that they do this). Despite more widely available training for selectors, it is possible that personal biases will influence the judgements they make.
- 4.3 For all these reasons, feedback to rejected applicants on the reasons for their rejection is always likely to be partial. Beyond the actual difficulty of specifying why a well-qualified applicant has been rejected in favour of another almost identical applicant, there are the very real issues of workload and institutional self-protection against legal claims. Since it is not in the employer's interest to give feedback to failed candidates, it is not surprising that we found no examples of this in the private sector. Highly selective / institutions / courses in HE are equally unwilling to give specific feedback to rejected candidates, although they might give a general summary of main reasons for rejection when the process is over.
- 4.4 Where the applicant is rejected for a course or job because s/he has not met the essential personal specification, it should in principle be straightforward to give individual feedback through a process of matching the candidate's profile to the specification. The same would apply if university course entry profiles were presented more like person specifications. Clearly, this could happen before the applicant makes the application, thus avoiding the rejection. Interestingly, large recruiters have reported that applicants for jobs often ignore such advice from them and go ahead anyway with applications which the experience of the recruiters suggests are bound to fail at the first hurdle. It is difficult to know whether this is foolhardiness of a realistic estimate of the margin of error on a far from perfect process which might allow them an outside chance.
- 4.5 A more detailed study of this stage is being undertaken by the related JISC Study on improving the provision of feedback to applicants and the use of technology to support this.

*Box 10: Examples from our survey of practice following rejection*

“Support for students who are unsuccessful in the application process to help them re-evaluate and re-plan in the context of UCAS Extra or Confirmation and Clearing is via the SS advisers who give advice on UCAS Extra. This advice is also on the e-communication system (‘The Portal’) where students have access to messages, emails and a noticeboard...Staff are in college for the whole week of confirmation and clearing.” (Sixth Form College)

“Students who are unsuccessful in the application process are supported / enabled to re-evaluate and re-plan on an individual basis.” (11-18 school)

“Tutors check from an early stage that students are making realistic choices so as to minimize unsuccessful applications.” (11-18 school)

“Very little usage of ‘UCAS Extra’. At Confirmation & Clearing, school examines list of offers, identifies problems and provides tutor for the results day and 2 or 3 days thereafter. The tutor can call the HEI on the student’s behalf if they’ve just missed the offer grades.” (11-18 school)

“At C&C, if students don’t get the grades specified for their CF offers, the school contacts the HEIs concerned to try to get them accepted. The school then goes to the CI HEI if unsuccessful. This process leads to a virtually 100% placement rate. The school then provides help with Clearing if necessary. There has been little need to use ‘Extra’.” (11-18 school)

Schools also recognise ‘non-applicants’ as a problematic group who need targeted IAG:

“There is individual tutor support for learners who do not complete an application. The system of having all learners register for UCAS ‘Apply’ has the bonus of allowing an extra tutor group to be set up on the staff section – called ‘not now applying’ – allowing tracking etc.” (11-18 school)

“There are 16 students who have not applied via UCAS this year. These are urgently referred to the Connexions PA for a careers interview. Tutors are responsible for monitoring this and also for supporting those interested in doing a gap year. The school feels this is an issue because non-application is often tied to lower exam ambition and this can knock-on to other learners, reducing their commitment. The school is very keen that it is not seen as a ‘UCAS-factory’, so post-January 15<sup>th</sup> they work with the non-applicants. There is concern that these learners should be picked up earlier in the cycle.” (11-18 school)

“Learners who leave the application process at other stages of the student life all have an interview with the Connexions PA... application ‘drop-outs’ will be followed up by tutors who will discuss issues with students, who can then book a careers i/v. NB: the college recognises that some learners will not be ready for an HE application in Y2 so will give IAG to support them when they are.” (Sixth Form College)

