CURRICULUM FRAMEWORK TRANSFORMATION TASKFORCE

LEARNING AND TEACHING DELIVERY FRAMEWORK SUPPORTING PAPER

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The views contained in this document are 'point-in-time' views of the Specialist Working Group and do not necessarily represent the views of Waipapa Taumata Rau | University of Auckland

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1 Introduction

This summary document outlines the concepts and recommendations developed from the Learning and Teaching Delivery Framework (LTDF) Working Group as part of the Curriculum Framework Transformation (CFT) Taskforce. The working group was established to develop a vision for learning and teaching, and a suite of corresponding recommendations consistent with the strategic vision of *Taumata Teitei* and the CFT. Specifically, the working group was tasked to provide a framework for Learning and Teaching that would deliver upon the aspirations of Education and Student Experience of Taumata Teitei, identify areas of learning and teaching change, and make practice and policy recommendations to support these. The full original document exists as a 'moment in time 'working document.

2 Learning and Teaching in Taumata Teitei

The aspirations in *Taumata Teitei* call for a university education that develops students 'connection to each other, their place in Aotearoa New Zealand, the Pacific and the world, and whose actions have social and ecological consequences'. Students at Waipapa Taumata Rau | University of Auckland will have access to an equitable, imaginative, and collaborative education through the provision of researched-informed programmes and courses.

Waipapa Taumata Rau | University of Auckland aims to provide students with an enriching and holistic education that readies them to engage critically with both enduring and contemporary complexities and challenges. Concepts drawn from Te Ao Maori offer vital resources in orienting the campuses in becoming a home for developing new ideas and engaging with the challenges of this moment in history, while recognising the importance of and commitment to place. Place is also important when acknowledging Te Ao Maori in relation to Moana Nui-a-Kiwa and the people of the Pacific. The values of Waipapa Taumata Rau | University of Auckland need to be made visible and, in exercising kaitiakitanga, the University needs to demonstrate its commitment actively and visibly to sustainability¹, defined as "Leading transition to sustainable and abundant ecosystems". Whanaungatanga finds expression in welcoming students from different cultures and worldviews and providing safe and easy-to-find places to dwell². The strategic move in *Taumata Teitei* towards increased student-centric learning, collaborative practice, student care and wellbeing, and work- / community-based learning points to a need for a commitment to fostering relational learning and teaching enhanced by technology and place. The call for improvements to the retention and progression of Maori and Pacific students means that a greater emphasis on embedding Kaupapa Māori and Pacific pedagogies in learning and teaching is key.

Our aim is to transform learning and teaching into an experience that reflects the values expressed in *Taumata Teitei*. Our framework is underpinned by our commitment to Te Tiriti o Waitangi and Mātauranga Māori principles, and to the values and Te Ao Māori principles detailed in *Taumata Teitei*.

¹ In alignment with the Sustainability CFT Working Group, we support sustainability being evident across the campus, which could be a space which embeds best practice in Sustainable Design where-ever possible.

 $^{^2}$ Concrete examples of how the University can support spaces to dwell include fostering cultural safety by allowing students to prepare food according to cultural customs on campus. This is a meaningful way of reflecting the value of cultural diversity. This will require some changes to the physical environment to accommodate this.

3 Methodology

The LTDF working group is part of the CFT Programme and includes the following members:

- Co-Leads Julia Novak (Ranga Auaho Ako [RAA]), David Lines (CAI), and Rob Batty (Law);
- Patrick Girard, Lisa Uperesa and Deborah Walker-Morrison (Arts);
- Doug Carrie and Mark McConnell (B&E); Alys Longley (CAI);
- Lawrence May, Claudia Rozas Gomez and Gail Ledger (EDSW);
- Cameron Walker (Engineering), Rachelle Singleton and Liam Anderson (FMHS);
- Oriel Kelly (Law); Jeroen Schillewaert, Kaitlin Beare and Murray Ford (Science);
- Chris Moselen (Libraries and Learning Services);
- Steve Leichtweis (RAA); Rennie Atfield-Douglas (South Auckland Campus); and
- Sahan Jayatissa (PGSA); and Alan Shaker (AUSA).

