

The application of technology enhanced learning to enhance the 'student learning journey'

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Abstract: The last 10 years has seen some major shifts in the way students in Australia experience their learning, particularly those studying at a distance. And this has been, in no small part, thanks to the advances in technology enhanced learning. In response the university has looked at different ways it could react to this change and as a consequence has made some major shifts in its approach to supporting its distance education students by re-framing its support methodology around what has been become known as the 'student learning journey'. However, in making such a shift one must also then provide for a 'staff learning journey' and facilitate a variety of ways for its staff to become cognizant of the many and varied options that now exist due to the advances in technology.

Key words: Technology enhanced learning, student learning journey, benchmarking, staff learning journey.

Introduction

This paper will first provide the context as to why there was a need to alter traditional practices and an insight into the University of Southern Queensland (USQ). It will then posit that the case studies to be invoked here, one's around the Student Learning Journey (SLJ), are aligned with the need to fully map and understand how the institutions' student body are interfacing with the business of the university, both with technology and through social pressure points. By understanding this and then aligning the professional development offered to teaching staff around this, there are a number of strategies this paper will suggest are now working very well in the context of USQ. The paper will highlight some of the change processes that the university has had to go through to get the context right. It suggests that a whole-of-university response is required, as "changing only an element at one level may have limited, local and provisional success ... because the rest of the system is not touched and established patterns prevail over the single change" (Bamber et. al., 2009, p. 3). Further, if a whole-of-university approach cannot be adopted, the university runs the risk of there being only limited or, even worse, no real change at all.

This paper outlines the principles that inform the ongoing change processes, the plans and the implementation strategies that have been required to help USQ implement a whole of university shift towards focusing on the SLJ. Of particular importance to this shift has been

the potential to improve student retention and progression, but in doing so it became clear that there was a staff learning journey that also had to occur to help make this a whole of university change process sustainable.

Since its inception, some 47 years ago, USQ has specialised in distance education and gained a reputation for keeping pace with advancements in online and blended



USQ Toowoomba Campus

learning opportunities (Taylor, 2007). Across its two major Faculties there are 12 Schools providing, flexible and blended learning that has become the defining feature of USQ, with some 74% (20,000) of its 27,400 students now studying fully online. However, all (100%) students are required to access elements of their learning online. Not surprisingly, the University has attracted students unable to participate in traditional, on-campus, university studies and also boasts significant international students (6,000), for a university of its size. We find that many USQ students are the first in their families to study for a degree and



USQ Springfield Campus

many are older students involved with family and work responsibilities and some are from rural, remote, and Indigenous communities. In broad terms, 33% of USQs students are from low socioeconomic backgrounds, so the University may be characterised as engaging with the widening participation agendas now being set by governments around the world. To help facilitate this USQ has strategically placed its other campus (Springfield, Fraser Coast, Ipswich and Stanthorpe) also in areas on low socioeconomic standing.



The location of the USQ Campuses

A number of recent reviews into higher education HE attest to the importance that governments attach to university education (e.g., Bradley, 2008; OECD, 2010). Such interest in HE is due, in part, to the global transition to knowledge economies. This requires nations to have highly educated populations. As a consequence, governments have sought to widen participation in HE and to make university study accessible to a wider cross-section of the population (Broughan & Hunt, 2012). For example the Australian Government has set 40/20 targets to be achieved by 2020. That is, to have 40% of all 25 – 34 year olds with a bachelor or above and have 20% of HE enrolment coming from low SES background.

Given USQ has been among the leaders in flexible learning in the Australasian sector, and that it is responding to national priorities to widen participation, it might seem unnecessary to enhance the quality of teaching and learning. However, that would assume two things;

the first being that USQ believes it doesn't need to change, in other words it can rest on its laurels and secondly, that the market is not demanding a higher quality education product.

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To extend this thought a bit further, the motivation for USQ to change actually comes from a number of sources. Firstly, competition for students between Australian universities has become increasingly intense due to the caps coming off enrolment numbers, and it is vital to attract and retain students to sustain a strong cash flow. In other words, universities now more than ever need to deliver a high quality student experience. Secondly, the Universities in Australia are regularly audited by the government and have to demonstrate transparent, quality processes associated with the design and delivery of their degree programs. In reality this means universities need to get the context right for learning and teaching and to do this there are some basic core principles that need to be addressed (Hunt & Sankey, 2013).

