



Good Practice Assessment of Online Teaching in Universities in Aotearoa New Zealand during the COVID-19 Pandemic and Lessons for the Future

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Summary

Universities in Aotearoa New Zealand began responding to the global COVID-19 pandemic from January 2020. Initially, their responses were focussed on supporting students unable to travel to Aotearoa New Zealand. However, the New Zealand Government initiation of the COVID-19 Alert Level system and the moves to Alert Level 3 on 23 March 2020 and Alert Level 4 on 25 March 2020 meant that universities needed to address maintaining teaching and learning and support activities for all students. Universities recognised that a great deal would be learnt from their responses to the pandemic and agreed a scope for a *'Good Practice Assessment'* to help capture practices and collectively develop lessons for the future. This report is compiled from the *'Good Practice Assessment'* reports provided by each of the eight universities and contributes to the collective record of universities' responses to the pandemic.

Universities based their responses on existing plans and frameworks and drew on considerable expertise within universities to form cross-functional response teams. Response teams met frequently (daily) and then with reduced frequency as Alert Levels were lowered. Considerable attention was paid to communicating with students and staff. The universities' response was to transition rapidly to online teaching and learning and support activities.

Universities maintained academic quality through: changes to policies, processes and procedures; development of principles and guidance for online teaching and learning; enhanced support for online teaching and learning; changes to assessment; redevelopment of student learning support, including support for remote study; and increased use of analytics. Treatment of assessment and support for online teaching and learning required particular attention and considerable support was provided by academic staff development and learning and teaching teams. Some practical and experiential teaching and learning was difficult to transition to online and some courses were suspended and 'still to complete' grades recorded. Overall, universities remain confident that graduate profiles could still be achieved and that grades awarded fairly reflect both mitigation of impact and academic achievement.

The COVID-19 Alert Levels and the transition to online teaching and learning and support activities exacerbated inequities among students. Universities' responses included gaining a better understanding of students' home learning environments, providing hardship support (including access to technology) and also making support services available online and by phone.

Success in responding to the COVID-19 pandemic and transitioning to online learning was a multi-faceted construct for universities. It included preparedness, academic success, student satisfaction, equity, safety, and well-being. Factors that contributed to success can be broadly grouped into: those to do with institutional preparedness and other institutional factors; those to do with people (staff commitment, expertise and flexibility, culture and collegiality, collaborative leadership models, leadership and students); technology (learning management systems, additional technology such as lecture capture and examination software, and technology planning and provision); response management (fast and early decision-making, cross-functional teams that included subject experts and students, the teaching pause, student-centricity, communications and information provision and having confidence in university ways of working); academic factors (making accommodations in academic quality policies and practices, the range and accessibility of learning resources that were made available, student contribution to learning and assessment design, pedagogical developments and improvements and professional learning by staff); and data (from surveys and through analytics).

Universities identified a number of factors that would help them prepare for future risks to academic continuity including: ensuring departments have plans that set out how teaching and learning and assessment/exams will continue, technology required and how student contact will be maintained; readiness to work from home registers for staff and improved connectivity for working from home; identifying students' technology requirements; ensuring that all students and staff are prepared to study and work remotely; and further attention to communications. There will also be longer term implications for how teaching and learning is developed and delivered and how students are supported for success arising from the COVID-19 experience.

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1 Introduction

The COVID-19 pandemic and New Zealand Government response created some of the biggest external shocks to teaching and learning and support activities that universities have experienced. Universities moved quickly to transition teaching and learning and support activities to online. Although this has been a difficult and challenging time (and is not yet 'over'), universities recognised that a great deal would have been learned from their experiences and sought to capture this in a *Good Practice Assessment* to collectively develop lessons for the future. This *Assessment* was requested by the New Zealand Vice-Chancellors' Committee in April 2020 and the scope and process for the report was agreed with the Committee of Deputy Vice-Chancellors Academic¹ (DVCs Academic) in May 2020.

The *Good Practice Assessments* were to examine:

- What universities did to move from face-to-face/on campus to online delivery (what)
 - timeframes
 - technology and tools
 - plans and frameworks
 - engagement with students and staff
- How academic quality was and has been maintained for online delivery in terms of (how)
 - student transitions and attainment of graduate attributes
 - assessment standards
 - academic integrity
 - student access to academic advice, learning support and support for well-being
 - teaching development support for staff
- Key success factors and challenges (why did it work/not work)
 - what constituted success at different stages of the response?
 - what factors contributed to these successes?
 - what were and remain the main challenges and how have these been addressed?
 - what other preparation would have been useful (2 years rather than 2 weeks)?

Lessons for the future would be developed to guide:

- preparation for future 'shocks' and sudden risks to academic continuity
- future development of teaching and learning and support for students and staff
- management of academic quality in rapidly changing and novel disruptive contexts.

The purpose of this report is to identify good practices and lessons learnt from universities' responses, based on the individual good practice assessment reports that each university provided to AQA at the end of January 2021. This report forms part of the collective record of universities' transitions to online teaching and learning during the COVID-19 pandemic in 2020. It focuses mainly on universities' activities in the first teaching semester/trimester of 2020.

Good practice finding: Universities intentionally reflected on their experience of transitions to online learning and teaching and support activities with the objective of collectively learning from experiences.

1.1 Caveats

It is not the purpose of this report to identify individual universities, but rather examine good practice that has occurred across the sector. The report focusses on good practice; inevitably, and as some universities have observed, there will have been aspects of the transition to online learning in response to the pandemic that did not go as planned or that were not reflective of good practice. A second caveat is that this report is

¹ <https://www.universitiesnz.ac.nz/about-universities-new-zealand/unz-committees-and-working-groups/dvcs-academic>

university-centric. Other groups and organisations have produced analyses of universities' responses from other perspectives. Te Mana Ākonga has examined the impact of the COVID-19 lockdown on Māori university students (Akuhata-Huntington, 2020) and in Australia, TEQSA has undertaken a meta-analysis of providers' student experience surveys (Martin, 2020). This report does not make comment on student or staff views of responding to the COVID-19 pandemic. Finally, this *Good Practice Assessment* focusses on online teaching and learning rather than the entirety of universities' responses to COVID-19. However, where other matters have been raised by a number of universities, they are also included.