The main focus of the LTDF working group was to address the 'where, when and how' aspects of the CFT. These were the subject of the main focus of working group meetings and were also considered in partnership with the Pūtoi Ako working group. Specifically, the group sought to explore the following dimensions: delivery mode (face-to-face; online; remote; blended); relationality as a 'distinctive pedagogy,' drawn from physical presences and place, technology-enhanced learning, and assessment.

The working group began with an examination of international learning and teaching frameworks, and definitions of learning and teaching concepts and practices in higher education. A list of important learning and teaching categories and definitions were formed as a result, and a working Learning and Teaching Delivery model was constructed. Faculty representatives shared learning and teaching insights from their faculty SWOT analyses undertaken as part of the wider CFT. The group also examined *Taumata Teitei* to look for key guidelines for change and recent key supporting initiatives such as the Flexible Learning Project and <u>TeachWell</u>. These were discussed at length alongside contemporary issues and concerns, such as the need to redress campus participation and attendance following the COVID-19 disruptions of the past 18 months.

The working group then prioritised key areas of change that were thought to be most important in terms of supporting curriculum transformation directed by the wider taskforce to meet the needs of *Taumata Teitei* and the future direction of Waipapa Taumata Rau | University of Auckland. These recommendations were shared with the CFT Sponsors, PDDC steering committee, Senior Management Planning Day and the wider CFT group. Emerging recommendations were shared with students as part of a CFT workshop in November 2021, and most recently at an Auckland University Student Association (AUSA) Student Council meeting (April 2022). A seminar was held for staff in April 2022. The Learning and Teaching Delivery section of the CFT webpages has been kept updated with relevant information. Staff and student consultations will continue in 2022. Finally, the group examined the area of assessment at the University within the context of the emerging recommendations and recent pressing issues around equity.

4 Main Themes

4.1 Delivery Method and Mode

The main mode of synchronous in-person teaching at the University occurs via lectures. Many 15point courses are timetabled with between 2 and 4 hours of lectures per week for the Semester. The nature of the learning activity in a lecture varies. At one end of the spectrum, often characterised as a "sage on the stage" model, a teacher conveys information to the class from the front, sometimes supplemented by Power Point. Some of what occurs in such lectures could be described as instructional teaching. There are occasions when synchronous in-person lecture-based instructional teaching is appropriate, for example when:

- Relating course content to students' personal experiences (Clark & Rossiter, 2006)
- Providing context and structure for a subject (French & Kennedy, 2017)
- Building sustained argument and narrative (French & Kennedy, 2017)
- Providing opportunities to present up-to-date research and model behaviour (French & Kennedy, 2017)

At the other end of the spectrum, greater interactivity is present; for example, a teacher may provide opportunities to engage with the conceptual material prior to the lecture, thereby freeing up greater time and opportunity for more interactive learning (flipped mode). However, when the synchronous in-person delivery of pure instructional content occurs in timetabled large lecture theatres and is also recorded, this can be detrimental to active student engagement with learning, to students building relationships with staff, and establishing a community with other students. Considering this, and to make space and time for prioritising relational teaching practice, it will be important to reduce the delivery of instructional content by synchronous, in-person teaching where this is possible, appropriate and aligns with good practice. The reduction could be achieved through, for example, more blended delivery (explained in more detail Section 4.3).

To achieve this reduction, courses and programmes will need to clarify for students' which content will be delivered by what means, such as in-person synchronous teaching or asynchronous online teaching. Such clarity may be achieved by signalling in Digital Course Outlines (DCOs). However, it will also require the development of guidelines of what amounts to valuable in-person synchronous instructional teaching sessions.

