

Transforming Online Learning at CSU

Background Paper on the Transform Online Project within the 2017-2022 CSU Strategy

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1. Executive Summary

CSU has embarked on a wide range of improvement initiatives focussed on our online course offerings over the past three years. These initiatives have included the following:

- The development of a Distance Education Strategy titled *Destination 2020: A Roadmap for CSU's Online Future*¹;
- Comprehensive market research culminating in a consultancy report titled *CSU Online Market Repositioning Strategy*²;
- Development of the CSU Online Learning Model and implementation in CSU's largest courses supported by substantial strategic funding;
- Ongoing resourcing of the Smart Learning Course Review process targeted at improving the overarching quality of CSU course designs;
- Improved brand marketing supported by a substantially increased budget allocation;
- Improvements in baseline subject quality through the Quality Learning and Teaching initiative aligned to School and Faculty reviews; and
- A wide range of enhancements to online student support processes, many funded through HEPPP.

These initiatives have already had a positive impact on incoming student online load (commencing student numbers increased in 2016) and have placed CSU's online course quality on a positive trajectory. Additionally, CSU has continued to maintain its strong performance in relation to employment outcomes (equal first in graduate employment rates, equal second in median graduate salaries).

However, these improvements within CSU have occurred alongside major developments elsewhere in the sector which have increased the urgency of the change and improvement process. One major development has been the emergence of a number of new competitors (the most noteworthy being Swinburne Online and the University of Tasmania with growth in annual commencing students of 6543 and 5731 respectively over the past five years, compared to CSU's relatively stagnant position in commencing students in the same period). The growth rates of these new competitors suggest that CSU may soon be overtaken as the leading provider by commencing headcount. The fact that the rapid growth achieved by these new competitors has been built on new business, partnership, delivery and/or student acquisition models is particularly important. Most recently a number of other traditional campus based providers (the most noteworthy being UNSW and RMIT) have undertaken major investments in the online space, targeted at similar kinds of growth to that experienced by Swinburne and Tasmania. Once again these growth plans have been underpinned by new business, partnership, delivery and/or student acquisition models. Alongside these University providers, the number of non-University online Higher Education providers continues to grow, including a number operating under the umbrella of large multi-national corporations (e.g. Torrens under Laureate International and Open Colleges under Apollo Education Group). Finally, the rapid growth of the Australian domestic online student market

appears to have stalled or at least paused in the most recent intakes. It would be fair to assume that if new providers such as UNSW and RMIT achieve the growth required to become significant players in a slowly growing market, CSU's market share and online student load could be severely threatened.

As a consequence it seems clear that improvement focussed initiatives such as those described above may not be sufficient to ensure that CSU is able to maintain its leadership position in Online learning into the future and more substantial work with a wider scope and greater strategic investment is needed. The Transforming Online project within the CSU 2017-2022 strategy will provide an umbrella for this more substantial body of work. The overarching Strategic Objectives for Online Learning within the 2017-2022 strategy are as follows:

- *We will ensure we are at the forefront of innovative, quality online teaching and learning that delivers a rewarding and flexible student experience.*
- *CSU Online will be the largest provider of online higher education in Australia through to 2030.*

This document provides background information about the sector context underpinning the Transform Online project, summarises the outcomes and emergent challenges from recent improvement initiatives and proposes transformations in the nature of the CSU online student experience and associated processes. A key focus for the proposed transformation in the online student experience is increased flexibility across the life cycle as a point of distinction for CSU online courses. This transformation will include enhancements to the CSU Online Learning Model, a new Pathways and Student Acquisition model, a new Design and Development model, and a new Teaching and Support model.