## Section Five: perspectives from graduate recruiters

- 5.1 Alongside the main body of work, a subsidiary investigation was undertaken into the use of technology to support admissions, transition and induction at the next substantive transition point, that of entry to employment following graduation. Here views were elicited from graduate employers (2), from online recruiters (2), a careers guidance and vacancy notification agency<sup>53</sup> (1), a developer of professional development systems for employees and the Chief Executive of the Association of Graduate Recruiters. This group was purposely chosen to reflect leading edge practice, and – given the time parameters of the study - represents an accessible rather than representative sample. It also provided follow up opportunities in respect of the systems architecture employed.
- 5.2 A recent survey (Cullen and Rowley, 2006) undertaken with recent UK graduates reported that ‘Over a third of respondents currently participate in blogs and over two thirds are considering using careers-related blogs in the future. Nearly a third download podcasts already, 20% of which are careers related....Companies like Siemens and Cadbury Schweppes have already ... launched corporate logs on their websites as part of their recruitment strategy, with contributions from both their graduate intake and their recruitment teams. Dresdner Kleinwort also include video profiles to introduce their 14 graduate bloggers who are based around the world ... PricewaterhouseCoopers and Centrica ... have both picked up on candidates requests for more information on ‘how to succeed at interview’ by offering mp3 downloads on the topic.’
- 5.3 The key points emerging from this aspect of the work may be summarised as follows:
1. The services provided by online recruiters varied, with one providing support from pre-application through application to induction (in some companies up to a year in post), and a second dealing with the application phase only.
  2. While commercial recruitment organisations saw their ‘customer’ as the recruiting organisation, they nevertheless provided a number of services which can be seen to be related to applicant guidance. Thus, at the pre applicant stage, the emphasis on ‘reaching out and relationship building’ is perhaps akin to the marketing / guidance crossover services we have noted at the transition to HE, with such provision (depending upon the company), as:
    - Jobclubs hosted electronically;
    - Competitions for student societies
    - Events databases;
    - Details of presentations at different institutions.

At the application stage some sought to guide potential applicants both in respect of the technical process of completing the online form (transition learning) and with regard to the job or vacancy itself. Some support was generic (e.g. in the form of FAQs), other bespoke e.g. by individual answers to

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53 After spotting a vacancy, potential applicants click through to the websites of employers or their recruitment agencies. This agency purposefully seeks to identify ‘*what a graduate would want in a face-to-face service and then seek to replicate it*’. It provides two levels of service: a short check on a cv/application form and a more immediate/realtime, personalised and in-depth service, including 1: 1 online chat with a named specialist adviser; online CV analysis; and personality/motivation assessment online.

specific questions. At this stage there were also 'realistic job previews' which allowed candidates to compare themselves to some of the role requirements and receive feedback in order to make an informed choice as to whether to apply. This self-selection facility (bringing self and opportunity awareness together) is concerned to get a match between individual and environment on a broad range of criteria beyond technical competence, and thereby facilitate applicant decision making.

3. The process in respect of application was less open than that delivered by UCAS. Specifically, for both online recruitment organisations and companies undertaking their own recruitment, the emphasis was upon initial automated screening against criteria such as work availability (is the applicant able to work within the UK); academic achievement (such as UCAS points and/or degree classification) and congruence of the applicants view of what they were looking for from work with what the work context may offer (see 2 above). Further screening involved online assessment of candidate levels of literacy, numeracy or of other capabilities dependent upon employer requirements.
4. There was a move toward limiting the – expensive – human contribution to the candidate assessment process, especially where such contributions were also seen as potentially lacking in high levels of reliability. Alongside this, however, must be set the recognition of the importance of a blended approach, and for face-to-face contact (as opposed say, to *'virtual assessment centres'*). As one respondent put it *'people are the most important resource of an organisation, so you can't expect to do everything remotely'*.
5. The predominant approach to application forms was in terms of a limited amount of space for free text responses, linked to the recruiting organisations requirements in terms of applicant competencies. Whilst termed competencies, these were more likely to reflect evidence of the application of broad skills categories such as communication, decision making or conflict resolution. It appears that many of these may be very similar to one another, but the difference of expression is important to the companies concerned. Such responses are assessed by staff against agreed definitions of key behaviours or indicators, or reviewed rather than scored as part of the overall decision making process.
6. Only one organisation dealing with recruitment was moving away from a template model and towards a greater free form approach, and it will be interesting to see how far this – which is linked by the developers to greater personalisation from the applicants' perspective - develops an affinity with the 'soft templating' model under development for UCAS online applications.
7. Related to this, there was only limited interest in the 'rich pictures' of applicants implied by e-portfolios, except at the margin, or where such pictures conformed to common data structures and could therefore also be investigated / screened in an automated way. This view also reflected the number of applicants for each opportunity (the candidates were very willing to *'jump through the employers' hoops'* so why should employers look at e-portfolios?). The first of these is highly reminiscent of the reactions of HE admissions tutors to applicants presenting with Records of Achievement in the 1990s.
8. The provision of services for unsuccessful applicants was not seen as a high priority. While one employer indicated that this would be provided 'at a high

