Sleeping with the enemy

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Practitioner notes

What is already known about this topic

- Almost every academic or university teacher is aware that learning technologies are more and more important for their teaching
- Most academics or university teachers are very frustrated with their IT departments
- Most IT departments are easily annoyed with academics and university teachers believing they have very little appreciation of their pressures and the importance of policies

What this paper adds

- Awareness raising of why the conflicts and dissatisfactions occur between IT and teaching in universities
- Exploration of the issues from two experienced practitioners in the field- a PVC (Learning) and a University IT director

Implications for practice

- Suggestions for structural positioning of leadership

Introduction

We are taking the concept of e-Leadership to be multifaceted and conceptually ambiguous (Gurr, 2004). Our focus in this paper is examining the importance for leaders in universities to promote the effective understanding and partnership between Information Technology departments and those responsible for learning and teaching. We point to ways of achieving collaboration at all levels within university organisations. We aim to promote a new spirit of co-operation and achievement (Avolio, Kahai, and Dodge, 2000). Barriers abound, often associated with contested ground and they constantly impact on the success of institutional systems and communication practices (Johnson et al., 2013).

From our position of deeply embedded experience over time, (one of us as university Director of IT, and one of a Pro Vice-Chancellor Learning Transformations), we review the fundamental issues underpinning the relationship between these two leadership systems within Higher Education and recommend some ways forward.

At a time of massive change and opportunity in technology enhanced learning in universities, leadership which results in productive relationships between technology staff and academics, and between Faculties and Schools is more important than ever. The 2013 Horizon reports points to MOOCS (content plus open data bases and communication), tablet computing (personalised learning design with support for a wide range of students' owned devices), gaming (incorporating the engagement and immersion of games with the curricula), learning analytics (to improve retention and achievement through big data sets) 3D printing (it's printers but not as IT know them…transforming the teaching and delivery of design of many things), wearable computing (the ultimate in mobile learning) (Johnson, et al., 2013.)... to name but a few. Every one of these initiatives requires deep collaboration across the professions.

Our perspective is one of universities as complex adaptive systems (Varela and Maturana, 1972). Many individuals and strategists in universities across the world are seeing information technology as a great opportunity to change higher education for the better; to enable it to become a constructive disruption (Christensen and Eyring, 2011) and act as a catalyst for new models of learning and business (Hamel, 2012). Technology, change and innovation are perceived as closely related (Marshall, 2010), and technology in all its forms continues not only very rapidly to develop but also to impact on every aspect of society Salmon 2013). However, as important as IT and learning technology is in the higher education scene in 2013, they interact as one element in a much older and well established system of teaching and learning where students expectations, academics and the institutional values and traditions predominate (Trowler, Saunders and Bamber, 2012). Other drivers, internal and external, play into every day decision making – such as those associated with financial models, workloads, established disciplines and much more (Oblinger, 2012). Many change processes suffer from serious problems in the collegiate, multiple layered and complex university environments (Marshall, 2010).

We attempt a slice through one aspect of this complexity, where we believe that leaders can make a big difference fast. We address the importance of the relationship or *marriage* between those that drive and implement information technology systems, such as IT (Information Technology) departments, and the beneficiaries and end-users such as those in academic faculties and their subsets (Avolio et al., 2000). We illuminate a still contested arena - each often seeing the other as the 'enemy'. We note that those at the academic coal-face (the university teachers) typically view IT service as poor and that there are very clear differences in the views of IT professionals and academics (Allen, Seaman, Lederman, and Jaschik, 2012; Katz et al., 2004).

Every university in the world is aiming to position itself for survival, growth and success for the future by impacting on the student learning experience, nearly always through online or blended learning. Multi professional team working may even be the 'make or break' for many institutions in the next ten years (Ernst and Young, 2012; Lowendahl, 2012)

A short history of the journey to the battle

As we write, well into the 2nd decade of the 21st Century, few would dispute that Universities are places of both scholarly endeavour and business (Ernst and Young, 2012). The scholarly

enterprise produces the valued outputs such as graduates, research findings, new knowledge, impact on society and so on. Similarly, though to other enterprises, they feature business enabling and facilitating functions whose purpose is to keep the organisation running at optimal efficiency and productivity. These are the professional service departments of Finance, Administration, Estates and Facilities, HR and of course IT.

The Academic techno war

From the 1960s onwards, in most countries in the world, the demand and provision of university-level education rapidly started to expand. When universities were small, local departmental centricity prevailed. Administrative arrangements, record keeping and procedures were undertaken by whoever in the department could deliver them and they were aimed at addressing only the department's needs. Learning methods were in the hands of the individual lecturer or professor, typically based on face to face teaching.