The following are the major proposed changes within these new and enhanced models:

- Prioritisation of our largest courses in establishing high quality and distinct learning experience models;
- Increased marketing spend using cutting edge digital marketing approaches focussing on the distinctive aspects of this new model and a proactive student acquisition team drawing on real-time data analytics;
- Continual exploration of new potential markets such as through new entry pathways or partnerships towards greater presence in the international online market;
- Proactive support and bridging courses to improve success for non-traditional students or students commencing through new pathways;
- Flexible study options including six starting dates per year for all subjects, flexible assessment to allow accelerated or gradual progression through a subject, and cohort based or individual study options;
- Increased time/resource allocation to the design process to ensure high quality online materials, and specialised online course and subject development teams working within a product development methodology, led by specialist online learning experience designers;

- High quality subject content including a blend of static and interactive digital learning resources, using individual and cohort-based learning experiences to cater for different learning styles and life circumstances;
- Teaching undertaken by a team including academics, study coaches and work-place specialists, using analytics to inform responsive teaching and proactive support;
- Relationship based study support from study coaches from enrolment through to graduation;
- Access to academic and learning support through email, online chat, telephone or Skype, at a convenient time, for example, between 8am and 12 midnight weekdays and 9am and 5pm weekends, comprehensive feedback on assignments guaranteed within 5 working days; and
- Ongoing market informed innovation in student acquisition, design and development, learning experiences and support services enabled by emergent technologies, leading platforms and strategic partnerships.

2. Contextual Background

CSU's position as the largest online provider in Australia has been gradually eroded over the past seven years, with CSU's overall share of the online market in steady decline and most of CSU's major competitors having higher rates of growth in commencing numbers. Rapid transformation of the online and distance education space with new providers, new public-private partnerships, and new acquisition, delivery and business models have challenged the notion that CSU's experience and national reputation as a Distance Education provider represent a distinct value proposition for online students. We need to acknowledge that without substantial innovation in this space, we risk being the KODAK of online education in the Australian Higher Education Sector.

There has been significant growth in the sector (total commencing enrolments in online and distance education grew nationally by 63.7% between 2009-14; total revenue from online education has grown 10.9% pa between 2011-16 to \$5.2 billion and is projected to grow by an average of 6.0% pa to 2021) while

- a. CSU commencing domestic students in online and distance education mode grew by 3.9%, compared to national growth of 63.7% between 2009 and 2014;
- b. Most of CSU's major competitors have increased commencing student numbers at a higher rate than CSU;
- c. For example, Swinburne University (through its online joint venture with SEEK) and University of Tasmania have both moved from having very small levels of presence in the online market to positions within the top five providers by commencing students within 5 years, while RMIT and UNSW are both embarking on major initiatives aimed at similar levels of growth in online students;
- d. CSU's share of the online domestic undergraduate market declined from 17.3% to 10.4% (-6.9%), while its share of online and distance postgraduate market declined from 11.6% to 8.9% (-2.7%)¹⁹ between 2009 and 2014;

We have not kept pace with advances in student recruitment, analytics, online products or overall value propositions. We have designed and implemented major improvement projects but it may be that we have not applied sufficient resources and needed capability to implement changes of sufficient scope in a sufficiently timely manner. Our Schools and academic staff, in attempting to address these challenges, like many academic workforces are experiencing the challenges of:

- a. being stretched too thinly across different modes of teaching and learning (on-campus, online and blended);
- b. ever changing graduate workplaces and technologies requiring new approaches to teaching, learning and assessment; and
- c. increasing expectations around research performance and engagement with their professional and regional communities.

3. Major initiatives to date and challenges encountered

A major intended outcome of the 2015-2016 CSU Strategy was for CSU to be the national leader in high quality online learning. Underpinning the planning towards the achievement of this outcome were two major strategic reports provided to Senior Executive in 2015. The first, developed under the leadership of the PVC Student Learning, was the Distance Education Strategy titled *Destination 2020: A Roadmap for CSU's Online Future*¹. The other was the consultancy report commissioned by the Executive Director of the Division of Marketing and Communication titled *CSU Online Market Repositioning Strategy*². Recommendations from these two reports underpinned the identification of actions included within the CSU Strategy 2015-2016 Sub Plans.