In reducing the delivery of instructional content through synchronous, in-person teaching, we create more time and space for synchronous *relational* teaching that builds cohort and community via small group learning experiences. By nature, this is more engaging and, through well-designed, synchronous, instructor-facilitated learning activities for both small and larger groups, students will be encouraged onto campus. But it must be partially driven by the students and include, for example, small breaks for exercises/reflection, discussion with classmates and/or the lecturer, team-based learning interactions (Peters et al., 2020), questions, live polls, and question-and-answer sessions.

As mentioned above, one way to reduce the delivery of instructional content by synchronous, inperson teaching is to 'flip' the classroom; essentially a mode of instructional design and delivery whereby acquisition of information by the learner occurs largely outside the classroom through visually appealing, often interactive content that keeps students engaged and is presented in short segments (such as videos that are less than 10 minutes long). In accordance with principles derived from cognitive science, factual content is presented in study assignments that are not overwhelmingly long, and the content is interspersed with questions or problems to ensure that students can assess their level of understanding (Schwartzstein & Roberts, 2017). In general, research concludes that students in flipped classrooms achieve significantly higher learning outcomes (which are assessed and measured by grades) than students in traditional classrooms, and, importantly, are equally satisfied with the learning environment (Van Alten et al., 2019). Van Alten et al.'s study quantitatively synthesised the results of 114 studies. Wagner et al. (2013) also suggest that students prefer a 30% flipped component.

However, recordings (simply reproductions of live lectures posted in Canvas for consumption by learners as a self-directed resource or add-on/supplement), as confirmed by Lyndsey and Evans (2021) and Kwiatkowsk and Demirbilek (2016), are neither innovative nor ground-breaking and their benefit for the learner remains controversial. While some authors report high demand and intensive utilisation of lecture recordings (Johnston et al., 2013; Gupta & Saks, 2013), others state that real lectures are better in experience and learning outcome (Cardall et al., 2008; Bacro et al., 2010). There is also evidence in mathematics education (and, presumably, in other disciplines) that some students do not use lecture recordings correctly, leading to diminished quality of learning (Lyndsey & Evans, 2021).

With the above points in mind, one suggestion is to re-purpose parts of the existing lecture to concentrate the content (e.g., with H5P-generated summary slides). The educational value of the lecture recording could also be significantly improved by this approach (Wehling et al., 2021). For example, video recordings can be made to be interactive (H5P interactive video) whereby information can be added to the videos (e.g., links or annotations) when the lecturer's message is unclear or needs to be more precise. The content can be enriched further through, for example, interactive multiple-choice questions, summary slides and opportunities to access further information and deeper insights.

4.2 Physical Presence and Place

We consider that relational learning can be enhanced by students valuing and feeling connected to place. That is, a connection to, and a presence on, Waipapa Taumata Rau | University of Auckland campuses, and to our place in Aotearoa New Zealand and Te Moana-nui-a-Kiwa. This will require our teaching space infrastructure, including timetabling, to facilitate a shift towards prioritising relational teaching; foster a sense of place and identity on the University's campuses; and create opportunities for building whanaungatanga through cohorts and co- and extra-curricular activities.

Even before the effects of the COVID-19 pandemic, attendance at the University and at lectures has been declining over the past 20 years, sometimes to as low as 25% after the first few weeks of the Semester. A complex range of factors have, potentially, contributed to this attendance drop, and the lives of students are also arguably more complex than those of previous generations. More and more students have part-time work and other outside commitments. Auckland City has also recently grown considerably geographically, causing a lengthy and costly commute to attend University for some of our students. Additionally, there is anecdotal evidence to suggest that the University's Lecture Capture and Release Policy, which came into effect in Semester 2, 2019, along with a shift from only first-year lectures being recorded to the capture of all teaching in recording-enabled rooms may have had an impact on attendance.