For many this was the heady, intoxicating stuff that had brought them to the institution - the freedom to apply their intellect to any problem and to solve it without constraints or conformity. The notion of academic freedom has been embedded as an important concept since the earliest formal universities. In time this environment matured into a state of devolved autonomy (Douglass, 2012) wherein academic departments or schools resolved their own challenges, issues and systems requirements. The department recruited the students for the courses they had the best expertise and knowledge to teach. They used the associated income to scale up their operations. As technology became available for administration and later for teaching and learning, they often built, acquired and installed local systems based on their favourites. For example, vestiges of this survive even today - Linux remains the operating system of choice in Computer Science and Mathematics departments in some institutions.

Institutions grew. Restructuring and organisational change abounded. Typically growing numbers of departments and activities were aggregated under Faculty entities. Local systems and technologies multiplied and diversified in pace with this expansion and so did the level of inoperability between systems - the age of technological anarchy was upon us. As a response, institutions developed moderating central management and control entities; professional service departments such as Finance, HR, Student Administration and IT to attempt to bring order, cost control, standardisation and enterprise-wide systems and procedures to bear on the potential emerging chaos. Late to the table, teaching started to embrace some technology- at first to enhance lectures and the like and in the last decade increasingly to offer alternatives in the form of online learning environments.

Academic Faculties- as the revenue generators of the institution - were required to fund these central functions and bodies. They gradually gave up many of the freedoms and idyosyncratic systems and procedures they had evolved and began to comply with corporate practice. Individual academics and university teachers teaching practices continued to be shaped by their previous experiences, especially those of their own learning (Russell, 2009).

Standing behind their separate battle lines, the differences between academics and IT professionals were significant. The stand-off phenomenon mirrored what was happening

across nearly all business and public sectors organisations (Caine 2010). Academic departments were most interested in the technologies and systems that serviced their own specific and often specialised teaching, learning, research and administration needs. Central IT departments were tasked with identifying and implementing corporate systems to enable the integration and harvesting of all departments' data and information and which reaped the significant discount benefits of large scale, standardised technology procurements and deployments.

As part of this growth and expansion, the need for new approaches and solutions to manage the burgeoning teaching and learning agenda materialised. The Virtual Learning Environments (VLE) (also called Learning Management Systems, LMS) emerged to accommodate and manage some of the complexity. Early varieties were text based asynchronous forums or bulletin boards, some totally 'home-grown', but tended to morph into enterprise-wide solutions. These systems are owned, configured and established at the 'centre' to serve the whole institution.

Every academic teacher now learns to exploit the VLE/LMS for his or her students- whether blended with campus teaching or entirely online. Institutions have put endless amounts of investment into the process of training and development, although the anticipated changes to approaches to teaching have materialised very slowly.

Technology is still constantly changing. Many aspects of learning technology are outsourced to the 'cloud' rather than directly on the institution's site, and hence do not really 'belong' to either camp. As teaching gradually exploits mobile apps, virtual reality environments, augmented reality and social media, the ownership is typically outside the institution and the role of IT units is to guarantee access for all relevant students and staff. The role of academia is to exploit the technological opportunities for learning and teaching purposes with appropriate quality.

The opposing camps

The people who lead and work in technology and those responsible for learning and teaching in universities have very different world views. IT professionals are distinguished by credentials, certificates and licenses. IT Leaders are often recruited for their ability as strategists in large scale IT systems (not necessarily in the education sector). It is common that even the most senior individual (Director of IT or Chief Information Officer CIO) does not have a place at the executive board (Katz et al., 2004) and can find the remnants of the older-style governance and management and the cries of 'academic freedom' most difficult to negotiate. Conversely, higher education teaching has been described 'as a calling', resulting in truly remarkable loyalties to disciplines and/or to individual institutions (Katz et al., 2004; Trowler et al., 2012). Typically, senior executives in universities across Vice Chancellor, Deputy and Pro Vice-Chancellors have come up through the academic apprenticeships and wear their backgrounds with pride.

In this Century, central IT Units first housed rather shadowy communities of rather geeky people, now moving towards a service orientation along with technology becoming ubiquitous, commoditised, reliable and capable. Of necessity, IT was attended by rather

uncommunicative and disengaged souls who practiced somewhat dark arts in pursuit of systems maintenance and repair. A true service and customer support orientation is still being sought in many institutions. Academics in most departments (except perhaps computer science) often consider that IT people have an almost indecipherable language, nomenclature and activities. The view is that they threaten impending doom if their system growth and investment needs are not met. They can exert influence on the academic community that defers to their expert power. However, both parties are increasingly recognising their co-dependency.