The following tables summarise the core recommendations, milestones achieved in addressing the recommendations, major aspects yet to be completed and key challenges encountered.

Table 1. 2015 recommendations and achievements to date related to online learning models and standards

Recommendation	Milestones achieved	Aspects still to be addressed and challenges encountered
<p>A distinctive model for online learning with student engagement, connectedness and workplace learning at the core¹ and a set of standards for the design and delivery of DE subjects and courses with accountabilities for learning and teaching leaders and for teaching and design staff¹</p> <p>The development of a consistent set of course standards incorporating the key market drivers including flexible delivery, deeper industry engagement leading to better employment outcomes, and a superior level of student support to enhance academic success²</p>	<p>A new CSU Online Learning Model has been developed and refined following university wide workshops and pilot implementation.</p> <p>Individual elements of the Online Learning Model were piloted in 28 subjects and following evaluation and refinement, the full model is being implemented in approximately 190 subjects within CSU's largest Online courses in 2017.</p> <p>Minimum standards relating to landing pages and student interaction with peers and teachers were included within the QLT Standards.</p>	<p>Data collected during pilot evaluation suggested that the elements most closely associated with overall quality are Teacher Presence and Interactive Resources. Responses regarding the Interaction between Students element were mixed, which aligns with market research suggesting that some segments of the market would prefer individual study, and that flexibility in relation to engagement with peers is essential.</p> <p>Despite allocation of substantial strategic funding for academic staff workload some school leaders have encountered major challenges in ensuring that sufficient academic staff are available to work with subject design and development teams towards implementation of the model.</p>
<p>New modes of flexible enrolment that meet diverse DE student needs, including the specific needs of undergraduate and postgraduate, urban and regional, school leaver and mature age students¹</p>	<p>No substantive progress aside from very recent work relating to single subject enrolment.</p>	<p>This recommendation has been challenging to implement because it requires changes to processes and systems across CSU's faculties and divisions.</p>

Table 2. 2015 recommendations and achievements to date related to online course marketing

Recommendation	Milestones achieved	Aspects still to be addressed and challenges encountered
Development of a new brand “CSU Online” ² and new terminology for the DE mode of enrolment at CSU to emphasise connectedness and engagement ¹	CSU Online brand launched in 2015. The decision to replace the term Distance Education with Online Learning within CSU was confirmed in 2016.	Major systems and business process work is still needed to complete the transition from the term Distance Education to Online Learning.
A substantial increase in advertising spend, and recruitment of students utilising a more personal approach with a single point of contact for students from the point of first contact with CSU to census date ²	Substantial increases in budget for brand advertising and marketing of Online courses in 2015 and 2016, and some progress towards relationship centred student acquisition.	CSU’s existing staff makeup and organisational structure may not allow us to fully adopt the recommended relationship focussed approaches to student acquisition.

Table 3. 2015 recommendations and achievements to date related to online subject design and development

Recommendation	Milestones achieved	Aspects still to be addressed and challenges encountered
The approaches used for learning materials and content development may require new paradigms across the developmental continuum including rethinking of the roles of teaching staff, content and materials developers, assessment specialists and student support professionals ¹	Some changes have been trialled within the Online Learning Model implementation processes.	More substantial changes may be difficult within the constraints of existing organisational structures and academic and professional staff roles and responsibilities.

