Achieving compliance and quality of learning

The role of Curriculum Management Systems

Akari and Blackboard

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Introduction

- Many universities still operate a decentralised and often paper-based curriculum management system (CMS), which is proving increasingly inefficient, time-consuming and costly.

- Senior management are struggling to accurately audit programmes and subject matter with opaque decentralised processes, risking compliance

- With growing demands from a rapidly changing job market, tertiary education is evolving fast. It needs to be more flexible, more career-centred and more sensitive to industry requirements.

- Without a modern digital CMS with a centralised database, universities will not be able to keep up with this shifting landscape. Education disruptors are here, and it's up to universities to move in the direction of change.

Part One

Akari empowers universities with cost savings and efficiencies

On campuses without digital curriculum management systems (CMS), processes around course proposal and approval, curriculum development and maintenance are still largely paper-based and manual. This leads to huge inefficiencies in time, resources and costs, with forms being passed through multi-layered and, often, confusing approval processes. Curriculum management systems like Akari cut these inefficiencies by digitalising the process. All data is stored in one place with any changes, updates and approvals instantly accessible and transparent to all stakeholders.

Time and Resources

A centralised digital CMS provides time efficiencies for everyone involved by automating processes and notifications, reducing repetition of tasks and simplifying workflows. One way this can streamline processes is in the faculty workflow for course proposals, course development and curriculum management.

Bond University in Queensland found Akari saved a substantial amount of academic-staff hours by digitalising the subject outline process. Moving from paper to the online CMS, subject outlines stored in a central cloud database means academic staff can update and modify existing programmes instead of creating an entirely new document each semester.

> "From semester to semester all they have to do is deal with incremental changes that they have made to their subject… Now things are much more streamlined from their point of view."

Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), at Bond University.

> "The tenor of the conversation [in Review Committees] has become very different. Instead of us having debates about whether field 11C has been filled in correctly, we're actually talking about subject descriptions… We're actually doing the things we should have been doing."

Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), Bond University.

Staff can focus their time on more important tasks suited to their expertise instead of repetitive admin and form filling.

Programme Subject Review Committees at Bond University, were also considerably simplified and focussed by the use of a universal centralised digital process.

Cost management

Centralised data allows universities to cut costs by capturing cost data of individual curriculum components. Where a subject is not quite economically viable, individual course units can be adapted, removed or swapped. For example, switching out a unit that involves an expensive field trip or a specialist external lecturer may bring the course back into the green zone of economic viability.

This in turn improves the dialogue between senate and faculties because, rather than shutting courses for economic reasons, academics can access the data and tools to change course elements to improve the economic viability and thus the course's future. This visibility of data provides the insight to make faculties more autonomous in deciding how to build a course for long-term success.

> "It's about getting the right information to the right people in order to support our students."
>
> *Shayne Simpson, Manager of Student Information systems, University of Sunshine Coast, Queensland .*

Driving efficiencies

Following preset workflows enables stakeholders to understand their role, avoiding confusion and repetition of tasks. Akari sends automated notifications of curriculum changes to relevant participants to ensure communication is streamlined.

This is especially important when handling multiple versions of curriculum data for different enrolment years. All staff and students can be notified of any changes to course curricula for specific courses and academic years, avoiding confusion of informing students from different enrolment years. The result is clearer workflows and responsibilities for everyone involved, as well as better compliance.

Materials

Physical materials are also saved by having a digital curriculum management system (CMS) such as Akari. The obvious one is paper. Academic senate committee and subcommittee meetings often involve documents of thousands of pages per member. Add to that student handbooks, curriculum updates, proposals, approvals and dozens of other paper documents and digitalisation is already saving money, not just on the paper itself but printing, stationery and energy costs, as well, of course, as the benefit to the environment.

Downstream Efficiencies

Centralising data creates downstream efficiencies in areas which most universities are not even thinking about yet. One example where it can drive knock-on efficiency gains is in the handling of student concession requests concerning late submission of coursework or inability to attend assessments.

