Managing academic support services in universities

The convergence experience

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Terry Hanson

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The place of useful learning: convergence at the University of Strathclyde

Derek Law

Background

The University of Strathclyde was founded in 1796 to be 'the place of useful learning', a mission statement it still embraces today and which applies just as much to the more recent lessons of convergence as to any instruction given to students.

While useful to take the time to reflect back on a decade of what seems – and has been – a journey of continuous change, it is sometimes difficult to reconstruct the sequence of events, the motivations and sometimes the logic in what has happened. This is compounded by the fact that many of the original players have left the scene, moving on, moving up or moving out and leaving a faded and incomplete corporate memory. This author has noted elsewhere the tendency for institutions to (re)write their history in terms of principled and timely decision-making, rather than the somewhat grimmer pragmatic institutional politics which in reality usually drives change (Law, 2004). In Strathclyde, as elsewhere, many of the new structures described coincided with someone being dissatisfied with their current lot and seeking to move in new directions, while others reflect a wish to change what was seen as an under-performing or inappropriate current system. What follows then is an attempt to reconstruct the last decade at Strathclyde as seen by the survivors.

At the outset it should be noted that one of the classic absolute requirements for success is a supportive management. Strathclyde was fortunate in that it possessed a Senior Vice-Chancellor in Sir John Arbuthnott, who was much involved in a range of national initiatives and committees from JISC to Dearing. In that capacity he was determined that his own local institution should practise what his national committees preached. As with many such leaders, his skill was to give others the space – and sometimes the resources – to fulfil their own ambitions. As a very first step, Senate, one suspects with no great understanding, was persuaded to agree to the following precepts: to provide a set of institutional goals that can be made sufficiently explicit at a level of detail that can be used for process redesign, to provide adequate pump-priming investment as a priority and to focus on and implement information standards.

Or perhaps they did understand that this was a framework to allow a radical re-think and redesign not just of academic support services, but of the whole framework of teaching and learning, and increasingly of research capacity.

History

In many converged institutions the lead role has been taken by the Library and much of that in turn was driven by institutional responses to the first Follett report. In Strathclyde the position was very different in the mid-1990s and convergence began by addressing a series of computing issues and boundary issues which bypassed the Library. The starting point was:

- the 'Computer Centre' – the academic computing services – formerly part of the department of Computer Science, but now being care-taken by a senior member of staff from the service following the untimely death of the then Director
- the Administrative Computing Service answering to the University Secretary but with young and dynamic professional leadership
- Audio Visual and Media Services, which had grown to be a large group led by an internationally distinguished scholar. It had moved into curriculum design and learning technologies, but the University had no clear perception of its potential and future.

The major external factor was the drive to create information strategies. All three services were integrated under the Vice-Principal, Professor Sherwood, but overseen on a managerial basis by Nigel Kay who had been given additional responsibility for the JISC-inspired information strategy development.

In an effort to provide academic involvement and buy-in there was inevitably a representative committee. This was called the IT Policy, Strategy, Research Group (ITPSRG), which at that time did very little policy, strategy or research, choosing to focus on immediate operational matters and budgets only. In a technological university such a committee inevitably attracted members with very decided views about the future of computing and the competence of its service providers. In an effort to recover the strategic role the committee was

split into two and ITPSRG was replaced by the Information Strategy Advisory Group (ISAG) and Information Technology Advisory Group (ITAG). In practice, this was not a great help, since faculties tended to nominate the same individual to both committees and as a result their agendas blurred.

On the e-learning front everyone was concerned that this was an attempt to get rid of academics from the classroom and cut costs. A few brave and honest souls recognized that this might be part of the solution to the problem of having academics in the classroom. No one understood what an information strategy was and as such at best scorned any overtures to become involved and at worst tried positively to block the efforts of Sherwood and Kay.

In sum, the senior management of Strathclyde had recognized the arrival of a quite new world, had reacted as best it could and in positive ways, had created a new structure to address this and waited benignly to watch the backwoodsmen grapple with it all. In Strathclyde the post of vice-principal is rotational and its tenure brief. There was a need for swift and early success if the new structure was to be embedded.