Table 4. 2015 recommendations and achievements to date related to online student teaching and support

Recommendation	Milestones achieved	Aspects still to be addressed and challenges encountered
<p>Enhanced student services and support including improvements to technical, academic skills and careers support with a particular focus on variations of student mentoring¹</p> <p>A high level of student support which is dedicated to providing the right support (academic skills, academic, pastoral care) at the right time through a single point of contact (mentor) including careers advice capability across the student lifecycle, building on enhanced and effective use of learning analytics to proactively focus support²</p>	<p>The Study Link subject <i>Introduction to Learning Online</i> was redeveloped and systems changes were put in place to ensure all students are automatically enrolled in it.</p> <p>Out of hours support has been incorporated into a range of Office for Students initiatives including ALLEN support and Outreach initiatives.</p> <p>The Priority Contact system has been implemented to proactively contact students identified as being at risk of non-completion.</p> <p>Case management trials have been undertaken by Office for Students.</p> <p>A mentoring scheme has been piloted by Office for Students.</p> <p>Career development services have been enhanced.</p> <p>Processes to ensure rapid turnaround of requests for ALLEN assistance on draft assignments have been instigated.</p>	<p>Establishing a single point of contact for all student support including career mentorship has not yet been enacted.</p> <p>The reliance on academic staff to promptly enter grades into Grade Centre in order for the Priority Contact system to track non submission of assignments continues to limit its effectiveness.</p>
<p>Exploration of alternative online teaching staff support models to ensure a consistent approach to the appointment, training, workload allocation and support of online teaching staff¹</p>	<p>Following a think tank involving online learning leaders from North America, Europe and Australia a series of recommendations for changes relating to recruitment, training and support for online teaching staff were provided to senior leadership.</p>	<p>Some recommendations have been enacted but the remainder were considered challenging to implement in a climate where major change initiatives within Faculties were already underway.</p>

4. Moving Forward

Despite substantial progress in some areas, key recommendations from the two major reports underpinning online learning enhancement initiatives within the 2015-2016 strategy have not yet been addressed, while the threat from increased competition has continued to grow. Arguably the pace of change and improvement has not been sufficient and consequently a major body of work with expanded resource allocations and a wider scope will be needed within the timeframe of the next strategy. Building on the work undertaken since 2015 and acknowledging the challenges encountered in progressing further during this timeframe, the following is a summary of proposed directions for the body of work to be undertaken within the *Transforming Online* project within the *2017-2023 CSU Strategy*:

1. Enhance CSU's reputation and performance as national leader for innovative quality online higher education by providing cutting edge high quality curriculum and learning experiences to CSU online students through the following core activities:

- a. Building on CSU's distinctive Course Review process and Course Space platform establish contemporary online learning design processes which harness contributions from content experts and media developers under the leadership of specialist online learning experience designers;
- b. Building on and extending the Online Learning Model, establish a production process that delivers highly interactive subject content, materials, teaching and assessment relevant to ever changing professional roles and workplaces;
- c. Establish an integrated workforce of suitably qualified professional and academic staff, trained, supported, and rewarded for continuous innovation and quality improvement of evidence based teaching practices;
- d. Building on the notion of a market oriented organisation, institute a culture and supporting processes to ensure ongoing market informed innovation in learning technologies building on leading edge web interfaces and social media communication tools responsive to evidence based assessment of student need;
- e. In the context of emerging technological affordances undertake continual data informed innovation and improvements in personalised, self-directed and scaffolded learning through learning analytics driven responsive digital resource provision and teaching; and
- f. Create an environment where teaching and support staff are able to personalise student learning by identifying and dealing with issues of greatest importance to students in a timely manner.

2. Grow load across our online course profile and provide sustainable scale and revenue streams through the following core activities:

- a. Utilise cutting edge digital marketing processes and systems and real time analytics to develop lead acquisition and recruitment strategies;
- b. Ensure the 'right' student is enrolled in the 'right' course through data driven, personalised contact strategies and sales incentives that span the entire student lifecycle;
- c. Improve student experience and retention by building strong student-centred relationships across the student life cycle through ongoing enhancements to services and support guided by comprehensive learning analytics;
- d. Undertake continual exploration of new potential markets such as through new entry pathways or partnerships towards greater presence in the international online market;
- e. Apply superior business intelligence in building/refining our course profile and expanding our markets;
- f. Prioritise graduate capabilities, dispositions and employment and career development outcomes within course design decisions; and
- g. Provide enhanced options for flexible enrolment and self-paced study better targeting the needs of the typical time-poor online learner.