The Principles

The framework that informs the principles that USQ has established around the student learning journey (SLJ) are seen in Figures 1 and 2. This framework shows the key contact points a student will make with the university from pre-enrolment until after graduation. Of course there are many points in between and we will investigate some of these later in this paper. However, the SLJ is a bit of an abstract concept, as it will vary from student to student, though, it can be generally said that the following elements form the strategic framework for USQ. It has been characterised as a relationships-based approach (Hunt & Peach, 2009), one focused on the student as a whole person, and not as the object of a series of unrelated interactions with the institution. It focuses the universities attention on the need for connectedness with the students during the different points in their learning journey (Hunt & Sankey, 2013).

At USQ, this learning journey has been conceptualised as the key points of interaction between the institution and the known needs of the nine different 'types' of student groups. These include, on-campus domestic, off-campus domestic, online students, international students (both on and off campus), partner campus students, northern hemisphere students, students with disabilities and low SES students (enabling). For each of these groups the key interaction points (Figure 1) may be summarised as: Decision to enrol; application and offer; enrolment; the early weeks (orientation & first classes); the experience of study in the first semester; preparing for the next semester; continuing study the following years; identifying unplanned events; completing study; and keeping in touch with graduates via the Alumni.

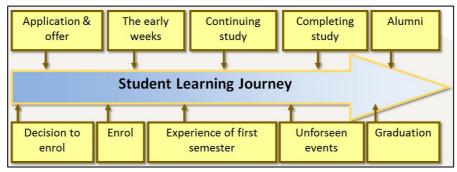


Figure 1. Ten key interaction points in the student learning journey

The SLJ framework offers an evidence-based approach based on the work of Geoff Scott (2005) and his study entitled 'Accessing the student voice'. In this study Scott analysed

168,376 evaluation comments made by 94,835 student graduates from across 14 Australian universities. In this study it was shown that students want (among other things) an "efficient and responsive administrative, IT, library and student support systems actively working together to support ... operation[s]" (P. 13). They also want quality course design, learning methods, and assessment, as well as staff who teach well and who are responsive to students' needs. In summary, the SLJ is everyone's responsibility, with everyone taking some responsibility for the main 83 broad ranging processes categories as seen in Figure 2.

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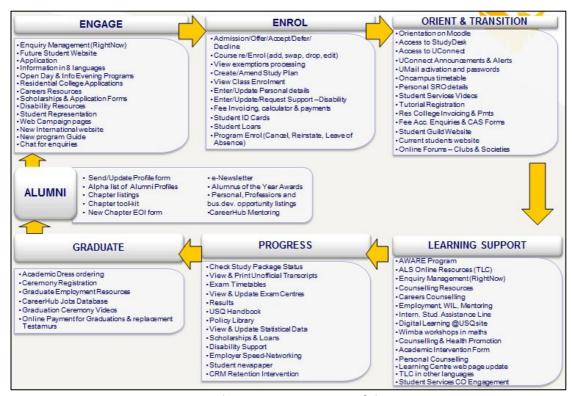


Figure 2. The process categories of the SAJ

If this is the case, to get the context right, it must require a whole-of-university approach. Consequently, USQ set about implementing a cross-institutional planning activity that meant each senior leader took responsibilities for a core function of the SLJ with the aim of ensuring a coherent approach for all students. And to extend this each of the senior leaders then had to make every effort to help the other senior leaders meet their goals.

This could be considered a centralised rather than devolved approach which, historically, has some potential to marginalize the centralised units from the faculties and schools (Kift 2004). However, Kift also acknowledged that faculty-devolved processes also "risk isolation from broader international, national and university strategic initiatives" (p. 8) and faculty staff may lack the power to effect change. So, in this case it was seen as too difficult to achieve a coherent approach to the SLJ through having disparate faculty initiatives, despite the student body seeing this as the face of the university (Hunt & Sankey, 2013).

However, this activity could not happen in isolation, there was also the need to identify some of the trends, particularly in how students were interacting with the universities learning spaces (online and physical) over the previous few years. Thus, some key trends were observed, ones that would impact on how the SLJ would be framed in the future. Some of these included:

• The declining demand for print-based resources. A noticeable trend for a number of years, although some still want print. But, if the downward trend continues this practice will be unsustainable, from a business perspective, within 12 months.