(general) level' if sought, the more general view was that there was no business benefit to be derived from the provision of such a service. There were two exceptions here:

- within the careers guidance agency, where CV's are stored within a database and, should the same individual return to use the system, the history of their earlier use will be available to the adviser. The intention here is to provide feedback in respect of the occupational area / vacancy to be applied for;
  - in the case of companies, for those limited numbers who progress to the assessment centre, where numbers are limited and responses can be provided face-to-face.
9. Interoperability in respect of data did not emerge as a major concern. This reflected two factors, particularly in respect of the online recruiters:
- Applicant data was held within the online recruitment system and accessed by employers within the confines of this system (so they are the 'data provider'), rather than exported to the employers as is the case with UCAS data passing to those HEIs chosen by applicants. To access the data employers log in with their passwords
  - Where there was a requirement for applicant data to be exported – as for example in the case of successful applicants where the online agency also provided support for induction, such data was provided in a bespoke format as required by the receiving organisation. One organisational representative described this as '*very straightforward in theory*'; in practice it involved agreeing solutions with each client company (defining data structures, defining company systems, convert data into the format required by the company system and passing this across). Different methods (SOAP and HR-XML, HTTP, FTP and simple e-mail) are therefore adopted, dependent upon the receiving systems.
10. Where induction support, (termed '*onboarding*' by one organisation) is provided, this includes the provision of information to new employees (who is in 'their team', joining information, pre-appointment documentation, pensions, and possibly the use of bulletin boards to link new applicants together). There is some interest in linking to existing employees, but also awareness that existing staff are very busy and such linkage may require careful monitoring.

## Section Six: Information architecture for supporting learners in admissions

- 6.0.1 Actual and possible web services and tools have been discussed above under the sections to which they appear appropriate. This section is intended as a basis for possible refactoring, and integrating relevant “service genres” and “service expressions” into the JISC-sponsored e-Framework.
- 6.0.2 General discussion of the e-Framework is followed by a brief review of the ePortfolio Reference Model, whose work is relevant both here and for other JISC projects, but which was not at the time of writing documented in the e-Framework. Then, gaps in the e-Framework can be discussed, together with proposals for service definitions to be developed.

### 6.1 Services and the e-Framework

- 6.1.1 The e-Framework site (<http://www.e-framework.org/>) is intended to comprise details of Service Genres, Service Expressions and Service Usage Models. On 2007-03-27, in the appropriate registries on the web site, 20 Service Genres were documented, out of 71 listed. Here is the list of the then documented Service Genres, with their dates of the current versions, and notes on possible use in the context of e-admissions. Most of these services could have a place in tools generally related to supporting learners, but without any relevance to e-admissions over and above their general relevance to e-learning.

- Add (2007-03-06)
- Alert (2007-02-28) – could be used to remind applicants of important tasks and dates
- Annotate (2007-02-26)
- Archive (2007-03-01)
- Authenticate (Users) (2007-03-01) – could be used to authenticate learners and agents of bodies providing opportunities
- Classify (2007-02-28)
- Dictionary (2007-02-28)
- Email (2006-07-24) – could be used in any user-driven application
- Harvest (2006-07-31)
- Logging (2007-03-01) – could apply to any application where people use systems
- Messaging (2007-02-28) – could be used in any user-driven application
- Personal (Competency) Profile Information (2006-07-25) – could be very useful in conveying relevant attributes of learners to providers.
- Presence (2007-03-06) – to flag availability of advisors and peers
- Rate (2007-02-28) – to rate opportunities
- Recommend (2007-03-06) – to recommend opportunities
- Search (2007-03-01) – to search for opportunities
- Service Registry (2006-07-24)

- Syndicate (2007-02-27)
- Thesaurus (2006-07-24)
- Translate (2007-03-06)

Of these, the one of most direct and immediate relevance is the Personal (Competency) Profile Information genre.