One prominent Australian university has centralised such requests from faculty to university level via an online portal. Student officers adjudicating the requests now have instant access to data from every course across the entire institution in order to make the correct decision in a timely manner. Having a centralised and easily accessible database of curriculum information will allow them to handle the roughly 50,000 such requests they process each year.

> "Under our old system, because we were so paper bound, we had 1,000 pages possibly for a meeting, so it was a lot of things to flip through."
>
> *Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), Bond University.*

Part Two

Akari supports student recruitment and retention

Curricula contain enormous amounts of valuable data that can directly influence student recruitment and retention via improving student learning outcomes. Furthermore, the flexibility and speed which a digital centralised curriculum management system provides, enables institutions to adapt and create courses in response to the rapidly changing demands of the workplace, giving early adopters an edge over competitors.

Curriculum interaction and feedback loops

With a digital centralised curriculum that is available to students as well as staff, curricula can be made more attractive, flexible, personalised and success-driven by allowing students to independently navigate and understand course components, helping them select courses and ultimately design their own pathways.

Institutions can say goodbye to clunky and expensive student handbooks with course outlines, enrolment information, terms and conditions and so on replaced by the digital platform, with content pushed from the curriculum management system. This will ensure course details will be relevant to each course year with programme and subject changes appropriately presented.

Unhappy learners will also be able to easily understand alternative courses available within the institution, which in turn improves student retention by focussing learners on alternatives within rather than outside the university.

Students can be presented numerous options or recommendations, that gives an Amazon-shopping-like experience. For example, course recommendations can be made based on browsing and search history. Customers viewing one course could be provided with a list of other recommendations based on other users who have viewed the same course, or that will complement a student's existing programme of study. And users could be contacted with any updates or new products that match their preferences.

As student outcomes improve through analysis of curriculum and assessment data, the results can be used as a marketing tool to generate further student recruitment. This creates a feedback loop driving continual improvement.

Work-ready graduates

Rapidly changing workplace demands mean that universities have to be increasingly responsive to industry. Employers are demanding specific workplace-related skills, which universities must ensure they provide. As the workplace continues to evolve and expand in response to new demands and technologies, universities need to remain agile in providing these competencies within their curricula.

Digital CMSs can help universities be more responsive to the requirements of industry via accrediting bodies. Professional competencies can be mapped to learning outcomes, making skills and knowledge acquired more transparent to employers and therefore more transferable to industry. This also aids the dialogue between employers and universities concerning required skills and how they can be delivered.

"Institutions can say goodbye to clunky and expensive student handbooks with course outlines, enrolment information, terms and conditions and so on replaced by the digital platform, with content pushed from the curriculum management system."

"I think we already had sound assurance of learning practices but because it was less subject to scrutiny and transparency the academics may not have been as concerned about the learning outcomes because nobody else was going to read them apart from themselves and their students. Now because myself and other people, at the push of a button, can read every single one of them, I think it's focussed people's attention on the quality of what they're doing."

Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), Bond University.

Quality of delivery

There is increasing pressure on universities from industry and accreditors to provide evidence of continuous improvement in student outcomes, workplace readiness, grades and graduation completion rates. Centralised CMSs make this data easily accessible for reporting purposes and provide the means to drive this improvement.

Bond University has used Akari to map programme-learning outcomes to subjects and subject learning outcomes to assessment data which they intend to start reporting back to faculties to improve the quality of course delivery.

"Centralised CMSs make this data easily accessible for reporting purposes and provide the means to drive this improvement."

Student success

Central data depositories allow for assessment information to be compared with learning outcomes to identify where students need help and provide it, for example through recommending relevant elective choices.

Bond University will use this data to identify weak areas in programmes and identify specific reasons they are failing.

"It will help manage risk because, if there is for example a programme that has an unexpectedly high failure rate in a semester, we would be able to look at students' performance within that programme over a period of time to identify what is going wrong."

Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), Bond University.

Part Three

Akari helps manage risk and governance

Accrediting bodies such as TEQSA in Australia and AQA in New Zealand enforce quality standards which universities are expected to meet [for further details read the Blackboard Curriculum Management Book]. Providing up-to-date and accurate evidence to these bodies is made far simpler with a centralised single-source-of-truth database, mitigating the risk of non-compliance.

That there is a real risk to non-compliance is illustrated by the case of Charles Sturt University (CSU) in Australia. In 2019, TEQSA renewed CSU's registration for just four years rather than the usual seven, placing conditions on the renewal because of issues with a third-party course delivery provider, Study Group Australia.

Unified data accessible to all

Curriculum Management Systems (CMS) like Akari provide a single source of truth, meaning that all stakeholders, including external bodies and third-party providers, can be on the same page when it comes to curriculum data. The CMS can also integrate with other systems including the learning management system, student system and university websites. This cuts down the risk of non-compliance by assuring consistency of message across all platforms and stakeholders.

Unified data means greater transparency around enrolment. Enrolment data could be audited in case of a student complaint to check whether the university acted unfairly in not enrolling a candidate. It also ensures that different departments are not giving out different messages around eligibility criteria.

Curriculum information on university websites forms a contract, which the university must deliver in order to be compliant. Unified data ensures learning outcomes match the promises made on the website and that this can be audited regularly.

Mismatches between what curricula advertise and actual outcomes can be serious non-compliance issues leading, in the worst cases, to the closure of the university. This was the case for Trump University in the US where published curriculum data showed that some lessons and advice given could be illegal in several states.

Greater efficiency managing governance and risk

Universities have flagged that they spend a huge amount of time, resources and money fulfilling and maintaining compliance with external accrediting bodies such as Engineers Australia, the Pharmaceutical Society of Australia or various Law Societies. CMSs can remove some of the repetitive aspects of maintaining and auditing compliance with these different external bodies, thereby cutting costs and gaining efficiencies.

In order to be compliant, students must be assessed on the curriculum relevant to their enrolment year. This requires the storage and handling of multiple versions of curriculum data. Information that is not relevant must become invisible to new students but remain accessible to students from the relevant enrolment year. Furthermore, ease of auditing is crucial in maintaining compliance. A centralised database makes the task hugely more efficient and transparent.

Bond University found that before implementing Akari, documents had been entered into the system and even modified by IT staff who weren't aware of compliance issues, making them opaque to the auditing process.

And according to Lauren Hives, Learning Systems Project Manager at Bond University, greater access to data and issues with that data has motivated an entire faculty at Bond University to do a full review of its curriculum.

> "Potentially we had programmes that weren't actually being offered the way academic senate had approved them."
>
> *Professor Keitha Dunstan, Deputy Vice-Chancellor (Academic), Bond University.*

Part Four

Akari supports micro-units/micro-credentialing

Micro-units and micro-credentialing are the future of higher education and career development. Allowing people in non-traditional learning situations to study and be recognised for bite-size chunks of learning, these new forms of study will enhance career progression, industry readiness and lifelong learning. They will place huge demands on how universities build and track curricula. Only organisations with the ability to be flexible and fast with curriculum design and delivery will be able to keep up.

Such is its perceived importance to the future of higher education that 64 percent of higher education institutions surveyed in a study by Pearson and UPCEA, see alternate credentialing as a future strategy and revenue-generating opportunity.

The New Zealand government also recently signalled its support for micro-units by providing funding for three micro-units in forestry and construction.

Lifelong learning and flexibility

In today's rapid-paced career landscape people change jobs on average every four and a half years, not to mention the huge increase in freelance work and the gig economy – 16.9 percent of the workforce in Australia in 2018, according to the World Bank. Few people have the time to take a break to study a bachelor's or master's degree. But neither do they want to be limited by lack of access to traditional learning methods and environments. Micro-units and micro-credentials provide the solution by offering flexible and time-efficient ways of enhancing skills and learning incrementally over the course of a career or an entire lifetime.