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- The increased demand for digital content and mobile compliant content. As USQ students become increasingly agile with technology the push is for accessible content, particularly for use on mobile devices has increased substantially.
- CDs were really popular for quite some time, but there has been a distinct decline is requests for these. On current trends these will also be gone within 12 months.
- There has been a strong push for more comfortable physical spaces on the four USQ campuses, particularly around providing places for students to meet, study, eat, talk and recharge. Learning space design is really important in this context. But this certainly does not equate to more lecture rooms.
- There has been a strong trend over the last 3-4 years of student's now bringing their
 own devices onto campus; preferring to use these instead of the universities
 computers. This led to the closure of two student computer labs last year. But the
 corollary of this has been the need for an increasingly robust wireless network.

So far, the principles that underpinned plans to promote teaching at USQ have been identified as, strongly aligning to the student learning journey and cross-institutional planning as an approach to facilitate this change. The next section will briefly discuss how this planning has been approached.

Planning

Cross-institutional planning has been a feature of the 'normal' planning processes for the last 4 years, but in this particular case it took on a new, higher level, of cross-institutional accountability to ensure such a wide spread aspiration could be met. Each section was required to be cognisant of what the other sections were planning in an attempt to breakdown some entrenched (possibly perceived) silos. Plans were necessarily constrained by time, budget and current university organisational structures, so it was not possible to do everything, but there was a distinct willingness to make significant change and to not reinvent the wheel. The plans structured and delimited what the University would do in terms of ten teaching, curriculum and student oriented projects. Specifically, they were:

- Learning and teaching management and human resources;
- Teaching excellence;
- Learning and teaching scholarship;
- Academic professional development;
- Assessment;
- Vertically integrated curriculum;
- Technology enhanced learning;
- Learning support;
- Evaluation; and
- Course and program mapping.

Each of these project had a number of sub-projects (between 3 – 8), but this paper cannot deal with all these issues, time does not allow. However, through the planning associated with this cross-institutional activity it became apparent that the following key elements needed to be significantly mainstreamed to ensure there was a holistic approach taken to the SLJ, which also, not surprisingly, included the Staff learning Journey. This paper will

restrict itself to discuss the following sub-elements, by way of providing a series of brief case studies of highlight the importance of these changes. They include, the:

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- development of a new role; the Student Relationship Officer (SRO),
- alignment with a new USQ Retention Strategy,
- increased focus on Academic Learning Support,
- mainstreaming of peer assisted learning (MeetUp),
- promotion of Communities of Practice (CoPs) for staff professional development,
- imbedding of the universities graduate skills and capabilities across all programs,
- promotion of the USQ ePortfolios for both staff and students,
- development of a hole of institution approach to closing the loop on student feedback,
- need to benchmark USQs capacity in technology enhanced learning with other universities

The Student Relationship Officer (SRO)

The Student Relationship Officers (SRO) have been established as a front line student support network. The strategy around the SRO is that every student has a named person they can get in touch with who will then follow them through their program. The network has been developed across three business unit levels:

- 1. Students and Communities
 - Recruitment & Admissions prospective and new students
 - USQ International for prospective and new students
 - Student Support & Retention current and continuing students
- 2. Faculties / School
 - Student Support staff in each Faculty based at Toowoomba campus
- 3. Campuses
 - Discipline based SROs based at Springfield/Ipswich & Fraser Coast campuses

The SRO has a clearly defined role within the USQ support model that relies on the following three stages, known as the Relationship Framework, which is further aligned to the USQ Retention Strategy.

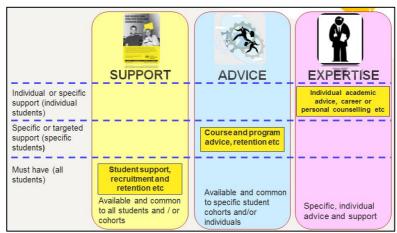


Figure 3. The Relationship Framework

Fundamentally within the Relationship Framework, the majority of questions the SRO team answer are general support enquiries. Examples of which include resetting passwords, advise on recommended enrolment patterns, study materials and exam timetables, to name a few. The advice column is where the SRO's hand the enquiry over to the Faculty, or relevant area, to provide specific information, such as a complex enrolment question or querying the grounds of a failed exemption application. The hand-over point beyond this is where expert advice may be required. Examples of this would include referrals to counselling support that is offered by Student Services, or specific course content enquiries to the relevant academic.