5. The Nature of the Transformed CSU Online Student Experience

Underpinning this plan of activity will be a transformed online student experience which builds upon enhancements to the CSU Online Learning Model as well as incorporating major student experience changes from initial inquiry, through to application, enrolment, orientation and eventually graduation and careers support. Delivering a transformed student experience and the associated growth objectives will require a new Pathway and Student Acquisition model, a new Design and Development model and a new Teaching and Support model. Importantly, as well as putting in place transformational change processes to establish these new models it is essential that we establish a culture of evidence based evaluation and innovation to ensure that ongoing refinements and improvements to these models occur so that we can re-establish and maintain a position of sector leadership.

The key features of the proposed initial models are described in the following tables.

Table 5. The Enhanced CSU Online Learning Model

CSU Online Learning Model - Enhanced	
Overarching philosophy behind the revised model	
Flexible Engagement	The Enhanced Online Learning Model will ensure flexibility in the timing, modality and style of engagement across the seven elements
Elements of the Enhanced Model	
Learning Communities	<ul style="list-style-type: none"> • Students able to move between cohort based learning within an active learning community and individual supported study (new)
Interaction Between Students	<ul style="list-style-type: none"> • Contemporary synchronous and asynchronous peer engagement options aligned to subject outcomes
Teacher Presence	<ul style="list-style-type: none"> • Passionate, knowledgeable and skilled online teachers supporting cohort based and individual study
Interaction with the Professions	<ul style="list-style-type: none"> • Learning activities, resources and assessment that engage with created, simulated and actual workplaces, professionals and professional practices
Flexible and Adaptive Learning	<ul style="list-style-type: none"> • Subject content and assessment designed and organised to support self-paced self-directed study, cohort-based study or a combination (new) • Subjects available in six sessions in the year with start dates in February, March, May, July, September and November (new) • Subjects able to be completed in as little as 8 weeks or as long as 26 weeks (new) • Learning analytics data to inform teaching and support and to allow students to self-track their progress and performance.
Interactive Resources	<ul style="list-style-type: none"> • Carefully-selected blend of static and interactive learning activities and resources, using individual and cohort-based learning experiences to cater for different learning styles and life circumstances • Subject content and learning activities carefully designed to ensure suitability for facilitated cohort based or supported individual study (new)
E-Assessment	<ul style="list-style-type: none"> • Assessment drawing on digital media to allow demonstration of authentic workplace capability and employability and using contemporary digitally enabled examination, submission and feedback systems

Table 6. Pathway and Student Acquisition, Design and Development, and Teaching and Support Models