Despite all universities experiencing the pandemic, their experiences (and student experiences) differ. The report mainly focusses on the transition period to online learning when the whole country was at Alert Level 4 on the COVID-19 Alert Level System.² Auckland universities and universities with campuses in Auckland experienced further returns to Alert Level 3 in August 2020 and February 2021.

The most important caveat however is that the COVID-19 pandemic is not over and universities, students and staff are continuing to feel impacts and need to find ongoing ways to manage teaching and learning and support activities.

1.2 This report

The structure of this report follows the scope for the *Good Practice Assessment*. It has been developed from the *Good Practice Assessments* provided each university. It is intended to be a whole of university sector report and not every university will have provided comment on every section in this report. Detail from university assessments has been included as this helps share practice across the university sector. However, generic language has been used in the report as it is not the intent to identify individual universities. Good practice findings are identified throughout the report. While making recommendations is not the intent of this report, a small number of recommendations have nonetheless been made.

2 What universities did to move from face-to-face/campus-based teaching and learning to online

With the government announcement of the COVID-19 Alert level System and the move to Level 4, universities transitioned from predominantly face-to-face teaching and learning to online teaching and learning. Academic support and pastoral and wellbeing support services also moved online.

2.1 Timelines and phases

The Government announcement of COVID-19 Alert Level 4 (25 March) occurred 3-4 weeks into the first main teaching period for universities. All universities paused or suspended teaching and learning delivery for a period. Two models of transition to online teaching can be seen from the universities' responses. One group of universities paused teaching for 1 week (23-27 March) and recommenced teaching and learning online from 30 March. The second group of universities brought forward planned mid-semester breaks and essentially paused delivery for 4-5 weeks. These references to pause or suspension only refer to delivery of lectures, tutorials, supervision, etc; as considerable preparation work that would be classed as teaching and learning activity was going on over this period and students will have been continuing with individual study activities.

The broad timeline for university responses to the COVID-19 pandemic is set out in Table 1. There were differences between universities in terms of how long they spent in different phases. Universities with more transnational education activity were involved earlier in developing remote teaching and learning activities. The other main differences between universities were in the time period taken for transition and then differences for universities with Auckland campuses as they experienced returns to higher levels of COVID-19 Alert Levels.

² <https://covid19.govt.nz/alert-system/history-of-the-covid-19-alert-system/>

TABLE 1 BROAD PHASES OF RESPONSE

Phase	Timeframe (2020)	Characterised by (more detail in later sections)
Early	January (WHO declared global emergency)	<ul style="list-style-type: none"> • Recall of NZ students from study tours and exchanges • Impact on Transnational Education, particularly in China • Contingency arrangements for summer school exams • First response teams established
Offshore and international focus	February (3 Feb – travellers from China unable to enter NZ)	<ul style="list-style-type: none"> • Delays in arrival of international students, particularly from China • Lectures recorded for offshore and self-isolating students • Contact campaigns with students intending to travel to NZ • Further response teams established
Start of main teaching and learning period	To 23 March (11 March WHO declared pandemic)	<ul style="list-style-type: none"> • Semesters/Trimesters start 24 Feb – 2 March • Policies for arrangements for off-shore students • Assessment policies and frameworks for assessment under COVID-19 conditions • Revised protocols for formal welcomes and large gatherings • Social distancing introduced • Preparation for online delivery, particularly for offshore cohorts • First cohorts of students advised to prepare for studying remotely • All response teams established • University COVID-19 communications underway
Pivot to online (teaching pause)	23 – 27 March Group 1 commence online 30 March Group 2: 20 April	<ul style="list-style-type: none"> • Lectures, tutorials, laboratories and face-to-face support services paused • 2 Groups of universities <ul style="list-style-type: none"> ○ Group 1: 1 week transition ○ Group 2: 4-5 weeks transition • Teaching and learning activities redeveloped and re-oriented to online delivery • Extensive academic staff development support • Development and release of guides to online teaching • New learning design services launched • Student (and some staff) readiness and capability for remote teaching and learning assessed • Focus on student and staff wellbeing • Extensive communications activity
Emergency remote learning ↓ Planned online	30 March 20 April (27 April Alert L3) (13 May Alert L2)	<ul style="list-style-type: none"> • Commence online teaching and learning and support activities • Universities distinguish between emergency remote teaching and planned online teaching and learning • Extensive support from academic staff development and teaching and learning teams • Practical-based learning and teaching and classes needing specialist equipment or facilities that cannot be provided online suspended • Differences in orientation between continuity and recovery
Return to campus	13 May	<ul style="list-style-type: none"> • Staff begin returning to campuses • Teaching and learning remains online • Support services remain available online
Second semester/ trimester	From 13 July (2 week variation in start dates for second main teaching period)	<ul style="list-style-type: none"> • Blended and flexible learning, also dual-mode • Many lectures remaining online but tutorials, seminars, workshops and labs in person • Most and final assessments remain online
Level changes	From 12 August	<ul style="list-style-type: none"> • Auckland campuses return to Level 3 12 August for 2.5 weeks

Prior to the Government announcement of the COVID-19 Alert level Framework (23 March 2020) universities had COVID-19 pandemic response activities underway and a number had already invoked their response frameworks and response groups. Early responses from January 2020 involved recalling students from study tour and exchange activities and establishing contingency arrangements for summer school exams. Universities with teaching arrangements in China were also very conscious of the growing impact of the pandemic in China. As it became apparent that students from China would be unable to travel to New Zealand attention turned to how these students could be supported to continue their studies at a distance.

How universities transitioned to online teaching and learning is examined further in Section 3 of this report.