Initial Successes

For some time Strathclyde had experimented with new learning models. Successes in the national Teaching and Learning Technology Programme (TLTP) and its local successor Teaching and Learning Methods Initiative (TLMI) and then the Use of MANs initiative championed by the Scottish Higher Education Funding Council (SHEFC) led to the creation of the small Centre for Educational Systems (CES), under Kay's direction. Initially it raised tensions with existing departments who saw this as their 'turf'. But rapid success and external funding for two projects, the Clyde Virtual University and the Virtual First Year Experience, demonstrated that CES was undertaking new roles rather than competing for existing ones. These successes put Strathclyde in the van but lack of institutional chutzpah and hard cash saw them sink back into the pack. However, through CES, IT skills for all students moved well up the institutional priority list and in the process of introducing new courses built a successful partnership with the Centre for Academic Practice.

The relationship between academic computing and corporate computing is, in many institutions, a fraught one and certainly one for which there is no standard solution. In Strathclyde, not only were the two brought together, but members of the administration are seconded to IT Services working teams in order to deal with the development and maintenance of each major module of the corporate system. Partly as a result, the IT service has achieved the grail of a common and standard networking strategy. At a very early stage a single networking team was created. The new group immediately began work on an

integrated networking strategy. Through a combination of good fortune and hard work a pioneering deal was struck with NTL, after lengthy negotiation and while that company was still expanding. In short the company provided a 'free' network upgrade in return for all University telephone traffic, including that from student halls of residence. This saved the University several million pounds in capital investment and persuaded Barclay Knapp, the then owner of NTL, to invest in a new technology institute. This was the first example of the new structure not only delivering measurable financial benefit from convergence, but also developing a specific beneficial partnership with part of the academic community.

The second phase

These initial successes had shown that the new structure could deliver substantial benefit. The coincidental timing of the retirement of the Librarian and of Professor Sherwood as Vice-Principal allowed the University to make a single senior external appointment as Librarian and Director of Information Strategy. Importantly the post-holder (and author of this chapter) sits on the senior management team of the University and reports directly to the University Principal.

The second phase has been characterized by several strands of activity. First, each of the areas described in the 'Present structure' section below has been reorganized to a greater or lesser extent. Second, much effort has gone into describing common goals and aims for the Directorate. As with all such activity it would be the Strathclyde experience that the process has been more important than the outputs. Third, there has been a fundamental re-appraisal of the notion of the information strategy. Rather than seeing it as a glue, which binds all other strategies together – a common perception when such strategies were introduced (Law, 1995) – we now see it as responding to the University's major strategic goals and a test against which all proposed developments must be measured. A final if tediously protracted strand has been the progressive move of all the major parts of the Directorate and most of its staff, other than the Director of Libraries and his staff, into a single building. The benefits of sharing space seem too obvious to labour. However the five years it has taken to achieve this physical proximity in Strathclyde has more than demonstrated the disadvantages of separation.

Present structure

The Information Resources Directorate has 300 staff and a budget of about £10 million. This scale is important and has been a key factor in allowing some of

the projects described here to happen. One of the mantras of the Directorate is that 'we can do anything we want with our resources – but not everything'.

The Directorate is organized into three operational groupings whose names consciously echo their distinctive role as part of Academic Services: Library Services, IT Services (including administrative computing) and Learning Services. The latter includes classroom support, IT skills training for staff and students, e-learning implementation, management of the VLE and media production.

Finally a small central Directorate looks after budgets, manages internal Directorate committees, communications and the external relations of the Directorate as well as overseeing some of the research. There is a management committee, a finance committee and a communications committee as well as several *ad hoc* working groups. The management committee works hard at consensus building. However, it is our firm view that the knowledge that the Director has an ultimate authority to make decisions is a critical element of success not afforded to convergence collectives. The Director is not *primus inter pares*, but has the ultimate authority to make decisions and just as importantly to allocate budgets.