Pathway and Student Acquisition Model	Design and Development Model	Teaching and Support Model
<ul style="list-style-type: none"> • Multiple pathways into undergraduate and postgraduate courses (e.g. School, TAFE, previous degree, bridging course, workplace experience, prior learning) and multiple exit points to suit career needs or personal circumstances • Growth in online load through CSU brand recognition at a national level • An innovative and market led course profile prioritising graduate capabilities, dispositions and employment and career development outcomes, driven by superior business intelligence • Consumer driven learning experience options including ability to enrol up to six times per year • Cutting edge digital marketing processes and systems and real time analytics that drive personalised lead acquisition and recruitment strategies • A skilled evidence driven and outcomes focussed team that utilises real-time data analytics to assist outbound contact and interaction • A case management approach ensuring the ‘right’ student is enrolled in the ‘right’ course through the provision of advice on industry, courses and careers and services such as subject selection and enrolment, study skills, counselling, preparation for study, equity support, financial support and academic support 	<ul style="list-style-type: none"> • Course and subject design building on CSU’s distinctive Course Review processes and distinctive Course Space platform. • Constructive alignment between outcomes, assessment and learning activities at the course and subject level • Choices available within designed learning activities to ensure options for cohort based and individual learning • Demonstrated alignment to CSU Graduate Learning Outcomes and professional accreditation requirements • Courses and subjects designed with input from academic, professional and industry experts as well as prospective students • Online subjects developed by specialist educational design and media teams using streamlined development processes to ensure fast to market courses 	<ul style="list-style-type: none"> • Continuity in student-centred relationship focussed support through study coaches supporting a student from enrolment to orientation, during study and through to graduate career advice guided by comprehensive learning analytics to maximise engagement, retention and success • Teaching teams involve academics, study coaches and work-place specialists. • Comprehensive training for all online teaching staff • Study coaches act as a conduit for specialised learning support including ALLAN, IT and library support. • Students have ready access to academic and learning support through email, online chat, telephone or Skype, at a convenient time, for example from early morning through to late evening on weekdays and from 9am to 5pm weekends • Self-help via learning analytics & online guides, and interactions with peers • Flexible assessment submission dates and comprehensive feedback on assignments guaranteed within 5 working days • Students have ability to comment on subject content, teaching, support and own learning at any stage rather than just relying on formal end of subject surveys

6. Major Changes, Underpinning Rationale and Evidence Base

The following table summarises the key proposed changes to existing approaches and the key rationale for each

Change	Rationale
Quality improvement focusing on large courses	
Prioritisation of our largest courses in establishing high quality and distinct learning experience models	Our online load has been flat over the past five years while the market has grown substantially and consequently our market share has declined by about a third in this period ¹⁹ . Our large course profile of over 300 online courses, many with very few students in them, makes it unviable to continue with a development model where all courses and subjects get equal attention regardless of the number of students enrolled. The cost of substantial improvements to the quality of the online materials for all courses would be prohibitive and could not be justified by the income returned. Our high growth competitors (e.g. Tasmania, Swinburne) have much higher ratios of students to courses. Negative perceptions of the quality of the CSU online environment and online teaching quality were found to be important drivers of student choice not to accept a CSU online offer within CSU's conversion research ²⁰ .
Student experience (from enquiry to graduation)	
Six starting dates per year for all subjects	Market research suggests that flexibility is the number one driver for Online study ^{2,3} . CSU's conversion research suggested that perceived lack of flexibility and the course duration were strong drivers for CSU online applicants choosing not to accept an offer ²⁰ . Market research data ^{2,3} and <i>Online Learning Model</i> pilot evaluation data ⁴ suggest that there is a sizable group of students who have a strong preference for study on their own and a distinct sizable group who highly value interaction with their peers.
Flexible assessment to allow accelerated or gradual progression through a subject	
Cohort based or individual study options	
Relationship based study support from study coaches from enrolment through to graduation	Retention research has consistently shown the importance of relationships with teachers and peers as a factor in resilience and therefore retention ^{5,6} . CSU's conversion research suggested that perceived limitations in the support provided was a strong driver for CSU online applicants choosing not to accept an offer ²⁰
Course addresses professional practice through learning activities, resources and authentic assessment for engagement with simulated or actual workplaces, professionals and/or professional practices	Building on CSU's strengths in employment outcomes this will allow the development of a distinctive niche in online professional engagement. Establishing a market niche incorporating an increased focus on alignment of course outcomes with the needs of the professions is consistent with recommendations from the <i>CSU Online Market Repositioning Strategy</i> ² . CSU's conversion research suggested that perceived limitations in CSU's involvement with industry and professional organisations was a factor in CSU online applicants choosing not to accept an offer ²⁰ .
High quality subject content including blend of static and interactive digital learning resources, using individual and cohort-based learning experiences to cater for different learning styles and life circumstances	The quality of the online subject materials is known to align with overall perceptions of quality ⁴ and is one of the most important aspects of a students' first impression of the university. High quality resource based learning activities, aligned to learning outcomes and assessment will improve student success without increasing the per student cost of learning support.