2.2 Plans and frameworks

Universities had plans and frameworks in place to enable these transitions³. Most universities referred to Emergency Management policies, plans or statutes as their internal enabling mechanisms to make the transition. They also referred to 'Resilience Management', 'Business Continuity', 'Pandemic' and 'Critical Incident' plans. One university was explicit that their emergency management procedures included a deliberate shift from response to recovery. Some of this may be a difference in language between universities, or it could reflect differences in how universities prepare for and manage crises and emergencies.

Good practice finding: Universities had plans and frameworks in place that enabled them to respond to the COVID-19 pandemic.

Despite universities having plans and frameworks in place, some universities commented that the scale of the COVID-19 pandemic brought new challenges. In contrast, other universities noted that their emergency management plans included provision for situations that did not arise in this situation, including widespread illness and loss of staff capability and capacity to continue teaching and learning and support activities. This does not mean that the transition to online was easy for staff, only that universities did not experience losses in capacity or capability, nor did they lose communications capability nor digital infrastructure and capability.

Recommendation: review the scope, orientation and performance of emergency management and business continuity plans in responding to an issue of this scope and scale.

Recommendation: consider whether the use of language in response plans and frameworks influences the way in which a university responds to a situation and whether this is intentional.

Beyond the use of emergency management, business continuity and other plans generally, universities oriented their response plans and activities to focus on teaching and learning and support activities and established oversight and operational groups to deliver responses. For all universities, the response was a transition to online learning and teaching and support activities. In other jurisdictions, responses included continuation (with amendments) of face-to-face teaching. This was not an option for New Zealand universities.

2.3 Response management

There was variation between universities in the names of the groups established to manage their responses. Some universities used generic names such as 'Strategic Response Team' or 'Critical Incident Management Team', while others had more situation specific groups and teams such as the 'Covid Action Planning Group'. Most universities also formed sub-groups or teams to manage learning and teaching and support activities.

Response teams had cross-functional membership from across the university and included subject experts. Just over half of the universities included student members in either the strategic response team or the response team for learning and teaching activities. Other universities maintained close communications between students' associations and senior management. Some universities considered that having student members of response teams was a contributing factor in the success of their response.

³ Cycle 5 Academic Audits (2013-16) had found that universities had plans and procedures in place or significant work underway to ensure continuity of teaching and learning (Matear, 2018).

Good practice finding:	University response teams were cross-functional and included subject experts and, in a number of cases, students.
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In the early stages of the response, response teams met daily and then moved to a lower meeting frequency. Some groups ceased meeting with a return to Level 1, others transitioned to more explicit recovery or future planning groups and, at the time universities provided their good practice assessment reports, one incident management group was continuing to meet. A possible issue for universities that have adopted a critical incident as a way of working is how they will differentiate between normal management and critical incident management in the future.

In addition to response management within universities, the Committee of DVCs Academic also met weekly, then fortnightly, to discuss common issues and share solutions in real-time. A number of other whole of university-sector groups, including the Vice-Chancellors, also met frequently from March to June to share good practice across a number of areas of university activity.

Good practice finding:	Universities were collaborative in sharing practice and solutions in real-time as they responded to the pandemic.
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2.3.1 Communication

Universities placed emphasis on communication and all developed dedicated COVID-19 pandemic webpages or microsites. These pages included policy changes for teaching and learning activities, FAQs, and advice on transitioning teaching and learning to online. Information was also made available in learning management systems, including on dedicated pages and links. Extensive use was made of email, with targeted emails and newsletters being developed for some groups. Use of video content increased and universities live-streamed staff forums and joint sessions between Vice-Chancellors and student association Presidents. Some universities reported on intentional shifts in tone and style of communications. In other universities student wellbeing messages were designed for students by students.

Student engagement teams called students and responded to a wide range of issues. Universities also developed new channels for communicating with groups of students and facilitating interactive communications. This included making greater use of zoom and MS-Teams and use of WeChat for students in China. Some universities commented that online meetings made a positive contribution to a “sense of common purpose” across the university.

Some universities acknowledged that communications issues had arisen. In some cases this was due to needing to change planned arrangements as a consequence of changing government advice and in others confusion stemming from inaccurate (or partial) media reporting. Universities acknowledged that the sheer amount of information that needed to be communicated could be overwhelming and also that at times staff felt that information needed to be provided more quickly. In acknowledging that issues did arise, universities also demonstrated that they were responsive to feedback.

Communications was a substantial component of how universities responded (and continue to respond) to the COVID-19 pandemic. There would be value in undertaking a more specific analysis of communications.

2.3.2 Feedback

Universities also sought feedback from students and staff through a range of surveys (Table 2). Most surveys mentioned by universities were administered by universities. However, universities also referred to surveys undertaken by students’ associations and external organisations. Surveys prior to or at the start of Alert Level 4 were used to assess student readiness to study remotely and to inform decisions about delivery of papers/courses and programmes. As the year progressed, other surveys sought information about student experiences and students and staff wellbeing. Some universities participated in surveys run by external organisations that could provide external reference points to benchmark universities’ responses.

TABLE 2 SURVEYS UNDERTAKEN OR PARTICIPATED IN

	Students	Staff
Internal	<ul style="list-style-type: none"> • Preparedness/readiness for remote study • Māori students and Pacific students experiences of learning in lockdown • Student evaluations of teaching replaced with online learning evaluations or questions added to paper and teaching evaluations • Faculty surveys • Pulse surveys • COVID-19 question block added to annual surveys 	<ul style="list-style-type: none"> • IT hardware asset • Staff reflections survey • Staff wellbeing • Staff teaching and learning
External (to university)	<ul style="list-style-type: none"> • Students' associations survey of experiences • i-Graduate COVID-19 Response Barometer • Student experience in the Research university 	

There is a general view that university students are over-surveyed. In this context however, surveys have been a valuable source of information and universities responded quickly to information gathered through surveys. Some universities reported survey results to students. How universities used and responded to survey data is discussed later in this report.

3 How universities maintained academic quality

With the rapid transition to online teaching and learning and support activities, the *Good Practice Assessment* asked how academic quality had been maintained. Maintenance of academic quality was addressed though:

- changes to quality policies, processes and procedures
- development of principles and guidance for online teaching and learning
- support for online teaching and learning
- changes to assessment
- student learning support, including support for remote study
- increased use of analytics.