Several attempts have been made to organize a suitable supporting committee structure which engages 'average' academics, rather than *soi-disant* experts in IT in particular. There is and always has been a conventional library committee. Over the last decade a variety of committees has been set up, which attempted to separate operational issues from strategic investment, none with any great success. Most recently the so-called Hub Committee has been set up to vet all IT infrastructure bids. The faculties are all represented on this Committee and in theory if they approve a project it becomes apolitical and is funded from a top-slice of the institutional budget, rather than (as historically) in competition with the Deans. Although this provides somewhat rough and ready justice it has proved a major benefit in depoliticizing IT strategy.

The one remaining major area of uncertainty has been in teaching infrastructure, where several major budget-holders have had partial responsibility for the converging area of refurbished teaching rooms (Estates); computer labs (IT Services and in some cases the Faculties); the Central Pool Group, led by the Centre for Academic Practice and upgrading teaching rooms; and a vice-principal with responsibility for teaching matters. After much debate and with positive support from the Directorate a new committee modelled on the Hub Committee, chaired by the Vice-Principal and with a budget will from session 2004–5 take responsibility for all teaching infrastructure.

Optimizing convergence

Lessons

The lessons learned are clear if hardly presenting great novelty. It has been important to make the University comfortable with the existence of the Directorate. It has been seen at different times as too much of a threat to established structures, both academic and administrative; too technology driven, with solutions looking for problems; and too large and powerful. Although there is an inevitable grain of truth in each fear, the University now seems to accept the Directorate as part of the established order of life.

Conversely it is important that the staff of the Directorate perceive this not only as a real change, which will challenge established practices, but also as an opportunity to achieve more than the sum of the individual parts could manage. Results here have been mixed – for example a common library–IT service point failed to achieve any real integration even if life for users was made somewhat easier, while the installation of a wireless base station in the library has substantially increased library traffic. But in both cases the important point is that thought was given to how to deal with an issue. Restructuring fails if it performs a lobotomy and removes any requirement to think.

It is also something of a paradox that academic staff, who almost by definition work at the leading edge of their discipline and thrive on change, are library and in many cases IT conservatives, seeking investment in back runs of journals and support for long since superseded or home-made software. As the mythical Professor Quincy Wagstaff (from the 1932 Marx Brothers film *Horse Feathers*) would have it 'Whatever it is, I'm against it!'

Major projects

Student laptop project

The story of the Millennium Student laptop project has been told elsewhere (Thornbury et al., 2003). In collaboration in the first instance with the Business Faculty IBM laptops have been made available to all first year students for several years and the programme has now spread to other disciplines. As of December 2004 there are some 3000 such laptops on campus. However, the ability to co-ordinate wireless networking, laptop procurement, mandatory undergraduate instruction in IT skills, content creation and academically led evaluation, plus the will to drive ahead in the face of significant academic opposition, required the co-operation of all parts of the Directorate in a way which we believe could not have happened except in a managed structure. The benefits are not just in terms of improved pedagogy, but in better use of the

teaching estate, reduced air-conditioning bills for no longer required computer laboratories and simplified support for a standard platform. Coupled with the use of WebCT for the VLE and mandatory IT skills training, academic staff can have high expectations of the standard that they can expect from all students in terms of IT equipment potential and personal competences.

Shared system platform

By a coincidence of timing the re-procurement of the library system (then a Dynix product) and the re-procurement of some of the IT systems were to happen simultaneously. It was agreed at Directorate level that this would provide the opportunity to test integration by making it an essential condition of the procurement that the systems must be capable of running on a common Oracle platform, but as importantly working on a shared machine cluster. This proved difficult for some vendors to comprehend never mind accept! But there were several advantages. Typically a library will undertake such a major procurement every five to seven years and in effect comes fresh to the process each time. Computing services on the other hand are likely to undertake a major procurement annually. They therefore tend to have good and tough negotiators both before sale and after sale. Certainly that proved an advantage in this case. In addition it has proved much easier to link the Oracle based information systems to both student records and administrative systems and to the VLE.