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USQ Retention Strategy

The SROs are the fundamental strategy for front line support in relation to retention management. The SRO will monitor student activity associated with key dates within the semester. During:

- Introduction/induction week, monitoring if a student hits the USQ systems.
- Week 4, that they have submitted their first assessment item, which is mandatory for all courses, by the end of week 3.
- Week 6, prior to the 'last chance to withdraw' without penalty date.
- Week 10, a mid-term check for activity on the systems
- Week 15, the week prior to exams
- Week18, that they have completed the course

Of these times the three main trigger points for action are predominantly:

- USQStudyDesk (LMS) Inactivity
- Assignment Non-Submission
- Missed Exams

Thanks to these measures being put in place USQ has experienced some noticible improvements in retentions for the last two years.

Focusing on Academic Learning Support

Academic skills support is essential in a university engaged in widening participation in HE, as new students may not be familiar with the required standards of written and oral communication and they may lack the necessary numeracy skills. However, it is important for principles to inform practice in academic skills support, because there is a risk that efforts to help may:

translate all too easily into little more than 'remedial' support for the 'weak' students, so that non-traditional students are effectively treated as 'charity' cases, rescued from ignorance. The existing edifice of elite education is simply extended by adding a large paupers' wing. 'Proper' students continue to define the norms, while the rest tag along behind. Yet such a response fails to meet the underlying aims of broadening education. Instead, it creates an underclass of students, who become alienated from the knowledge dangled beyond their reach and eventually emerge from their encounter with education with a sense of personal inadequacy rather than empowerment. (Northedge, 2005, p.13)

In simple terms this has led to the development of a fairly straightforward (simplistic) three level model of support, as seen in Figure 4. Importantly, this is not just for the 'traditional



support sections to adhere to, it is also for the faculties to follow, to ensure a consistent approach is adopted across the whole institution.

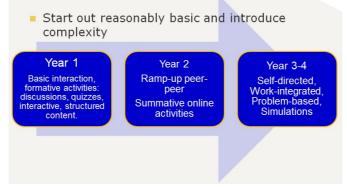


Figure 4. The three level overarching framework for student support.

In practical terms the above model ensures there are, for year one students, online and face-to-face sessions for communication skills and maths. This front-line support then happens in the following ways:

- Individual or small group consultations
 - o face to face, phone, email, online chat
- Group Workshops
- Meet-Up (discussed more fully next)
- Course-based assistance

But one should not be deceived by how simple this model is, for when it is spelt out in more detail; as in the full model of Integrated Student Support seen in Figure 5, we start to see why there has to be such a strong cross-institution approach taken to student support.

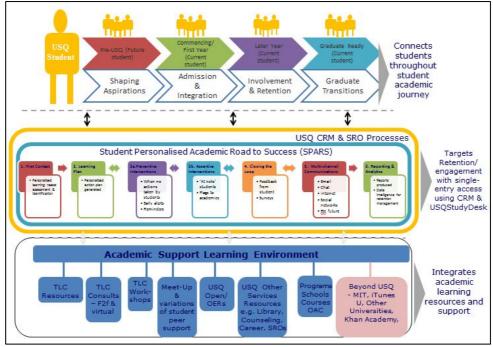


Figure 4. Full model of Integrated Student Support (Kek, 2012)

This holistic model of support has been named SPARS (Student personalised road to success) and consists two main levels, as follows:



- 1- SPARS: What students see
 - First contact self-assessed academic 'problems'
 - Personalised learning plan targeted learning resources and support
- 2- SPARS: Back end
 - Pro-active & early warning interventions
 - Closing the loop
 - Multi-channel and mode communications
 - Analytics for reporting and decision-making and continuous improvements

The SPARS model was implemented two years ago and has already realised significant benefits to students. Data analysis is currently underway to quantify the success of this structure and is due to be published later this year.

Mainstreaming peer assisted learning (Meet-Up)

A further key strategy for supporting first year students, particularly, is focused on embedding support into in curricula through academic skills development, good assessment practice, actioned though peer support. At USQ, Meet-Up is a student led program that brings students together who are doing the same course. The sessions can help students understand course content and develop learning skills and to help them find new ways to use their study time more



effectively. Sessions are designed to help students prepare for assignments and exams. Currently there are some 54 active Meet-Up groups meeting regularly. The sessions are different from formal tutorials as they are:

- led by students who have previously done the same course, so they are responsive to other students needs
- interactive, informal and fun
- they encourage discussion and develop understanding of course content
- concerned with how to learn as well as what to learn
- supervised by qualified academic staff

This has been one of the most successful programs run for student support at USQ. It is time consuming to run, but students are not only reporting better engagement in their courses, but their grades are also indicating improvements (Kimmins, 2013).