These are discussed further below.

3.1 Changes to quality processes and procedures

Most universities made changes to their 'quality frameworks' as part of their response to the pandemic and transition to online teaching and learning. Changes also included the ways in which decisions were made.

The main areas in which changes occurred were:

- student workload and assessment requirements
- increased pre-moderation of assessment
- requirements for withdrawal from study and fees refunds
- provisions for aegrotat and special consideration
- changes to GPA calculations
- changes to or suspension of academic progress requirements
- academic integrity and academic misconduct.

Changes to assessment are discussed further later in this report (Section 3.4). From an academic quality perspective, changes to assessment ensured that course/paper learning outcomes and therefore qualification graduate profiles could still be achieved. In some cases, universities noted that course learning outcomes were revised.

Other changes included the establishment of new course/paper codes to identify courses/papers where students were enrolled offshore or 'still to complete' codes for courses with practical work that could not be completed online. One university established a new 'term' to allow students to catch-up after disrupted starts to the year.

Universities also developed policies for teaching and learning under COVID-19 conditions. In some cases these were in the form of temporary guidelines.

Good practice finding: Universities were explicit in making and recording changes to academic policies and regulations.

Changes to decision-making processes included use of emergency and executive powers to make decisions that would normally have been an academic committee responsibility. This use of executive power was balanced by input from the cross-functional teams leading the response. Universities also delegated decisions for changes to process to faculties as they were better placed to understand the needs of students and staff and some changes were made outside of universities' Course Management Systems. Some universities provided principles and/or criteria to support decision-making.

3.2 Development of principles and guidance for online teaching and learning

In addition to policies and changes to academic quality processes, universities developed principles and guidance statements to support the transition to online teaching and learning. Principles and guidance addressed:

- overall guides to teaching and learning online
- user guide for preparing for online learning
- differences between emergency remote and planned online teaching and learning
- being explicit about taking a student-centred approach
- recognising the challenges that online learning presented for students
- focussing on removing barriers to academic success
- 'minimum standards' and rubrics to support consistency between courses/papers in the online learning experience for students
- student workload
- redesign and redevelopment of assessment and guidance for running tests and exams.

Some universities made reference to guides and advice being shared between universities.

3.3 Support for online teaching and learning

Support for online teaching and learning was provided through technology platforms and, more importantly, by academic staff development and learning support teams.

All universities have learning management systems (LMS). LMS are a mature technology and together with video-conferencing options provided the base platforms for online teaching and learning. IT teams played a significant role in ensuring that teaching and learning activities could be undertaken online and increased the capacity of LMS. Universities used a range of other technology solutions including:

- lecture capture tools – Panopto, Echo 360
- video-conferencing – Zoom, Facebook Live, Microsoft Teams
- remote examination tools
- remote academic integrity (Proctoring) tools
- virtual lab and field trip tools
- higher performing VPN connections,

Universities are now reviewing these additional tools to assess whether they should be integrated into the LMS in the future. Associated with this, universities are also considering future needs of LMS and what next generation LMS and digital learning environments will entail.

Good practice finding: Universities are considering future needs for LMS and digital learning environments.

There are of course differences in using an LMS for face-to-face teaching and using it for online teaching and learning and support. Universities recognised that both staff and students needed additional guidance and support for teaching and learning in an online environment.

As discussed above, universities provided a series of guides and advice for staff (and also students) about online teaching and learning. Academic staff development and learning support teams played a major role in the development and implementation of online learning and teaching. Universities also acknowledged peer support, including support and advice from peers who had experienced the transition to greater use of online learning and teaching following the Canterbury earthquakes ten years previously.

Support for online teaching and learning included:

- creation of one-stop shops of advice and guidance on LMS platforms
- proactive review of all LMS materials and advice on their suitability or adaptation for online teaching and learning
- an LMS 'design shell' to sit alongside course/paper pages and support the transition
- development of a special version of an online and blended learning course in a PG Cert Tertiary Teaching and Learning
- rapid response zoom workshops on key topics
- training materials for specific tools including Zoom and Panopto
- webinars (sometimes daily) on aspects of online teaching and learning
- Eleventimes - 11-minute Zoom introductions to key teaching technologies, both live audience and recorded
- online drop-in sessions and 'ask me anything' sessions
- other virtual support
- development of cross-disciplinary peer support teams
- student e-tutors who assisted teaching staff with technology use.

Good practice finding: academic staff development and learning support teams were well prepared in advance for a transition to online teaching and learning.

Good practice finding: Universities were able to mobilise pedagogical expertise to guide and support transitions to online teaching and learning.

Good practice finding: Support was available in asynchronous, live and on-demand modes.

Universities acknowledged the high levels of support provided by academic staff development and learning and teaching teams. The contribution of academic staff development and learning support teams was also acknowledged externally with some universities noting external awards that had been received.

Library teams also supported the transition to online teaching and learning through providing access to more digital materials and making these available through the LMS.

IT teams also supported the transition to online learning and teaching and remote working by:

- distributing hardware including laptops, webcams and headsets
- enabling staff to take equipment home
- upgrading VPN and Zoom licences
- scaling up IT infrastructure, including second instances of LMS to help manage assessment load
- installing and integrating new tools, for example lecture capture tools
- new systems to manage volume increases in requests for support.

Most of the comment in university reports was focussed on internal sources of support. However, some universities referred to external sources including ATEM's COVID-19 Institutional Policy Virtual Network⁴.

3.4 Assessment

Assessment was one of the major issues that required considerable attention in universities' transition to online teaching and learning. As indicated above, universities developed policies, principles and guidance and drew on the expertise of academic staff developers and teaching and learning teams. These policies and expertise were also applied to assessment, particularly summative and final assessment tasks.

Universities replaced face-to-face, invigilated exams with other forms of assessment. However, principles for assessment continued to apply and were supplemented by additional guidance. The changes reported by universities include:

- reducing the amount of assessment
- replacing exams with alternative authentic assessment tasks
- redesigning assessment to take advantage of online functionality
- extension of existing pilot projects using examination software
- planned moves away from final examinations
- but also, use of both invigilated and non-invigilated online examinations and tests.

