Report on the Use of Digital Technology
in the planned University of Strasbourg

1.   Introduction

I was invited by EUA to comment on the plans for distance learning in the integrated University of Strasbourg. Whilst the plans for the new university include references to distance learning in the sense of curriculum delivered remotely from the central campus (see below 4.2), this was not the main focus of my visit. The documentation that I reviewed and the meetings that were arranged for me were principally concerned with the plans to create a Department for Digital Technology Users (hereafter D.U.N.), and other issues related to the organisation and function of IT services in the new institution. This report is therefore a companion piece to the review by Chris Cobb on the integration of the Information and Communications Technologies, which I was able to read before my visit. It avoids replicating his findings, with which I am in agreement.

2.   Executive Summary

The report finds clear strengths in the planning process, in the decision to create new departments in advance of the commencement of the single university, in the proposed management structure with its clear identification of political and strategic responsibility, and in the tradition of cross-institutional working which the new university will inherit.

It finds that the almost complete absence of effective student feedback is a major weakness. The ambitions for distance and lifelong learning require further attention, and work needs to commence on a proper risk register for the implementation of the project. The report supports the concern expressed in the plan about the present fragmented provision of VLEs.

The report believes that the proposed D.U.N. can constitute an engine room of change in the use of IT across the institution, and argues that the post of its Director be advertised externally. It urges that focussed attention be given to a move to open source software, and that consideration be given to the creation of a Department for Research into the Application of IT for Learning in Higher Education. It commends the work being undertaken on automated formative assessment and on security systems, particularly in respect of student confidentiality. It welcomes the intention to create a Help Desk and urges that this be given high priority. It believes that the strategic development of IT can play a central role in the new universities plans for outreach.

Possible threats to the successful implementation of the plans include a failure to modernise employment and reward systems, to create a single space for the new services, to overcome dissent from one key department, and to reconsider the institution's broadcasting policy.

I was invited to present my oral report in the form of a SWOT analysis, and this written report follows that format.

3.   **Strengths**

3.1   *The Planning Process.* I confirm the view of Chris Cobb that the project group led by Catherine Mongenet is approaching its task with an admirable combination of determination and patience. The project possesses a strong vision and a clear timetable. The new structures are taking shape through a widespread and continuing process of consultation, designed to draw in the diverse units currently involved in the provision of IT services. I was particularly impressed by active role played by a student representative, speaking on behalf of the key users of the new service. With one current and important exception (see 6.3 below) there appears general support for the direction of change, although inevitably there are many individual interests and agendas.

3.2   *The Decision to Create New Departments.* The definition of at least two new departments as a first step in the process of reform is an important achievement. The new University will find itself in possession of around 165 high calibre staff in IT units, and it is critical that they are given a secure and purposeful future at the outset of the institution's existence. The alternative proposition which was put to me by the heads of one of the existing units, that new structures should emerge through a process of organisational ecology following the creation of the University of Strasbourg, would pose very serious threats to the efficiency of the new institution, and in particular to the coherence of the student experience.

3.3   *The Management Structure.* Discussions during my visit confirmed the view expressed in the documentation that a current weakness in IT provision across the three universities is a lack of political leadership of the scattered departments. Individual units have been operating without effective operational or strategic management from senior officers or committees. The pattern of direction will not take form until the new university is created and given that its President is not to be appointed until the eve of the commencement of the University of Strasbourg, there is inevitably some uncertainty at present about the policy which will be developed.   Nonetheless the proposed articulated structure of Vice Presidents with specific portfolios, two strategic committees, an operational committee and then the delivery departments, does offer the prospect of a clear advance on the current situation and should be seen as a significant strength in the plans. It may be necessary to consider further whether dividing senior responsibility between two Vice Presidents and two Strategic Committees threatens the effective co-ordination across the provision and use of IT services.