Research support

In the research area things have proved more difficult. Increasingly we feel we understand the teaching and learning process and what we can contribute. Good relations with student representatives have brought closer links at a time when traditional library use is in slow decline. In research parallel developments have distanced us from research staff and the research process. Increasingly large sums are spent in supporting research but these tend to go on infrastructure, whether high speed networks or electronic journal subscriptions. Research is then increasingly dependent on such infrastructure but the users are increasingly remote, having little need of support or else seeking services we cannot deliver – typically complaining about their inability to use services such as journals off-campus, thanks to the inanity of current licensing arrangements.

However the convergence of Open Access initiatives, institutional repository technology and the approach of the Research Assessment Exercise have allowed us to re-engage with the research community to explore how more direct

support from the Directorate as a whole can reduce research support and administration to allow research staff more time at the bench or in the archives.

Making progress forwards

A host of other projects has been taken forward:

- Library Services and Learning Services share information skills training.
- The Digital Library is part of the virtual university being developed by Learning Services.
- Staff from IT Services, Learning Services and the Centre for Digital Library Research (CDLR) are all supporting the Engineering Faculty in its major JISC-funded e-learning project.
- IT Services and Learning Services have developed a new real-time equipment booking system with online fault diagnosis and an asset management register to link to the room booking system.
- IT Services and Learning Services have developed special needs support in IT use.

Now it is perhaps true that none of these require a converged structure to make progress. However, the view at Strathclyde is that the sheer volume of project-based development, the intricate cross links and the need to prioritize in the interests of the University rather than the interests of the department have benefited from convergence. Almost as importantly a critical success factor, we believe, has been the fact that the Head of the Directorate sits at the senior management table and is an information professional – a chief information officer – rather than acting through a pro-vice-chancellor with an academic background.

Making progress backwards

Perhaps curiously the biggest disadvantage has been in sometimes being too far ahead of the game. The Laptop Project and the decision to install a very high-speed backbone (ten gigabit) were forced through subversively and/or in the face of stout academic opposition, although with hindsight the decisions are accepted as correct. Early leadership and progress in e-learning and institutional information management were lost or vitiated by a failure to persuade a large enough constituency that these were of any value and should be translated into what have become virtual learning environments and institutional repositories. As a result several different standards for both now operate on campus. More generally we have failed to persuade the institution

that IT is not an extraneous layer, but that it is the catalyst for re-engineering. Nor have we won the argument that the use of IT should be demonstrably cost effective and become a natural part of every member of staff's and student's skill set. Progress has been made on each of those, but not as much as might be wished.

Commitment to convergence

Perhaps the biggest gain from convergence has been the ability to focus: to focus thinking, to focus resource and to focus staff interest. As major new national and international developments and initiatives come along it is possible not only to respond to them but perhaps more importantly to help set the University agenda. It is an unashamed luxury to have space for staff to be detached from the day-to-day in order to think about the future. It allows time and space to establish a shared mission, common attitudes and ambitions and to develop new approaches and importantly to seek external funding to do many of the things we wish. It has most successfully allowed us to develop a holistic approach to teaching in which all of the resources of the Directorate are exploited. Working closely with the student union it has allowed us to start from the student not the technology and to focus on the student experience. Now that the development of teaching is well in hand we have set up a group to look at the research experience. For good or ill, we are directly and heavily involved in the development of learning; the opposite is true of research. The more we invest in hi-tech infrastructure with staggeringly long mean times between failures, the more we invest in electronic resources and the more we develop web pages and FAQs, the less contact we have with researchers, to the point where our very success may appear to make us irrelevant. We are therefore working with a group of academics to reconsider how we can again be seen to be engaged in and relevant to the research process. The management group of the Directorate also spends time regularly reviewing how we relate to the University mission and how we can help to deliver it. And of course we continue to work on demonstrating value for money.

Strathclyde was an early adopter of convergence and when given the opportunity chose to strengthen that commitment. Its structure and methods are no doubt idiosyncratic, but there does seem to be a view that we would neither wish to go back to an un-converged state, nor consider that we have achieved some form of perfection. We believe that a decade into the new era we are probably still at a fairly primitive state of evolution but that we are evolving and will continue to do so, having demonstrated substantial gains to the University.

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