University reports demonstrate that changes to assessment were pedagogically-led and there appears to have been a great deal of discussion about authentic assessment. Assessment is one area where innovation prompted by the response to the pandemic is likely to change future practice where universities have found that the changed assessment environment produced better experiences and outcomes than previous assessment tasks.

Universities made more use of open-book assessment tasks and assessment tasks designed to be undertaken online, for example, flexibly timed problem-solving questionnaires, and also oral assessments. Existing pilot projects using examination software were extended to other courses/papers. In some cases assessments were redesigned to work on lower-power student laptops. The availability of technical support for both staff and students in online assessment, particularly time-limited assessment, was also noted by universities.

With some courses/papers still using final examinations, universities used both invigilated and non-invigilated final exams. For universities that did retain invigilated examinations, a range of methodologies were used. These included invigilation or 'remote proctoring' packages and invigilation via zoom. Feedback on the use of remote proctoring in particular was mixed and some universities have deferred further roll-out until issues and concerns can be addressed.

Other aspects of assessment are discussed below but assessment is an area that would benefit from more detailed analysis. Some universities have started this analysis and have reported that both staff and students report a preference for moving to forms of assessment other than exams and would like to see this shift continue.

3.4.1 Attainment of graduate attributes

Assessment redevelopment and redesign considered how attainment of graduate attributes would be achieved. Principles for redesign addressed both students who were studying remotely in New Zealand and those studying offshore.

Universities that already had online or blended learning in place had a clearer sense that graduate attributes could be attained through online learning.

The initial assessment seems to be that shifts in assessment will have had little impact on attainment of graduate attributes. Universities that explicitly assess the attainment of graduate attributes in graduate feedback and employer surveys will be well placed to examine this matter further.

⁴ <https://www.atem.org.au/events/event/covid-19-institutional-policy-virtual-network>

3.4.2 Practicum and practical-based learning

Ensuring the attainment of graduate attributes was more difficult for practicum and practical-based learning and teaching activities. Universities worked with professional accreditation bodies to ensure their requirements could also be managed. Professional bodies also made changes including extension of registration or accreditation periods, flexibility in meeting practicum requirements and changes to how accreditation visits were undertaken. These changes were consistent with international changes, particularly flexibility in practicum requirements and planning for additional mentoring and support for new graduates⁵.

Practicum and practical-based learning encompasses a range of teaching and learning contexts including clinical and professional work placements, work-integrated learning, industry placements and practical work requirements, field trips and tours, laboratory teaching and other forms of experiential learning and teaching.

Students working in essential services for practicum requirements or placements were able to continue with additional health and safety measures appropriate for their employment.

Universities utilised a range of approaches to address the particular issues of transitioning experiential learning to an online environment. Approaches included:

- use of virtual laboratories and virtual field trips
- use of existing (rather than live) work-integrated-learning projects
- new experiential learning activities such as ‘hack-a-thons’ and think-tanks
- placing more emphasis on preparation components.

However, there were some courses/papers with practical or experiential components that were not able to be transitioned to online learning and teaching. Some courses had to be suspended and grades recorded as ‘Still to complete’.

3.4.3 Academic integrity

Online assessment is not inherently more prone to failures of academic integrity than other forms of assessment.⁶ Universities provided additional academic integrity advice and guidance for online teaching and learning. This included check lists, academic honesty declarations and advice on assessment design to reduce cheating. Use of *Turnitin* was encouraged.

Universities reported mixed views on whether more breaches of academic integrity had occurred. Most reported an increase in concerns and incidents to be investigated. Use of contract cheating sites was also detected but universities lack benchmark data to know whether this was an increase. Universities also commented that with lower use of exams that academic integrity concerns may not have been reported.

3.4.4 Grade considerations and adjustments

Universities were conscious that the transition to online and remote teaching and learning would have impacted students’ academic performance. Greater flexibility around submission dates for assessments was provided and the evidence requirements for aegrotat applications were relaxed. In some cases new forms and more straightforward processes for applying for special consideration or impaired performance were developed.

Universities undertook reviews of grades. Most universities addressed differences in academic performance compared with previous years at course and individual student levels and made adjustments if they considered it necessary and fair. Some universities took a global approach to recognising impact and increased course grades by one grade (5 marks).

Other grade considerations included not including F grades in GPA calculations and giving students the option of recording special grades of ‘Pass During Disruption’ or ‘No Recommendation During Disruption’.

⁵ <https://www.aqa.ac.nz/sites/all/files/September%20Newsletter%202020.pdf>

⁶ <https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/encouraging-academic-integrity-remote-online-and-person>

Universities that reported year-on-year comparisons of pass rates and grades noted that pass rates and GPAs had increased slightly on previous years.

Good practice finding:	Universities were conscious of the impact on academic achievement and took steps to mitigate this.
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3.5 Student learning advice and support

Universities were conscious that online learning would be new for many students. Information and advice was also provided on student websites. In preparation for online teaching and learning, universities assessed students' preparedness to study remotely and transitioned support services to also operate online. Some universities ran specific engagement events to both help prepare students and assess needs. New services were also developed or made available. Some universities drew attention to support for specific groups of students – Māori students, Pacific students, students with disabilities, offshore students, postgraduate research students, residential students, and school students.

3.5.1 Understanding student (learning and living) environments

As noted above, universities surveyed students throughout the year. Student surveys earlier in the year asked students about their access to technology (see below). Technology availability was a focus, but universities also gained information about other aspects of students' learning environments and other hardships and challenges that students were facing and support that would be needed. Universities undertook specific calling campaigns to contact students and understand their situations and provide advice and support. This included recognition that students would be in vulnerable situations and may be affected by domestic violence or abuse caused or exacerbated by COVID-19 lockdown or other responsibilities that made it difficult for them to continue studying. Vulnerable students and those at high-risk of withdrawing from study were supported through case management approaches that enabled a more integrated approach to be taken. Some universities updated "guidance documents for staff on "Supporting students in distress".