3.4   *Cross-University systems.*   It is a strength in the current transitional process that whilst there are many fragmented and uncoordinated services across the institutions, there is also a tradition of collaboration and joint practices. The relevant staff know each other well and have long worked together. The inter-university department of management IT (SIIG), for instance, provides a basis for what otherwise might be the risk-intensive process of creating common management, finance, human resources and student record systems before the commencement of the new University. There is already a single portal to access key student services. By the same measure the work that has been invested in a university-wide system of basic IT training (C2i) provides an excellent basis upon which to build further cost-effective and well-managed services for the student body. The consolidation of this programme and the broadening of its second level to a wider range of courses are critical to the success of the general IT strategy, and should enhance the employability of the graduating students.

4.   **Weaknesses**

4.1   *Student Feedback.* There is at present no systematic process of obtaining student feedback, and no plans in place to introduce one. This is a significant weakness, and I understand that the Ministry of Education is encouraging the devolved universities to move in this direction. In respect of the planned reforms of information technology, student feedback can perform three key functions:

- As the new University assumes the responsibilities of an autonomous institution under LRU, it will need to demonstrate to stakeholders that it possesses robust means of measuring the quality of its teaching, amongst other functions. Student feedback is a necessary, though not sufficient, mechanism for identifying the impact of teaching at the level of individual courses and tutors.
- As difficult decisions about the integration of tools and the choice of new software are made, the response of the key users, the students, is an essential means of measuring the consequences of change and adjusting implementation.
- A characteristic of the present moment in university pedagogy is the willingness of many students to develop their own strategies for engaging in the wealth of web-based learning materials and tools now available to them. The student body is an important driver of innovation in its own right, and the University needs to be able to engage with its behaviour as it seeks to modernise its pedagogy.

4.2   *Distance Learning.* The master plan for the new University identifies an ambition to create -de diplomes à distanceø in the Masters Programme.[1] The Strasbourg University system has been involved in classical distance education for four decades, and there is no doubt that there is an interest in deploying e-learning to extend and systemise the off-campus teaching of the new university. It is perceived that this could be a means of enlarging

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[1] Demain, løUniversité de Strasbourg, *Project døEstablissement, 2009-2012, Les projects par chapitres*, p.24.

the territorial reach of Masters programmes. However my discussions indicated that thinking in this area is still at an early stage. There is no coherent strategy for investment or programme development. This work will need to be taken forward once the new IT structure takes shape.

4.3   *Lifelong Learning.*   The master plan lists amongst the ₋missions fondamentalesø a commitment to ₋une adaptation de løoffre de formation aux défies de la formation tout au long de la viewø[2] It associates this ambition with the development of on-line programmes. The existing system has made some important experiments in on-line programmes, and attention is being given to this mode of delivery as a vehicle for reaching students unable by reason of employment or infirmity to attend a conventional campus university. This outcome would conform to the broader ambition of the new institution to reverse the fall in attendance and reach out to a wider market. But it was apparent that as with Distance Education, policy in this field is still at an early stage of development. The European University Association is currently completing an important policy statement on the subject of lifelong learning, and it might be advantageous for the integration project to review its implications for its own strategy.

4.4   *Risk Assessment.* The programme of change which seeks to deliver unitary IT systems for the new University, and to integrate key tools and services used in teaching, is inevitably full of risk. Up to this point no attempt has been made to develop a formal risk register in relation to these projects, although the project team is now in possession of the tools for doing so, and plans have been laid for two seminars to explore their application.

4.5   *VLEs.* The project group is aware that the current permissive system which allows individual units within universities to build and maintain their own VLEs is a serious threat to the creation of an efficient IT system in the new university. The decision that has been made not to rush this change and to allow students and staff to continue with systems with which they are familiar is probably correct. Nonetheless there needs to be a rapid decision in principle to move to a single VLE, and then a carefully managed process of selection and implementation. It is unlikely to be cost-effective to build a new system in-house, although internal staff will have a significant role to play migrating current tools to a new product, particularly if this is an open-software solution (5.3).