- 6.1.2 The 20 documented service genres are shown as selected ones of 71 envisaged genres. Others of the 51 not yet documented are potentially of interest to e-admissions depending on their eventual content, in particular: calendar; chat; grade; list resources; manage e-portfolios; manage personal development; message users; online conference.

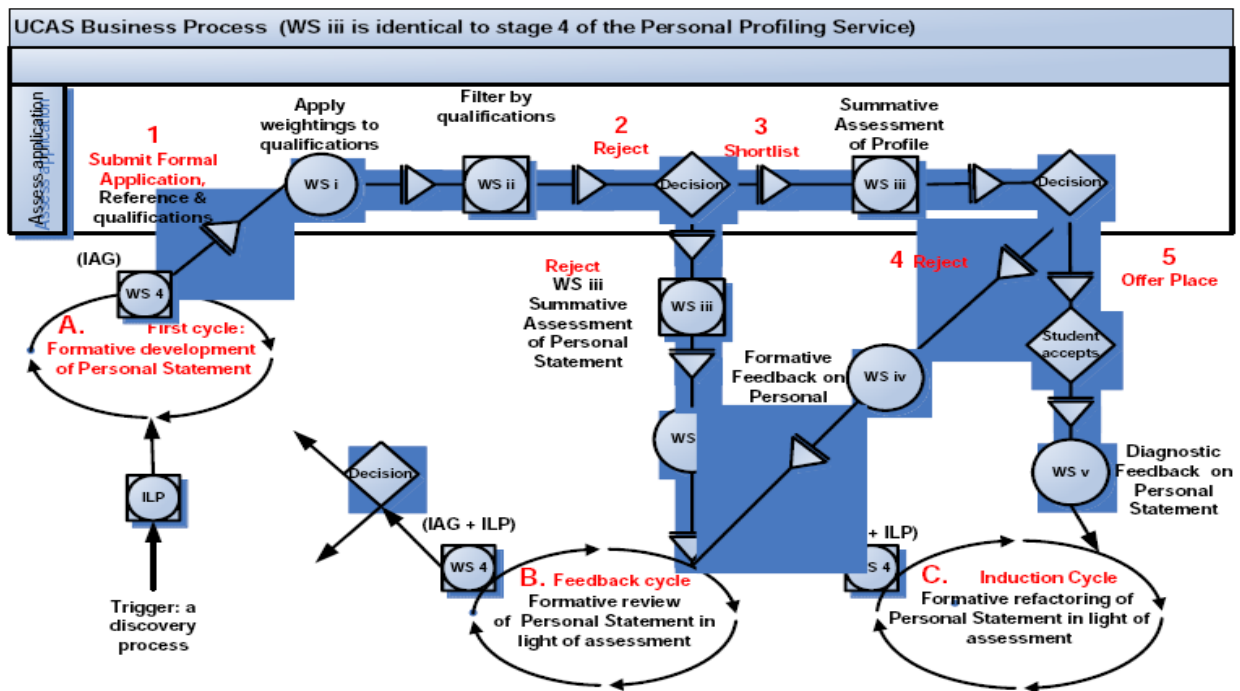
## **6.2 The e-Portfolio Reference Model (ePRM)**

- 6.2.1 The ePRM was funded in an attempt to throw light on processes involving e-portfolios, and thus it is worth considering its findings here, as they overlap with supporting applicants in the sense of this study.
- 6.2.2 The work from the ePRM had not been entered on the e-Framework site at the time of writing. But because the ePRM dealt with processes related to the support of e-admissions, it is particularly worth reviewing the materials here. The project outputs are available at the Nottingham web site which covers the ePRM project, also including material from related projects:

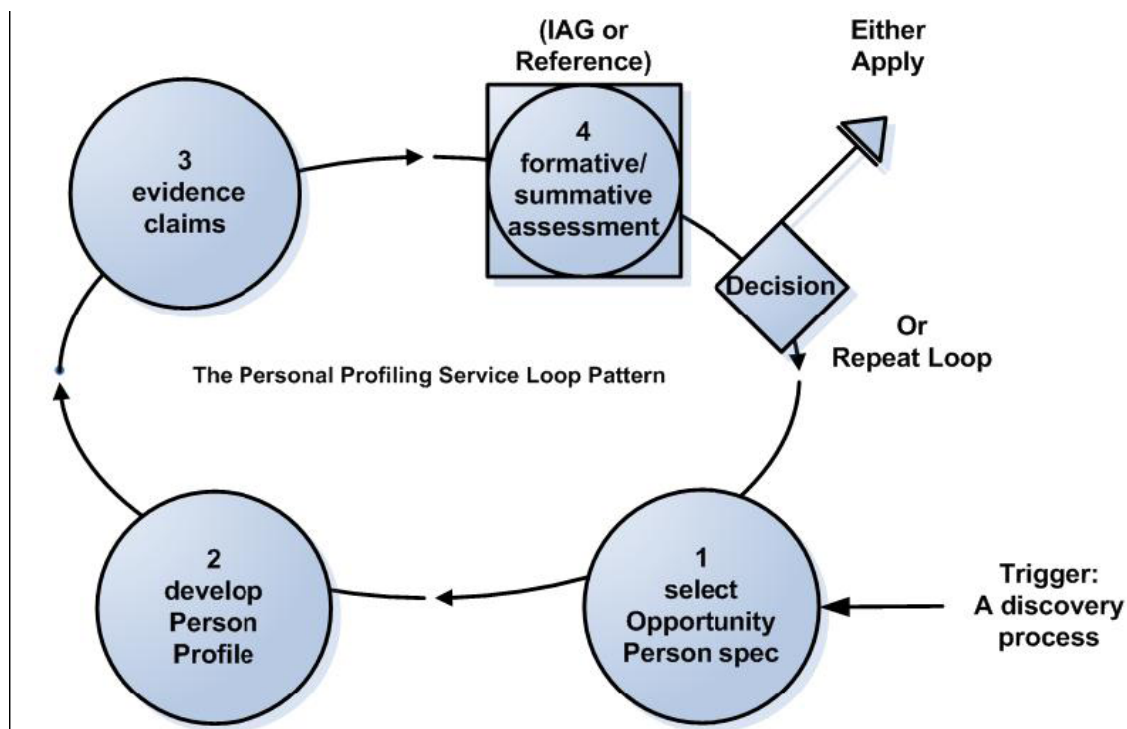
<http://www.nottingham.ac.uk/epreferencemodel/outputs.htm>

The ePRM project “took a highly pragmatic approach by focusing on Transition e-Portfolio” (final report, September 2006, page 12). This tight focus meant that the project did not claim to cover other uses for e-portfolio technology in as great a depth.

- 6.2.3 The project used an overarching service flow scenario illustrated by this diagram:



6.2.4 Annex 2 of the ePRM final report details the “service genre” (a term defined within the e-Framework) outlined by the project, called “Personal Profiling”. The main explanatory diagram (below) details the service loop pattern outlined in the loop A of the overarching service flow.



The stated purpose of the service genre is to help with putting together structured alternatives to the single, undifferentiated “personal statement” which appears for example in UCAS forms.

6.2.5 As in the present study, this is an idealisation of the processes that are engaged in by learners and their advisors, as the processes featured in the service genre

diagram neither are necessarily distinct, nor follow each other in that necessary sequence.