The role of Head of Academic Department and Dean tends to be a cyclic appointment. An individual will be elevated to the position through a variety of institutional specific mechanisms but may hold the position for 3 or so years before returning to other duties. These factors have proven unfriendly to adaptive, responsive and corporately innovative cultures. Heads of Academic departments and faculties can be reluctant heroes in terms of the promotion of the relationship between academia and IT needs and the driving of change.

A battle between academia, in the forms of individuals and faculties and 'The Centre' was now fully engaged. In the ensuing maelstrom - which to some extent continues today - eddies of conflict would centre around issues such as 'loss of academic freedom', blunt IT approaches to specific user group needs, a transfer of the IT staff 'logical 1/logical 0 mentality' into impenetrable and interminable policies that almost constituted a denial of service to anyone trying to operate beyond a small sized domain of expected behaviours.

Recommendation: To sleep with the enemy

We believe that the potential for IT departments and university academics to successfully work together is a critical 'make or break' factor for the realisation of learning and teaching with technology in the near and further future. We suggest that as many cross-professional activities as possible are imagined and actioned by leaders.

Jointly, leaders can promote collaboration.

1. Seek first to enable understanding from both camps through dialogue to promote respect and trust. Deliberately seek to dismantle the silos and promote sharing of thoughts, ideas and capability with the aim of transforming learning experiences. Ensure that both camps have serious regular effective communication processes in place through a variety of methods. Invest in a few 'away days' and joint activities.
2. Involve students as key stakeholders and future thinkers- they often provide a great bridge and illuminate actionable ways that they learn, or would like to, with technology.
3. Enable ways for IT people and academic staff to work together – perhaps in a small innovation lab space, perhaps through research and development projects. Put a structured innovation 'pipeline' in place that moves project to prototype and then to mainstreaming where evidence is generated. Celebrate and make space and resources for innovation prototypes that encompass both pedagogical and technological change.

Use the evidence from the prototypes to inform future directions for learning and teaching policies and strategies and those for IT.

4. Involve IT people, learning technologists and academic teachers in the design of new types of courses and modes of delivery. (See Salmon 'In press' for team working on learning design ‘Carpe Diem’).
5. Encourage high level strategic representation by IT so there is informed decision making and choices about the allocation of resources (including small amount of higher risk stimulation funding). Ensure that every member of the community is clear that the senior executives value IT’s contribution.
6. Change the governance and decision making structures so that learning and teaching directly informs strategic learning technology decisions. By learning technology we include wireless networks, the VLE/LMS, Microsoft Office suites, support for bringing your own devices as a minimum. Include if possible more future orientation e.g. wearable computing, social media. Make sure that there is training and development for faculty and student representatives so they meaningfully understand the IT challenges and joint research and development activities.
7. Develop learning, teaching and assessment strategies and policies then combine and integrate digital technologies (Salmon 2005, 2013)
8. Recruit champions from senior executives or governance processes. For example, a lay-person interested in and with IT experience, and serving on the University Council can be very helpful.
9. Recruit and promote the role of ‘learning technologists’- people with a foot in both camps who can interpret language and needs from both parties (Oliver, 2002).
10. Enable IT people to offer ‘audits’ to faculties. Help both IT people and academic staff to understand that planning saves time and energy for everyone and is more likely to result in positive impact on students’ learning outcomes.
11. Look for complementarities between IT and faculties, between IT people and teaching academics. (Pettigrew et al., 2003; Russell 2009). Encourage cross-disciplinary and silo networking and decision support. Could this be a passion for the future of digitally-enabled learning?
12. Deans and heads of academic departments can be reluctant heroes in terms of the promotion of the relationship between academia and IT needs and IT's role in the driving of innovation. It’s worth investing considerable time and energy at this level in promoting IT understanding and the role of learning technologies in the future for teaching.
13. Encourage and build structures so that ideas – for research projects and for teaching- are presented early to IT (*not* after their budget is set for the year!).
14. Constantly promote informed decision making at every stage. Enable all academics to understand the importance of evidence and business cases; provide training, support and development as a core competency for all.

15. Irrespective of the scale of the initiative or project, championship and advocacy is everyone's business. Successful e-initiatives will be those that have first encouraged the presence of key professional service Leaders – such as IT – at the executive table where those leaders have an absolute responsibility to ensure the fullest understanding of the business case, its benefits, risks investment profile and development trajectory to everyone else.
16. The leaders of central IT units have a duty to instil in their staff the habit of walking the job and visiting the work places of those who daily interact with the technical solutions provided by the IT department. The quality and integrity feedback loop should be closed and must serve the teachers and learners.

Conclusions

The implications for those interested in promoting positive, if disruptive, change in universities, especially around the improvement of learning through technology, are clearly very challenging. Leaders need new ways to grapple with change. Many are now turning towards very different business models. We contend that starting with 'sleeping with the enemy' – IT and faculties working productively together - is a faster and most productive approach.

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