5.   **Opportunities**

5.1   *D.U.N.*: *The Concept.* The decision to separate the IT functions between a services department, and a department for supporting the use of tools and software is well-founded. It is a commonplace of those working in the field of the application of IT to education that the key challenge is not the development of new tools, but the discovery of efficient and effective

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[2] Demain, løUniversité de Strasbourg, *Project døEstablissement, 2009-2012, p.6.*

ways of using them. In most cases the functionality of tools significantly exceeds their application by both staff and students. This applies to individual tools and to their interoperability. The student representative on the project group was rightly insistent that priority be given to enabling students to locate relevant tools and navigate between them. Creating a department whose prime purpose is the pedagogic needs of learners and those teaching them is an essential reform. It would meet the frustration expressed by a number of staff to whom I spoke that currently they find it very difficult to engage with the users of their services. If carried through effectively it should become the engine room of significant reform in the integrated university.

5.2   *D.U.N.: The Director.* Unlike the IT Department, little progress has yet been made with the critical task of appointing the Director of the new unit. Given the importance D.U.N. it is proposed that as with the Director of the I.T. Department the post be advertised externally, and that the appointing committee contain one or more external advisors. Even if the successful candidate turns out to be an internal member of staff, his or her authority will be greatly enhanced by the knowledge that they have been tested against the best in the market. The person specification for the post should foreground a record of engagement with pedagogy, a knowledge of developments in the field nationally and internationally, and a passion for improving the learning experience of students. A working knowledge of IT systems is necessary, but technical expertise at the level of software development should not be a requisite.

5.3   *Open source software.* In its formal documentation it is evident that the project group is aware of the need to strike a new balance between proprietary and open software. Senior staff in the current units are also interested proposition. However I learned that in ULP Multimedia, one of the largest and most progressive of the units, just 4% of their current applications are open source. The proposed IT Department together with the proposed ICT Leading Committee should provide a framework within which strategic decisions can be taken about the preferred direction of travel.

5.4   *Department for Research into the Application of IT for Learning in Higher Education.* Consideration should be given to the creation of a third department alongside the proposed IT Department and D.U.N. This would provide a centre of expertise in research into the application of IT to higher education. It would have an internal focus, examining at an institutional level the outcomes of pedagogic innovation, and an external focus, engaging with the national and international research community in this branch of educational development. It could be a means of harnessing the research ambitions of some current members of staff without distracting them with service delivery and user engagement. It would make use of the evaluation and feedback systems which need to be built into all aspects of the provision of IT services, and give professional advice on the development of such systems. It would be a means of broadcasting the work in this area of the University of Strasbourg to a wider audience, and

helping to establish the University's distinctive identity. The core staff should be small, bringing together current employees with a capacity to undertake this kind of research, perhaps reinforced by one or two external appointments. The unit should be expected to draw down external funding through the quality of its research, and to use this funding to create a larger community of research staff. The capacity to win external research grants would be a key indicator of the success of the proposed unit. The creation of such a Department would need to take account of the pedagogic research resources which currently exist in IUFM, which will be a constituent member of the new institution.

5.5 *Autoévaluation interne.* The project group is right to foreground automated formative assessment as a major priority of the new structure. Nationally and internationally there is awareness that building user-friendly, IT based systems of self-assessment into teaching programmes is a crucial area of innovation. I understand that the Ministry of Education is currently giving this issue a high priority. It gives students a sense of control in their process of study, and crucially helps both the students and their teachers to identify learning needs at an early stage. This can contribute not only to more personalised student support over the course of a degree but also to reducing the incidence of avoidable failure or premature withdrawal.

5.6 *IS Security.* The project group is right to foreground security as a major task of the proposed IT Department. The task is not only to ensure the integrity of the University's systems in general, but specifically to offer students the assurance that their increasing use of IT for registration, delivering assignments, engaging with staff and other students, will not come at the expense of threats to their privacy. They must be given the right to share in the definition and enforcement of access to their records of practice and achievement.