Despite declining attendance, our students say that they enjoy coming onto campus; however, many cannot always do so. When students do come onto campus, they say they value active learning activities and opportunities for community, cohort, and relationship-based learning, not only in degree programmes but also through co- and extra-curricular opportunities. Moreover, *Taumata Teitei* itself underscores the importance of a campus-based experience: "[Our students] will learn from each other and participate in imaginative and innovative programmes designed by leading researchers in their disciplines and <u>engaging with their fellow students in campus-based experiences."</u>

The physical infrastructure, including classrooms and informal learning spaces, will continue to play an important role in the quality of educational experience envisioned. It therefore needs to adapt and be built to increase the value of students' connection with place and presence, and to support active learning activities and community- and cohort-building activities. There has already been significant investment at Waipapa Taumata Rau | University of Auckland in such infrastructure; for example, the new Science Building (Building 302), the CAI Design Programme Labs in the Engineering, and the School of Architecture and Planning (SoAP) buildings. Earlier in the year also saw the retrofit of the Exhibition Space on Level 3 of the SoAP building to allow for synchronous on-campus/remote delivery to students/teaching.

4.3 Technology-Enhanced Learning

Taumata Teitei calls for "accessible, equitable lifelong higher education opportunities". The imperative for accessible education opportunities recognises that students have changing demands, needs and preferences. Students have indicated that they want choice in how they access materials, and a voice in how learning occurs and in how their course and/or programme is assessed, to accommodate learning that best suits them and their lives. Increasing flexible learning options provides such choices and helps make learning more accessible and equitable. Students have also indicated they value clarity and consistency in what to expect in terms of how teaching will be delivered, how the learning materials that support their learning are provided, and with assessment procedures. Delivering equitable education opportunities involves understanding where our students are in their learning and circumstances and taking steps to meet their unique needs to help them realise success.

For the purposes of this document, the term 'technology-enhanced learning' (TEL) is used to describe the application of technology to teaching and learning activities, and signals the value that technology adds to learning in universities. TEL is an umbrella term covering all types of teaching and learning delivery, including blended, flexible, multimodal, online and face-to-face learning. TEL can foster rich on-campus experiences, as well opening new avenues for learning, and helps educate students for the present while empowering them for lifelong learning. Through TEL, all physical campus, digital, community or industry environments can, and should, become valid locations for learning and teaching.

In this context, TEL would extend Waipapa Taumata Rau | University of Auckland's identity as a campus-based institution to a rich campus-based culture which is explicitly connected via technology-mediated activity to the communities we serve. As an approach to learning and teaching, TEL endeavours to emphasise the deliberate use of learning technologies, enhances place-based teaching, and opens space for more deliberate decisions around blended and online learning, which speak to the model of delivery.

TEL and modes of learning and teaching delivery can combine to play a key role in providing more accessible, equitable and lifelong higher education opportunities for students at Waipapa Taumata Rau | University of Auckland. Blended learning describes a mode of learning and teaching delivery that seeks to integrate, in a significant and meaningful way, more than one technique for delivering instruction. For example, combining face-to-face and online learning. Online learning, broadly speaking, describes approaches to learning mediated by the Internet, often through a Learning Management System, where the learner is physically separate from an instructor and other learners.

Blended learning has the potential to provide flexibility in response to a range of needs at learning, teaching and institutional levels. For learners, this could mean choice in time, pace, place, content, learning style, assessment, collaboration, and support mechanisms. For teachers, this flexibility could

mitigate workload issues, facilitate access to external experts/contexts as part of learning and teaching, and address resource demands. For the institution, it could provide solutions for dealing with travel to a main campus in a congested city, for widening access to the student market and improving resilience to disruptions in teaching and learning (i.e., pandemic conditions).

Both blended and fully online learning provides avenues for flexible learning. Flexible learning describes situations where a learner has some choice in how, where and when learning takes place.