Good practice finding:	Universities took a student-centred approach to student support.
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Good practice finding:	Universities adopted proactive identification and integrated case management for vulnerable and high-risk students.
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Student engagement and support initiatives were later informed by analytics (Section 3.5.6) but continued throughout the year.

3.5.2 Access to technology

All universities and the government recognised that some students did not have access to the technology required to continue learning online. Universities rapidly developed digital equity initiatives to make laptops, webcams, headsets and internet connections available to students. These initiatives were then supported by the *Technology Access Fund for Learners* administered by the *Tertiary Education Commission*.

Universities also loaned specialist computers to students and made specialist software available remotely.

3.5.3 Financial hardship

Some students experienced financial hardship during the pandemic and especially during COVID Alert Levels 4 and 3. Universities established and extended student hardship funds. University staff and alumni contributed to these funds. New funds and tools to manage hardship funding were developed. As the pandemic and its wide ranging impacts including availability of employment for students and their whānau are not yet over, higher levels of student hardship are likely to persist.

Other ways in which universities sought to relieve financial hardship included changes to conditions for withdrawals and refunds and suspending debtor management. Some universities did not charge for university managed student accommodation. However, practice was mixed with respect to this last point.

3.5.4 Online support services

In addition to transitioning teaching and learning activities to online, universities transitioned learning support services to online (and phone) delivery. These services included:

- changed models of academic support
- office hours via zoom
- development of student learning videos and accompanying resources
- online repositories of information on studying during COVID-19
- Peer assisted student support (PASS), mentors and peer writers
- Tuakana mentoring
- pre-reading services
- increase in online library services that can be accessed through the LMS
- library workshops and individual consultations
- library click and collect services and postal services
- careers and employment advice
- research skills workshops.

Universities reported increased demand for support services and recognised that these services were stretched. Student contact centres played significant roles in information provision and referrals to appropriate services. Universities also extended the hours that support services were available. Some universities engaged third party tutoring support services that could operate over 24-hour time periods.

Some universities were already in the process of digitising access to support services and had developed tools for off-campus students that could be extended to all students.

3.5.5 Wellbeing

Health and wellbeing services also transitioned to being available online. Health and counselling services operated as essential services during lockdowns and provided phone and video consultations. Some universities introduced new secure video consultation technology for GP and counselling appointments. Universities are considering whether the transition to ‘telehealth’ services offers a more sustainable model for future service provision, especially when students are not all on a single campus.

Students worked with universities to develop wellbeing and support messages for students by students.

Recreation services developed at home fitness programmes. Other wellbeing services included sleep advice.

3.5.6 Analytics

Some universities were in pilot or early roll-out stages of major analytics projects and these projects were extended across the university to help identify students who were struggling or not engaging. These initiatives supported universities being more proactive in contacting students and providing support.

Good practice finding: universities were proactive in contacting students to understand their access to technology for learning and in identifying need for further contact and engagement using analytics.

3.5.7 Priority student groups

Universities were conscious of learning and support needs for particular groups of students.

Māori offices and Pacific offices took lead roles in co-ordinating and providing support for Māori students and for Pacific students and worked with individual students. Access to technology, support for technology and welfare checks were highlighted in university responses. Mentoring schemes also transitioned to operating online.

International students unable to travel to New Zealand to either begin or continue study have been a particular focus for universities. As noted above, universities’ responses to the COVID-19 pandemic were initially focussed on international students, but then shifted orientation to include all students as the COVID-19 Alert levels systems came into effect. Universities with teaching and learning activities in China were able to learn from Chinese experiences. Universities faced challenges in making the online teaching and support services available to students in New Zealand available to students in China. To overcome firewall issues universities established relationships with Chinese VPN service providers and with providers in Hong Kong to

move course content closer to students in China. Universities also worked with China partner universities to establish learning centres in China. Learning centres provided alternatives to solely studying online and support was available from local learning facilitators. Universities also supported students directly by:

- contacting students in China through WeChat and establishing WeChat groups
- translating academic support materials
- establishing 'language buddy' systems
- changing office hours and some delivery to be more accessible to overseas students
- providing pastoral support via zoom, email and phone
- engaging with international students' associations to gain feedback and seek input into service design.

Gaining Chinese approval for recognition of online delivery was also an important component of supporting students.

Universities also worked with students with disabilities and disabilities services coordinators worked with academic staff to continue to provide inclusive learning and teaching. For some students with disabilities, the increase in online materials provided the improved access that they had been seeking.

Postgraduate research (PGR) students are another group particularly impacted by the inability to access laboratories or other research equipment. PGR students were encouraged to contact their supervisors and universities provided targeted hardship, fees waivers and extensions for research students.

Two further groups that universities paid differential attention to were students who remained in university accommodation throughout COVID-19 Alert Levels 4 and 3 and senior school students. A number of students remained in university accommodation and were supported by accommodation and residential services. Universities also worked with schools to communicate changes to entry requirements and in some cases broaden entry requirements to place more emphasis on Level 12 results. This also allowed offers to be made earlier.

4 Key success factors and challenges

Success in responding to the COVID-19 pandemic and transitioning to online learning was a multi-faceted construct for universities. Some gauged success in terms of how well prepared they were for a pandemic, some in terms of student satisfaction and others by being able to provide *"a good, equitable, clearly understood and safe student learning environment, despite external challenges imposed by COVID-19. It was also critical to provide an environment where staff felt supported and enabled to continue to teach and assess effectively and maintain quality offerings"*. Universities differentiated between stages of the response with success initially assessed by *"being able to actually begin the semester"*, at the end of the semester success was *"the move from all face-to-face exams to a very limited number of online proctored exams"*, and at the end of the year success was universities retaining students and students *"succeeding in their chosen study path"*.

4.1 Factors contributing to success

Many factors contributed to universities being able to transition to online teaching and learning. They can be broadly grouped as in Table 3. The ordering of these factors is not intended to imply that any are more important than others. They are all important and mutually reinforcing. However, it could be considered that institutional preparedness and other institutional factors, people, technology and response management underpin academic factors, and all are informed and monitored by data. Each of these factors have been discussed above and are only briefly repeated here.