For more information about Meet-Up see: http://www.usq.edu.au/learning-teaching/students

Communities of Practice (CoPs) for staff professional development

The Communities of Practice (Wenger 1998) methodology is particularly pertinent to a community development approach used at USQ, it brings together academic and professional staff on a cross-institutional basis to build capacity around an issue of importance. So, for example, it might be all staff associated with teaching first-year students in one faculty to ensure a smooth first-year transition to university (McDonald & Star, 2006; Sankey & Lawrence, 2008), or it might be professional and academic colleagues from across

the university who work with international students. CoPs apply constructivist learning principles (Stewart, 2012) to staff professional development because participants determine the matters to be addressed and share and build knowledge together. They provide opportunities to develop applications for teaching grants and awards, and to publish. CoPs are an important component in the integrated professional development program, including tailored professional development which responds to the expressed needs of staff.

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There are currently nine formal (with funding) CoPs operational across the university and a further five non-formal (operate without funding) CoPs, each has a membership (loosely termed) of between 12 – 20. This has become a phenomenon that has led to engaged staff development in key functional areas. As the CoPs are now well established it is not anticipated that there will be significant growth in numbers, as most of the key areas are now covered, but that each would slowly strengthen to provide a robust level of support for staff requiring encouragement.

For further information about CoPs at USQ see: http://www.usq.edu.au/cops/communities

Imbedding graduate skills and capabilities

Assessment and graduate attributes are discussed together here because the development of templates was based on Biggs (2003) model for aligning assessment with learning objectives, graduate skills and teaching activities, as is now customary in many Australian universities. Once the core resources (mapping templates, rubrics and help sheets) were developed, USQ Academic Developers were able to work with faculty academic staff to ensure that subject outlines demonstrated alignment. The templates also helped staff to identify and assess different levels of learning outcomes.

This was very much driven by the Australian Government's push to see proof that the skills students required for entering the workforce were actually being developed by the courses they were studying. This led to the mapping of hard and soft skills across the USQ curriculum. Importantly, this was seen as an opportunity not a threat and it allowed for a significant improvement in not just the transparency of what was being taught to students, but also served to further focus the attention of the academic staff responsible for teaching the curriculum on the learning outcomes.

In addition the development of the help resources, the Academic Developers took the opportunity to also embed and align the academic skills (support) that were required in the curricula to align with this graduate skill development. For example, where a skill of 'critical thinking' was embedded in a course, aligned with this would be the support resource that explained what 'critical thinking' was and how this skill could be developed. It was a business-as-usual approach — academic skills are for everyone to learn. At the same time, the staff responsible concentrated on the specialist help that was required.

The USQ ePortfolio

One of the key elements of developing a suite of blended learning environments is to address the needs of a diverse and dispersed student population by maximizing the links between mobile spaces, virtual spaces and physical spaces. This has been done with the understanding that, "actual learning occurs when teachers begin to engage with the possibilities that are created by a consistent and pedagogically informed whole-of-university approach to the development of contemporary learning spaces" (Hunt, Huijser & Sankey,

2011, p. 194). In short, learning design came first – not technologies. The vision for blended learning and more meaningful interactions between staff and students, and student to students, spawned a range of technologies and Web 2.0 approaches. These were mediated by the introduction of the open source learning management system, Moodle and the Mahara ePortfolio system (to name just a couple).

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USQs approach to the introduction of ePortfolio has been a gradual one and based on three strong principles.

- 1- Students needed a place they could demonstrate they were attaining the graduate skills required to be employable.
- 2- Staff where evidencing their professional practice to the students and with the benefit of building towards potential promotion.
- 3- That an ePortfolio was for life.

ePortfolio was introduced four years ago. It started with the Nursing program and then was introduced to the Education program, since then the Arts and Engineering programs have quickly adopted it. Currently there are 18,000+ students using the system. The Human Resources department have also adopted ePortfolio as a way for staff to evidence their professional practice. Please see: https://eportfolio.usq.edu.au/view/view.php?id=18

Regardless if you are a staff or a student at USQ, the ePortfolio is there for you for as long as you want it. As an Alumnus of the university, or as a previous employee (friend), as long you keep your identity on the USQ systems you are able to retain your portfolio.