Change	Rationale
Access to academic and learning support through email, online chat, telephone or Skype, at a convenient time, for example, from early morning through to late evening on weekdays and from 9am to 5pm weekends	Explorations into the study habits of CSU's online students have found that there are peak study times after hours on week nights and on weekends ⁷ . The provision of support when the students are studying is essential to a high quality learning experience.
Comprehensive feedback on assignments guaranteed within 5 working days	Years of research have shown that feedback is one of the most important drivers of successful learning ^{8,9} . High quality and prompt feedback is essential to the provision of accelerated learning pathways.
Design and development process	
Increased time/resource allocation to the design process to ensure high quality online materials	The team approach to the design of digital learning resources and environments has been consistently acknowledged as best practice ^{10,11} . High growth online providers across sectors (e.g Open Colleges in VET, Swinburne and Tasmania in Higher Ed) have adopted a team production approach to online learning design. CSU initiatives such as Smart Learning and the Online Learning Model implementation have consistently found that the scarcity of academic staff time or competing priorities for individual academic staff have been a major impediment to success ⁴ .
Specialised online course and subject development teams working within a product development methodology, led by specialist online learning experience designers	
Academic discipline experts providing subject matter and pedagogical expertise but not undertaking hands on development work	
Student acquisition process	
Increased marketing spend using cutting edge digital marketing approaches	High growth online providers (e.g Open Colleges in VET, Swinburne in Higher Ed) have substantially higher marketing spends than traditional university providers and have used contemporary sales approaches drawing on sophisticated customer relationship management (CRM) systems. Relationship focused student acquisition drawing on contemporary data analytics was a key recommendation from <i>CSU Online Market Repositioning Strategy</i> ² and from the <i>CSU Prospect to First Census Date Review</i> ²¹ .
Proactive student acquisition team drawing on real-time data analytics	
Heavily resourced case management focussed course advice service	
Multiple entry pathways including proactive support and bridging courses to improve success for non-traditional students	CSU's conversion research identified the lack of credit provided for prior learning as a key consideration for students not accepting a CSU online offer ²⁰ . Institutions with high online growth have tended to experience an increase in attrition possibly due to a tendency to take in students not ready for university in order to meet growth targets ¹² . Consequently proactive support and bridging courses are essential elements of any online growth strategy.
Teaching and Support process	
Teaching undertaken by a team including discipline experts, study coaches, and work-place specialists	A team approach will ensure that academic staff time, one of the most precious commodities at CSU, is used most effectively. Drawing on specialist support teams with ongoing relationships with students will also be a key plank in the retention strategy.

Change	Rationale
Use of regular in context student feedback along with learning analytics to inform responsive teaching and proactive support by learning support staff	Responsive teaching approaches drawing on data about student learning progress and student perceived needs is the current focus of research and initiatives across sectors ^{13,14} . The use of analytic data and presentation dashboards to allow this to be carried out efficiently is a key area of potential distinctiveness for CSU's online programs.
Comprehensive training for all online teaching staff (including sessional, contract and continuing staff) to ensure a consistently high quality model of teaching and support	Inconsistent training and support for online teaching staff has been found to be a major impediment to quality in a number of recent bodies of work at CSU (e.g. the <i>Academic Compass Sessional Academic Staff Survey</i> ¹⁵ , the Recommendations emerging from the <i>Think Tank on Alternative Staffing Approaches for Scalable Distance Education</i> ¹⁶). One of the hallmarks of Swinburne Online's high growth programs has been consistent training for all teaching staff to ensure delivery of a consistent learning experience ¹⁷ .
Students provided with a range of data so they can self-track their progress and performance	Self-regulation is a driver of learning success with a substantial evidence base ^{9,18} . The use of analytic data to support students' self-regulation has been suggested by many researchers to be the most important application of big data in education.

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