TABLE 3 BROAD GROUPING OF SUCCESS FACTORS

Institutional preparedness and institutional factors	People	Technology	Response management	Academic	Data
Emergency response and business continuity plans	Staff commitment, expertise and flexibility	LMS	Decision making	Accommodation in academic quality policies and practices	Surveys
Strategic alignment	Culture and collegiality	Additional technology and systems – lecture capture, exams, video conferencing	Early decision making	Range and accessibility of learning resources.	Analytics
Institutional history and experience	Collaborative leadership models	Provision of technology	Cross-functional teams and having the right people (including students) in teams	Student contribution to learning and assessment design	
	Leadership	Technology planning including early adoption of zoom and cloud hosting	Teaching pause	Pedagogical developments and improvements	
	Students	Central purchasing of hardware	Student-centricity	Professional learning	
			Comms and information provision		
			Confidence in university ways of working		

Institutional plans for emergency management and business continuity contributed to universities being able to transition to online teaching and learning as did institutional history. For a number of universities, the responses required to transition to online teaching and learning (for remote, emergency teaching and planned online teaching and learning) were in line with other strategic developments already underway. These initiatives included:

- increasing online, flexible and blended teaching and learning, including being able to make specialist software available for remote use and lecture capture and recording
- student outreach and targeted support initiatives
- use of analytics to support outreach and student engagement with learning and teaching
- rethinking assessment, including the use of digital exams
- online provision of support services
- examining academic quality implications of online teaching and learning.

Good practice finding: Universities are proactively developing their teaching, learning and assessment models.

Universities with history and expertise in distance delivery and online learning and universities where staff and students were familiar with lecture recording, loss of teaching space and need to provide teaching continuity also considered that this contributed to their successful transition to online teaching and learning.

All universities mentioned ‘people’ as a factor that contributed to success. Universities commented on organisational culture, collegiality, staff commitment, expertise and flexibility. Working in cross-functional teams and having the ‘right’ people in teams including students and subject experts also contributed.

Universities were able to draw on expertise in online teaching and learning and make this expertise available across the university. Some could also draw on staff experience with previous loss of teaching spaces and the need to provide continuity of teaching and learning. Students contributed as members of response teams, in developing new assessments and online teaching and learning activities and in developing and delivering communications.

Technology, both in the form of existing LMS and in the addition of other technology tools was a factor that contributed to success. Universities also mentioned technology planning and being able to respond to hardware needs.

All universities considered that how they had managed their response was a factor that has contributed to success. Having cross-functional teams and the 'right' people including students and subject experts was a contributor, as were being able to make fast decisions and have clear communications. Universities had confidence in university ways of working and decision-making and oversight processes.

Academic factors also contributed to success. These included developments and improvements in pedagogy for online teaching and learning and being able to make adjustments and accommodations to reflect the pressure that students and staff faced.

4.2 Challenges

Despite being able to transition to online teaching and learning and maintain continuity of teaching and learning, universities inevitably encountered a number of challenges. There were challenges associated with both the pandemic itself and the response which was the transition to online teaching and learning. There were also some university-specific challenges. Although these sets of challenges have been identified, they are of course inter-related.

Challenges associated with the pandemic itself included:

- the changing national situation and uncertainty as to whether future lockdowns would occur
- being able to access information from government agencies about student status – onshore or offshore
- financial impacts on universities with both revenue loss and increase in demand for services
- high workloads and stress for staff
- student engagement and difficulties for first year students in particular in feeling part of a university community, as well as students for whom whānau/family contexts meant that they felt they had little choice but to disengage
- mental health and well-being for staff and students, including international students who have been unable to return home
- balancing communications to provide the relevance and detail needed without overwhelming people; also having consistent messages across large institutions with significant (and important) internal differences.

More university specific challenges included:

- the need to manage multiple campuses and particularly campuses operating at differing COVID-19 Alert Levels
- attempting to initiate another large scale change to the teaching and learning model for the university (in addition to transitioning to online).

There were also challenges with the response to the pandemic – the transition to online teaching and learning. They included:

- questions of teaching philosophy and recognition that online teaching and learning did not always align with existing academic values and practices
- determining online tools and pedagogies
- online assessment design, security and integrity

- building staff capability in online teaching and learning and identifying and providing support
- staff access to digital equipment with adequate specifications
- managing students in different time zones placed workload demands on academic staff
- student expectations, preferences and preparedness for online teaching and learning, and recognising that face-to-face remains a preference for some students. Even if some teaching is online, some students still need access to physical facilities such as libraries to be able to study
- recognition of digital inequity and digital poverty among students. This impacts on students being able to engage successfully in online teaching and learning and access support services
- practical and experiential courses/papers that could not be transitioned to online learning and teaching.

All of these challenges are important to be aware of and to address. However, the challenges associated with the transition to online teaching and learning are particularly pertinent as online teaching and learning is likely to play a greater role in universities in the future.

5 Lessons for the future

The experience of the transition to online learning and teaching and support can be used to develop a series of lessons for the future. Universities have learnt how well emergency management and business continuity plans enabled them to transition to online delivery. They have also learnt a great deal about online teaching and learning and support. In some cases, the options developed during the pandemic are seen as better than the previous options and will be retained. This section examines lessons with respect to:

- preparation for future ‘shocks’ and sudden risks to academic continuity
- future development of teaching and learning and support for students and staff
- management of academic quality in rapidly changing and novel disruptive contexts.

5.1 Preparation for future shocks and risks to academic continuity

Managing risk to the disruption of quality and continuity of teaching and learning will be assessed as part of the Cycle 6 Academic Audit of universities.⁷ This section of the *Good Practice Assessment* will assist universities in providing evidence with respect to this guideline statement.