5.7 *Help Desk.* This is properly identified as a major priority in the new system, and is discussed in Chris Cobb's report. It may be particularly important in the first two or three years of the new University, as it will inevitably take time for the planned integration of systems and services to take effect. In the meantime new students in the new university will still find themselves faced with a legacy of uncoordinated provision, and an effective, centralised support centre will be essential. In planning the timetable for innovation, the Help Desk should be a priority, if possible in operation on the first day of the new university. The organisation chart locates this in the IT department, though discussion indicated that it would also be a function of D.U.N. and it may be necessary to give further thought as to how the two departments are to work together in this area. It is also important that attention is paid to the balance between automated support services, based on a frequently asked question (FAQ) model, and those which require direct personal response. It is already planned that the Help Desk should have long opening hours, but given the tendency of students to use internet-based learning services around the clock, consideration should be given to the provision of a 24/7 service.

Monitoring the use of help services will also be an important contribution to the feedback intelligence identified in 4.1.

5.8   *Outreach.* It is evident to those preparing for the new university that a key challenge is in establishing closer relationships between the university and the high schools that supply it with its students. This is partly because there is growing competition for good quality applications as the age cohorts begin to decline.   And it is partly because the presence in universities of ill-prepared entrants is a prime cause of early drop-out. A more focussed, strategically directed IT service can accelerate the production of on-line courses and other digital assets which can more readily be made available to users outside the formal system, including high school students preparing themselves for university education and seeking to make the right choice of institution and programme.

6.   **Threats.**

6.1   *Employment and reward systems.* If the new University is to realise its ambition to change the culture of teaching across the new institution, it will need to reform patterns of managing and rewarding staff which stretch back over many decades and which were designed for the era of print communication. The criteria for promotion of and reward for tenured staff must be broadened to encompass measurable innovation and high performance in teaching, or real progress in what is described as ―le renouvellement de la pédagogie‖[3] will remain limited and marginal to the institution. There are major questions to be addressed about the continuing relevance of the legal requirement for 192 teaching hours a year in a context in which digital communications will be transforming the nature of contact between staff and students, and the forms of support that are made available to learners. The concurrent granting of university autonomy under the LRU would appear to offer an immediate opportunity to adjust practices to the new mission of the integrated institution. It is, however, likely that established custom and structures of privilege will make it difficult to implement greater flexibility as rapidly as might have been hoped.

6.2   *Space.* There is general agreement that co-location of the staff of the two proposed units is necessary for their success. I agree with Chris Cobb that it will be advantageous to bring together staff who are currently scattered across the universities in order to facilitate the creation of new cultures of working and derive efficiencies through shared responsibilities and working practices. The issue is not critical at this stage, as staff have long been used to co-operating across buildings and faculty boundaries, but unless appropriate space is found in the early period of the new institution, there is a danger that the intended benefits of the re-organisation will not be realised, and that the scattered units will fall back into their old ways of working. Moving staff to a central location will be both a symbolic and a practical means of creating a single culture of operation. The exceptions

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[3] Demain, l‚Université de Strasbourg, *Project d‚Establissement, 2009-2012, p.22.*

to this process should be those IT staff employed to give specialised support to research teams, who should remain co-located within their academic departments.

6.3   *Buy-in from all units.* In general there is a remarkable level of support for the new structures from units which have long enjoyed the privilege of virtual self-management.   However at the time of my visit, ULP Multimedia had absented itself completely from the process of consultation about the new structures, on the instruction of its Director. This withdrawal has lasted most of 2008, and appears to be becoming more entrenched. The unit, which currently has 44 staff and an income of over þ1.8m is too important to be excluded from the outcome. It has been a key agency in the development of systems and tools, and its legacy has to be incorporated in the planned departments. This is an issue which will require (and is receiving) intervention at a senior level.

6.4   *Broadcasting.* The University has its own television system, but its future seems unclear.   Both the function of what is now a somewhat old-fashioned form of communication, and its relation with emerging forms of internet broadcasting need to be strategised. This is a relatively expensive service, which can quickly become a threat to the quality of the learning experience if there is a lack of investment in new technology, and if the programmes fail to keep up with advances in pedagogy. A new structure of spending, innovation and management needs to be implemented.

Professor David Vincent
Pro-Vice Chancellor,
The Open University, UK

On behalf of the European University Association

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