A further enduring feature of the Mahara ePortfolio tool is its ability to syndicate content and to form groups. The notion of syndication has become paramount for many universities trying to divest themselves of being responsible (at a systems level) for all the student data and content. If a student has a blog site of their own, USQ doesn't necessarily want them to go and create a blog site on a USQ system. It is seen to be far better for the student to have the one blog site and be able to syndicate that into their ePorfolio or LMS. Further, the ability to form groups was seen as essential feature within this system, as students were encouraged to share their portfolios with other students and work with each other to develop up their professional appearance.

Please see http://www.usq.edu.au/ele/eportfolio for more details about this system.

Closing the loop on student feedback

A significant aspect of getting the context right for teaching and learning is to provide for continuous monitoring of the curriculum. A key objective of this planning was to develop a system and a process to facilitate staff reflection on the curriculum and their teaching. A system was devised that collated all relevant data such as grade distribution, student retention rates, and student feedback. A process was developed that requires the team of staff teaching a degree program to meet once a year to examine the collated data and to respond to qualitative questions about, for example, assessment and graduate qualities. Subsequently, staff determine what needs to be done to enhance teaching and learning and their report becomes part of the annual faculty report to the University. The key points are that quality is locked in to the accountability processes and it is resourced with one-stop-shop data. It is an empowering process because staff have considerable control. This is an improvement on surveillance models of course review and serves to support reflective practice by teaching staff.



The system is built around five key elements all aligned to the universities strategic direction and focused on capability building:

- 1- Quality (strategic direction)
- 2- Information (data input and analysis)
- 3- Assurance (system performance checks)
- 4- Communication (aligning the message)
- 5- Records (access and storage)

In practical terms, once an academic staff member has had access to the feedback from their students from a particular course, they are required to then provide generic (not individual) feedback back to the students. This would generally take the form of, "you said this about this course and in response to your feedback we have done this". So far (in the last two years) this strategy has seen a slight increase in the quality and amount of student feedback being received, as the students are now starting to see that what they say is actually being listen to.

For more information see http://www.usq.edu.au/sbmi/about-sbmi

Benchmark in technology enhanced learning

This planning activity has ensured that USQ systems and the approaches taken to their use is generally consistent with other institutions in HE sector nationally and internationally. Accordingly, the university has undertaken three formal benchmarking activities over the last five years with many Australasian and international universities. It has done this by adopting the Australasian Council on Open, Distance and eLearning (ACODE) Benchmarking methodology, the results of which demonstrated that the University is well placed in terms of integrating technology into everyday learning and teaching practice (Sankey, 2008).

Most recently; June 2014, USQ was the major sponsor of the ACODE Benchmarking Summit held in Sydney. In this activity 24 institutions from five countries benchmarked various elements of their capacity in technology enhanced learning. This was an unpredicted activity in Australasian HE and has now opened the door to ACODE adopting this strategy on a bi-yearly basis as their way of pro-actively facilitating a consistent approach by the HE community toward technology enhanced learning and teaching. Additionally, it is providing much needed and focused professional development for staff responsible for providing these services to their institution and more importantly to their students.

Please see: http://www.acode.edu.au and click on the link Benchmarks for more details.

Conclusion and Lessons Learned

These brief case studies summarise some key highlights of a systematic approach to enhance university learning and teaching at USQ. It shows how the principles and vision of a change process were brought to fruition in a range of focused planning initiatives based on the Student Learning Journey. In particular, it highlighted the need for providing an embedded approach that engages the whole university. Barriers to change included a strong decentralised culture with considerable faculty ownership of processes. Nonetheless, this is a small university, which helped when implementing rapid change and it already had a solid

infrastructure for online learning. The reorientation of the services the university offers was a useful starting point.

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This might be seen as too corporate by some – organisational intervention that impedes academic freedom to develop learning and teaching as individual lecturers see fit. However, the point of this paper was to shift attention to whole-of-university responsibility for facilitating students' learning and for demonstrating quality assurance in learning and teaching. In so doing, this paper has documented what happened to get the context right in a few key areas of learning and teaching which has included a holistic approach to change leadership, cross-institutional planning and a community development that has incorporated a methodology tailored to suit one university.

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