- 6.2.6 In this idealised ePRM model, it is assumed that each course (or, more broadly, each opportunity) provides a “Person specification” (for example, a generic “entry profile” for a course), subdivided into several requirements. The first step in the ePRM model is for the learner to choose one of these to apply for. In the model, as in reality, this provides the basis for the next step, in which each applicant to each course constructs an individual “Person Profile” in which the requirements of the specification are addressed separately.
- 6.2.7 The next step in the ePRM model is for claims to be evidenced, and this approach has much to commend it. But it is not necessarily obvious what kind of evidence is required for each claim. Possible evidence differs according to different kinds of claim; but also the evidence required by the opportunity provider may also differ. (There are constraints of feasibility: typically, basic mathematical ability can be evidenced through qualifications; ability in team work cannot be so evidenced directly.) Employers in particular may want higher standards of evidence for requirements that are more vital to the employee role, but may be content with self-claimed abilities and self-reports as evidence for less essential matters.
- 6.2.8 The ePRM model goes on then to assess whether the claims, together with the evidence assembled, are likely to meet the conditions of entry. If they do, the application proceeds; if not, some other application is selected. Again, there is a clear logic in this, even if it does not match with observed practice.
- 6.2.9 Taken together, this aspect of the ePRM model is clear enough to be related to the model developed in this study. The ePRM model starting point, at the lower left of the overarching diagram, is the “Trigger: a discovery process”. This can be located after steps 1 and 2 of the present model: that is, after supporting learners in becoming more self-aware, and making sure that they have accessible and comprehensive information about opportunities. In terms of the DOTS model, this means that the ePRM starts after “S” and most of the way through “O”.
- 6.2.10 The ePRM personal profiling service loop (“A: Formative development of Personal Statement”) can then be seen as to a lesser extent involving part of the present step 3, evaluating information about the characteristics and requirements (“O” and “D” of DOTS), and to a greater extent involving the present step 4, “Supporting them in presenting themselves to institutions”, which is identified with the “T” of DOTS in this study.
- 6.2.11 Having located the ePRM service genre materials within the present model, the present model can be used to consider actual and possible web services and tools, and this will naturally include the ePRM concepts.

### **6.3 Gaps in provision**

- 6.3.1 The discussion above strongly suggests that many of the processes involved in supporting (e-)applications are common to other areas. The most important related areas relevant to supporting e-application appear to be firstly the whole e-portfolio area, as it deals with the gathering of personal information relevant to application; and the area of managing and presenting information about opportunities gathered

from as broad a range of providers as could be relevant to applicants. As both of these areas have their own issues and communities, it cannot properly be said that services within those areas are appropriate for development just in the context of support for e-application, or indeed even in the context of e-admissions.

- 6.3.2 What is specific to the e-application process are the specific processes involving the interaction between the sets of information from both these other areas: information about the characteristics of individual applicants, and information about the characteristics of the opportunities (and their providers).
- 6.3.3 As the Personal (Competency) Profile Information service is already specified in outline, that invites the next logical stage to this process, which is to have a service returning personalised information. This was touched on in Section 3, Part 2. At this point, it seems the most relevant service to describe in more detail, because of its key role in the automatic use of personal information to filter the mass of available opportunity information, so that potential applicants find it easier to be aware of the range of relevant opportunities without being hit by information overload. This service genre is called “Opportunities Relevant to an Individual”.

***The service genre: Opportunities Relevant to an Individual***

- 6.3.4 A service delivering the benefits to the learner from this genre of service could position itself as part of information, advice and guidance services related either to careers, or more short term, to further and higher educational opportunities. It would depend on a portfolio or other information service able to deliver a Personal Profile Information service, that is, given a range of attributes (which would often be in the form of a map of desired competences or other characteristics) a Personal Profile Information service would, after suitable permission or authority checks, return the information held against that “map” for the identified individual. As part of the setting up of related systems, individual learners would let the Opportunities service know of the address of the Personal Profile service.
- 6.3.5 If the learner was logged into an IAG service which knows about suitable Opportunities services, a screen would come up inviting the learner to search for relevant opportunities, with the option being given of using the learner’s personal information to filter the results. When the learner submits the form, the IAG service sends a request to the relevant Opportunities service, comprising any straightforward search terms, the URI of the Personal Profile service, and perhaps a single-use key obtained from the Personal Profile service. The Opportunities service would then examine the search query, to determine what information about the learner would be relevant to filtering the results of that query. The Opportunities service would send a Personal Profile Information request to the Personal Profile service, at the URI provided, giving the competency (or characteristic) map required, along with the single-use key. The Personal Profile service would return any relevant information held to the Opportunities service. The Opportunities service would then use that information to filter the results, and return to the IAG service the list of results suitably filtered. This would be displayed on the learners screen, and if seen as useful, perhaps stored by the learner for future reference. The results returned by the Opportunities service would include URIs for each opportunity, either of a XCRI service, or of a general web site where the learner could go for more detailed information, or both.

