



Sector Analysis: Higher Education

Transforming quality assurance to enable the digital learning ecosystem

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Businesses in an increasingly digital world are facing a key challenge to transform their quality assurance practice to make sure they remain relevant and competitive. The higher education industry is no exception. With the introduction of the Tertiary Education Quality and Standards Agency (TEQSA), the federal government requires higher education providers to embed quality assurance practices within their day-to-day activities.

Non-regulatory drivers are also rapidly changing the higher education system. Remote tuition and self-paced learning have allowed students to become more flexible and self-directed in organising courses and learning. Through blended learning, competency-based degree programs, and helping

students design their own education program, universities are leveraging digital advancement to create choice for students in a digital learning ecosystem.

As a result, it is important for higher education providers to deliver quality products and services that ensure students get the most that they can from their program.

The providers are finding ways to better understand student expectations through the data available to them. Some have gone a step further and looked at how effective they are in equipping students with the right tools and knowledge to not only improve their job prospects, but also support further study in the future.

In general, they rely heavily on Big Data processing and predictive data analytics to better tailor services to students.

With a focus on generating sector-wide quantifiable results to inform performance improvement, some universities have gone beyond collecting course experience survey data and developed insights on, for example, the students' attainment of skills, their learning outcomes, and graduate satisfaction-levels. As a result, students, employers and professional bodies can get an informed view on the educational investment, when and where needed.

Australian universities use the Australian Qualifications Framework (AQF) to compare the quality of their own courses with those being offered by their peer institutions. This allows TEQSA to easily monitor and measure the performance of different tertiary courses throughout Australia. By collecting student and graduate course satisfaction metrics, and graduate employment and further study outcomes, universities compare their courses with other market offerings and find ways to better compete in the market.

Meanwhile, a US university has used predictive analytics to help students with course selection. The mathematical model takes a student's grade history, enrolment data, and curricular constraints into consideration and then predicts which courses are most suitable and, if the student was to take them, estimates the final grade he or she would receive, and how this may help them progress through their chosen program. This model has helped the university increase retention and graduation rates.

Thanks to advancements in learning and teaching technologies, higher education providers can work with third party providers to design high-quality courses and resources. Students are provided with affordable content access that is not bound by time and space and are increasingly becoming curators of their own learning. They tend to see more value in what they learn and develop increased critical thinking, collaboration and teamwork capabilities beyond the walls of traditional classrooms. Coupled with the data analytics capabilities, teaching advisors and mentors are able to leverage actionable dashboard data to provide students with targeted guidance on how to build incremental learning pathways in a transparent and trusted way.

Robotic Process Automation (RPA) is also being used in the education industry to eliminate paperwork and manual processes. Administration and customer facing roles are a major part of higher education and act as the main touchpoint between universities and their students. Through the use of RPA, repetitive tasks and processes

– such as system enrolment, timetable scheduling and answering frequent enquiries – have been automated in order to minimise error and reduce task completion time. Through the introduction of automated processes, higher education providers are better able to manage the quality of their customer facing services and ensure students can get answers and outcomes as quickly as possible.

By transforming the higher education business model, universities can better use technology to develop information flows between different ecosystem parties to create trust. They can open up learning materials and student study plans to external accreditation facilities that are backed by the industry. And enterprises and organisations can see what is being taught and work with universities to incorporate necessary industry requirements.

However, the integration of student-related data across various business systems can lead to potential data interoperability and security challenges, particularly when higher education providers choose to integrate and share data amongst institutions and across the higher education ecosystem.

Higher education providers need to clarify their role in the digital learning ecosystem, working together with the sector, external assessment agencies and third party providers to set quality benchmarks. There is the opportunity to use data and analytics to measure how effectively courses are contributing to the development of job-ready skills. In doing so, technical capability planning is essential to strategically invest in AI and automation technologies and platforms to deliver insights on-demand, guide capacity planning and help predict potential quality compromise.



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Vision without viability is wishful thinking. Like other transformation initiatives, the capacity of people and resources to manage all of them is a key constraint for many organisations. This means organisations need to plan for the capacity – under the new quality assurance model – to absorb the change, and management and employees must clearly understand their roles and responsibilities in ensuring continual quality delivery and managing cultural shift.