A TEL approach provides specific benefits that align closely with *Taumata Teitei*, including:

- extended access and choice through greater flexibility
- greater opportunities for part-time learners
- personalised learning, and understanding learner engagement
- further integration of teaching and learning into community/industry placement settings
- greater sustainability and potential to contribute to climate change concerns

4.4 Assessment

Assessment is a core academic activity and has a significant impact on what and how students learn and, ultimately, what they go on to achieve. As Boud (1995) argues, "assessment is the most significant prompt for learning". Its main purposes are to encourage student learning, to make judgements about student achievements, and to monitor the effectiveness of the learning environment. It is what students consider important and is at the heart of the student learning experience. It is important to acknowledge from the outset the varied disciplinary cultures and practices that exist regarding assessment (lannone & Simpson, 2017). There is a growing body of international research and practice, as academics, and institutions look to provide students with more authentic and meaningful learning experiences of assessment, while ensuring academic integrity (Ellis et al., 2020; Miles & Foggett, 2019; Skaik & Borg, 2018; Sotiriadou et al., 2019)³.

Gulikers, Bastiaens, and Kirschner, (2004) define authentic assessment as: "an assessment requiring students to use the same competencies, or combinations of knowledge, skills, and attitudes that they need to apply in the criterion situation in professional life" (p. 69). We might usefully extend Guliker et al.'s (2004) definition to include community and society more broadly. Authentic assessment therefore aims to integrate what happens in the classroom with work and professional practice, replicating the kinds of tasks and performance standards typically faced by professionals in the world of work (Wiggins, 1990). So, in a real sense, authentic assessment is about making visible (produce evidence of learning) and measurable (to some appropriate standard) a performance that is a valid (by this we mean relevant) indicator that the identified elements of the curriculum have been learned in an integrated manner for the conditions in which they are ultimately intended to be needed or used.

While the original working group did not consider assessment in significant depth, nor authentic assessment specifically, the central theme of relational learning carries with it certain implications for how we conceptualise assessment practice. Given the significance that assessment plays as a 'prompt

³Assessments that include the authenticity factor or the "impact" factor (defined as "task is visible beyond educational setting; involves participation, sharing, delivery or use in a real-world setting") have shown less cases of cheating behaviours (Ellis et al., 2020, p. 458). Skaik and Borg (2018) reported success from redesigning their group assignment to include self and peer assessment, authentic assessment design. Griffith University reported great success in improving academic integrity, employability and student learning through authentic interactive oral assessment with large business cohorts in both face-to-face and online settings (Sotiriadou et al., 2019).

for learning' we might fruitfully consider whether a more explicit move to authentic assessment might be more productive in meeting the aspirations set within the CFT. Additionally, we identified further themes that would be worthy of further exploration this year. While not exhaustive, these include the role of assessment and the extent to which current principles outlines in the University's new <u>Assessment (Coursework, Tests and Examinations) Policy</u> are reflected in current practice. The term 'assessment' generally describes the process whereby an educator makes a judgement about the extent to which a student's work meets a particular standard. Assessment plays several roles in tertiary education. Boud has described assessment as having as a "double duty" (Boud, 2000). First, assessment plays a role in certifying student achievement. This type of assessment is typically classed as summative assessment. Summative assessment summarises student achievement at a given time, often at the end of a course (William and Black, 1996) - an exam is one example. Second, assessment seeks to aid learning and equip students for future, lifelong learning. This type of assessment may be classed as formative assessment. Formative assessment is assessment designed to "stimulate further learning": it is assessment "in which information is gathered [by students, but also teachers] to contribute directly to the learning process" (Stobart, 2012).