Universities identified a number of factors that would help them prepare for future risks to academic continuity including:

- ensuring departments have plans that set out how teaching and learning and assessment/exams will continue, technology required and how student contact will be maintained
- readiness to work from home registers for staff and improved connectivity for working from home
- identifying students’ technology requirements
- ensuring that all students and staff are prepared to study and work remotely
- further attention to communications.

Some universities indicated that for some issues that affect all students some co-ordination across the sector could have been useful.

Recommendation: universities should consider if they know the timeframes that will be required to transition to online learning in future.

Recommendation: Universities should consider whether students and staff have emergency response advice that can be provided in advance in the event that internet is not available (civil defence information, where to look for University information).

⁷ GS 5. Academic risk management: Potential disruption to the quality and continuity of teaching and learning at the university, including risks to infrastructure, is mitigated through effective risk management processes.

5.2 Development of teaching and learning and support for students and staff

The response to the COVID-19 pandemic by transitioning to online teaching and learning has provided impetus for moves to greater use of online delivery. Universities have distinguished between emergency remote teaching and learning and strategic, planned, online teaching and learning. However, a number of the shifts and steps taken for the emergency response will inform future developments including:

- assessment design – universities needed to focus on assessment of course learning outcomes
- the use of final examinations and attention to authentic internal assessment
- more attention being paid to academic integrity.

Student feedback indicates support for some aspects of online learning being retained, particularly aspects that provide greater flexibility and accessibility. Universities will provide more information about how courses/papers will be delivered so that students can be better informed in making course/paper choices.

Although online teaching and learning may provide greater flexibility, it can also present challenges in motivation and time management for students. Social and relational (Felton and Lambert, 2020) aspects of teaching and learning are still important. Universities are also more aware of digital inequality and the need to address this strategically in both teaching and learning activities and support activities. Some universities found it more difficult to identify students in need of support and greater attention may need to be paid to understanding students' learning environments and identifying students who need assistance. Greater use of analytics should assist here.

Staff will also require support to undertake more teaching online. Academic Staff developers undertook a great deal of work to support the emergency transition. Universities are now planning how to support staff undertaking teaching and learning activities online in a sustainable way. Some universities are considering reorganising staff development activities to ensure that there is a common baseline of good teaching practice and tools across the university.

The transition to online teaching and learning in response to the COVID-19 pandemic largely used stable and familiar technology platforms – learning management systems. Universities are considering the development of these systems and beginning to scope next generation digital learning systems.

Universities did not indicate that transnational education was part of their thinking about future developments in teaching and learning. However, the combination of greater online capacity and capability and financial pressures may also give greater impetus to transnational education. Increasing online teaching and learning is not the only strategic imperative that universities will be responding to in terms of their teaching and learning developments. Better meeting the educational needs of Māori students and Pacific students will continue to be a driver for universities in Aotearoa New Zealand.

5.3 Management of academic quality

Along with other aspects of teaching and learning, quality assurance activities also transitioned to being undertaken online. Universities used Zoom and other technologies to enable overseas contribution to academic programme reviews and graduating year reviews were also conducted remotely. It should be noted however that some of these activities were deferred.

Although changes were made to some academic quality processes as part of universities' transition to online teaching and learning, appropriate oversight was retained for these decisions. Universities have indicated that accommodations and changes will be reviewed. Universities have also indicated that attention will be paid to the academic quality components of online teaching and learning to ensure the quality equivalence of online teaching and learning. The Cycle 6 academic audit framework will also ask universities to provide evidence that guideline statements are being met for all forms of delivery, including online teaching and learning.

6 Conclusion

The report reflects the collective and collaborative approach that universities took to respond to the pandemic and transition to online learning and teaching and support activities. All universities have contributed to this report and have reflected on their experiences to prepare both for future emergencies and for the future development of learning and teaching in universities in Aotearoa New Zealand.

Universities started and engaged with changes to provide teaching continuity in response to the COVID-19 pandemic from different bases and different initiation points. Some had long-established distance learning experience, others considered that online learning was already an established component of the overall learning experience and recognised that for NZ domestic students they had experience of online learning and assessment in schools. Others, as a consequence of the experience of earthquakes in particular, had experience of moving from face-to-face campus-based teaching and learning to online and flexible and blended models to adapt to rapidly changing circumstances.

The response to the COVID-19 pandemic by universities in Aotearoa New Zealand drew on existing policies and leveraged off active strategic initiatives to shift towards more flexible teaching and learning and support activities and to rethink assessment. However, the response gave impetus to existing moves towards online teaching and learning and triggered greater thinking about how support services could be delivered online. It is likely to inform universities' thinking about next generation digital learning environments.

Online teaching and learning is not new and there are well-established bodies of research and good practice that universities were able to draw on. Universities also have people with considerable expertise that were able to provide guidance and assistance. However, this should not ignore the fact that most academics will not have been online teaching specialists, not will many have had much experience in teaching online. Nor should it ignore the massive effort from staff all across the university sector to transition to online teaching and learning. Further, while online teaching and learning is not new and, the transition to online happened rapidly and in circumstances where students and staff also needed to manage multiple domestic and wellbeing challenges at the same time. If online, or flexible or blended, teaching and learning is to be sustainable in the future in terms of the demands that it has placed on staff, attention will need to be paid to how staff are supported.

The COVID-19 pandemic highlighted inequities among students. Again, these inequities were not unknown and universities have many programmes and initiatives that seek to address inequity and the effects of multiple deprivations. However, the pandemic exacerbated inequity and deprivation and although much of the commentary was on digital inequity, this reflected inequities in students' home study environments. Universities adopted student-centric approaches to understanding study environments and learning support needs. Whether this will become a more enduring model for support for student learning is not yet clear. Other aspects such as the greater use of analytics seem likely to continue. One of the advantages of seeking to understand student learning environments was that it helped identify issues before they were manifest in analytics. However, the two approaches are complementary and both reflect greater student-centricity.

Many of the topics identified in this summary report would benefit from further analysis and consideration in both national and international contexts and from other perspectives. Academic staff and other groups are undertaking research from a range of disciplinary and other perspectives. There is an opportunity to share the assessments made in this report and make information available to contribute to further work.

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