This flexibility extends beyond traditionally-viewed aspects of learning to encompass skills acquired directly from the workplace and other non-traditional settings. As well as acting as standalone units, micro-units and micro-credentials can be 'stacked'. Thus accruing a greater number of micro-credentials could aggregate to the equivalent of a larger, more recognised award.

More universities are beginning to experiment with stackable micro-credentials that can be aggregated into a larger qualification, among them include Swinburne University, University of Newcastle among others. These basic units would recognise learning in workplace and informal settings, and offer recognition of off-curriculum graduate attributes such as soft skills, professional competencies and meta-cognitive skills, providing a solid basis for ongoing professional development and continuing education.

Bridging the skills gap

There is a widening skills gap and a disconnect between perceived graduate readiness and what industry actually expects. Although 70 percent of educational institutions believe students are prepared for work, only 42 percent of companies think so, according to a study by McKinsey. Micro-credentials help to bridge this gap and make graduates truly industry ready by allowing students to seek out and prove they have the precise skill sets employers are looking for.

Micro-units and micro-credentials will allow for greater collaboration between universities and industry in curriculum design as universities seek to meet the demands of employers. This will put pressure on technology to make curriculum data workflows and approval pathways more open to collaboration with external partners. Only institutions that have centralised, easily accessible, transparent and up-to-the-minute data will be able to meet the demands of such a flexible and open approach.

Competing with online learning portals

There are a host of online learning portals that offer education that is flexible, time-efficient and available in bite-size chunks at affordable prices. From LinkedIn Learning to Coursera, Udacity, SkillShare and FutureLearn, the number of digital disruptors is growing fast. Adoption of micro-units and micro-credentials enables universities to keep up with this growing competition and avoid being left behind as the traditional learning space succumbs to technological disruption.

Micro-credentials could form a kind of digital badge included in digital resumes on LinkedIn and other job-related social media platforms. The attached metadata would provide reference to where and when units were studied, course content and outcomes, providing a verifiable form of skills credentialing.

The potential to combine digital credentials with blockchain technologies opens up a new world of possibilities where online resumes become lists of authenticated, non-centralised skills badges picked up in life and work environments as well as from traditional institutions.

Because of its ability to stand alone, aggregate and pull apart curriculum data, digital CMSs like Akari could be very useful in providing the metadata that would enable this kind of digital credentialing.

"The potential to combine digital credentials with blockchain technologies opens up a new world of possibilities where online resumes become lists of authenticated, non-centralised skills badges picked up in life and work environments as well as from traditional institutions."

Conclusion

The advantages of implementing a digital CMS can be summarised as follows:

- Better, clearer and more consistent workflows, reporting and auditing
- Greater access for students to navigate curriculum, study plan and course outcomes
- Central database reducing duplication of work by also offering greater transparency of course changes
- Greater automation of processes leading to reduced staff workloads
- Improved feedback loops driving continual course and subject improvement
- Delivering industry specific learning outcomes for better relationships
- Merging of curriculum, learning outcomes and assessment data streams allowing identification of positive and negative trends
- Greater readiness for adopting micro-units and micro-credentials

As well as all this they will lead to future efficiencies that haven't even been considered, solving problems that no one has yet thought of.

Universities are no longer the monolithic repositories of tradition they once were. Curriculum management systems are providing the agility needed to become modern businesses. This is enabling faculties to focus on student performance to improve satisfaction and retention while improving quality of delivery.

The visibility of programmes is giving the data to support compliance, reducing risk and enabling the organisation to be competitive. Tertiary education institutions that fail to adapt these systems will inevitably be left behind, or face significant legal or commercial implications.

Get more information

Contact us at Akari@blackboard.com for more information.