- 6.3.6 The suggestions concerning authentication and authorisation are only one tentative possibility for achieving the required functionality. Experts in this area need to be consulted to establish adequately secure architectures for use in this context.
- 6.3.7 The service has the potential greatly to increase the effectiveness of opportunity search, effectively by factoring in some of the knowledge which would be used by a skilled advisor. If this can help to place learners in the opportunities to which they are most suited, it might be expected that this may result in a better chance of successful completion, and thus better satisfaction and retention.
- 6.3.8 The service is described further in the separate document drawn up in the e-Framework template.

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# **Appendix A: Institutions and organisations which took part in the survey**

## ***Schools and Colleges***

Carr Hill High School, Kirkham, Lancashire  
Christopher Whitehead Language College, Worcester  
De Lisle High School, Loughborough, Leicestershire  
Guilsborough School, Guilsborough, Northampton  
Hanley Castle High School, Hanley Castle, Worcestershire  
Lady Hawkins High School, Kington, Herefordshire  
Haybridge High School, Hagley, Worcestershire  
Tewkesbury School, Gloucestershire  
Wyggeston QE1 College, Leicester  
City of Leicester College  
Kidderminster College  
Orpington College  
Preston College  
Tameside College  
Worcester 6th Form College

## ***Local Authorities and 14-19 Partnerships***

Wolverhampton LA  
Cumbria 14-19 Strategic Partnership  
Leicester VESA Support Agency  
Plymouth 14-19 Learning and Work Partnership

## ***Universities***

De Montfort University  
University of Bradford  
University of Plymouth Partnerships Faculty  
University of Teesside  
University of the West of England

## ***Organisations involved in graduate recruitment / development***

Association of Graduate Recruiters  
Graduate Prospects  
Gradweb  
Marks and Spencer  
PDRPro  
Price Waterhouse Coopers  
World Careers Network

## **Appendix B: Glossary of abbreviations used by interviewees**

AS Advanced Subsidiary: the first part of 'A' level examinations

C&C Confirmation and Clearing: the process which takes place over a few days or weeks starting in mid August when exam results are declared, confirming acceptance of offers of places where required grades have been achieved and offering unfilled HE places to applicants without offers or who have failed to meet grade requirements.

CF Confirmed Firm Offer. UCAS applicants may hold two offers of HE places until exam results are declared: the preferred (normally higher) offer is the CF, the lower offer is the CI.

CI Confirmed Insurance Offer (see above)

CoPE Certificate of Personal Effectiveness

CNP City of Nottingham Passport

CPD Continuing Professional Development

DfES Department for Education and Skills

IAG Information, Advice and Guidance

INSET In-service education and training (for teachers)

ILP Individual Learning Plan

LSC Learning and Skills Council

MEG Minimum Expected Grade

MIS Management of Information System

NVQ National Vocational Qualification

PA Personal Adviser

PD Personal Development

QCA Qualifications and Curriculum Authority

TFL Targets for Learning

TT Timetable

SS Student Services

UCAS Universities and Colleges Admissions Service: the UK-wide agency handling all HE admissions

UCAS Apply The online application system offered by UCAS

UCAS Extra The online system which allows additional choices midway through the application process (designed for candidates who have not received any offers)

## Appendix C: Interview protocol for schools/colleges

1. What is your approach to supporting applicants to HE and/or employment?
  - What led you to make use of this approach?
  - What is your rationale for this approach?
  - In what ways does it constitute 'good practice'?
  - How does this approach work for students who are leaving FE to go into employment?
2. What have been your experiences of success and failure in using this resource/ approach?
  - What evidence do you have to support these experiences?
3. Are there aspects of other learning provision in your institution (or the context in which you are working) that are being delivered (or assessed) electronically?
  - How do the applicant support processes fit in with these, or not, at the ICT level and otherwise?
4. How are/will your ICT-based applicant support processes be integrated with other ICT-based systems such as e-assessment or the institution's own management or student information systems?
5. How do you support/enable students who are unsuccessful in the applications process to re-evaluate and re-plan?
  - Eg in the context of UCAS Extra or Confirmation & Clearing?
  - What about learners who leave the application process at other stages of the student life cycle (eg after enquiry?)
6. In the context of all that you have said, do you have a 'vision' of the future of applicant support?
  - In particular about how various different ICT services can combine to help deliver this support?
7. Given this vision, what do you see as priority areas for development in order to provide effective ICT-enabled support for applicants to HE?

Finally are there other points we have not covered that should be mentioned?