5 'Relational Pedagogy' – A 'distinctive' approach to learning and teaching

Underpinning the proposed LTDF is the concept of relational learning, enhanced by technology, presence, and place. As the preferred student-centric education model, it is considered vital to achieving the aspirations of *Taumata Teitei*, which refers to students being "active participants" in an educational environment which "privileges human connections". We agree and affirm that learning is a human endeavour that is enhanced by relationships between learner and teacher. Learning does not occur in solitude and in isolation. Relational learning demands an education model that goes beyond the transmission of information. Relational learning requires students to take an active role in the learning process. Relational learning is also key to building communities of learning and enabling students to gain a sense of belonging and actively participate in their tertiary education at Waipapa Taumata Rau | University of Auckland. The notion of relationality has become an important conceptual touchstone in our thinking and corresponding recommendations.

We use the term relationality in its broadest sense to affirm a university education that turns students towards the world and towards ideas that may not be of immediate interest (Biesta, 2021). In this sense, education is an interruption to being solely with oneself (Aspelin, 2020). A student-centred education of this nature fosters a personal agency that is not primarily driven by personal interest, but by an engagement with ideas, problems, and civic duty. Our recommendations offer ways to maximise relationship building among students, between students and academics, and between students and the world.

The central idea of relational learning is that "learning occurs in relationships" (Konrad, 2010 and Aspelin, 2020). In the literature, relational learning or relational pedagogy is claimed to respond to a perceived binary between the independent role of teachers on the one hand (teacher-centred learning) and students on the other (student-centred learning) (see Aspelin, 2020).

Relational learning attempts to refocus attention on the relationship between a teacher and students as active participants in the learning experience. Significantly, relational learning can be conceptualised across a spectrum of practices. A core feature of such practices is that students and teachers enter into a dialogue about the learning experience and such practices often additionally emphasise interactivity, interaction, connection and care. Features of such practices also include:

- low Staff Student Ratios in teaching sessions

- students bring their 'whole self 'to the room
- learning which attends to the students 'affective and cognitive needs
- Active Learning Spaces (in-person and online)
- assessments that are open-ended, creative and collaborative where appropriate
- learning and assessment with guided and multimodal choice
- active participation in co- and extra-curricular activities to complement the overall learning experience

The concept of relational learning is not new. Indeed, it is integral to the philosophy of Āta. Āta has its origins in Mātauranga Māori and is a "basic principle intrinsic to Te Ao Māori" (Forsyth & Kung, 2007). Relational learning aligns with values of manaakitanga, whanaungatanga and kaitiakitanga. Pacific values also emphasise relational learning through for example:

- Faka'apa'apa (Tonga) enacting mindfulness, reciprocity and responsibility in duty and care for others.
- Vaerua (Cook Islands) embodiment of the spirit that fosters belonging and connection.
- Vā (Samoa) the physical, virtual, social and relational spaces of learning.

6 (Emerging) Recommendations

6.1 Policies and Guidelines

- 1. Reduce the delivery of instructional content by means of synchronous, in-person teaching, particularly in large lectures.
- 2. Ensure that the teaching of instructional content is always accompanied by a teaching activity that is more interactive and engaging and offers a relational or active learning experience for students, emphasising the importance of person-to-person activities.
- 3. Prioritise weekly timetabled blocks of teaching by course or student cohort to encourage natural cohort-building and on-campus days for students.
- 4. Encourage and develop staff understanding of Universal Design for Learning principles to ensure that we are pro-actively supporting students in their studies.

6.2 Delivery

- 5. Encourage and recognise co-teaching (this comes hand in hand with rationalisation of courses/programmes to ensure workloads are manageable).
- 6. Schedule optional learning and teaching activities for all courses; e.g., drop-in sessions, online discussions, tutorials held on another campus, or student-led activities.
- 7. Build in opportunities for student interaction in all teaching and learning activities.

6.3 Assessment

8. Build in opportunities for students to learn through assessment; e.g., through opportunities for formative assessment, feedback and resubmission of assessment, plussage etc.

- 9. Increase the use of collaborative work in assessment. Collaborative work can be applied in individual assessments or group work and involves students working together, and/or with communities, and others, rather than competing with others.
- 10. Encourage scaffolding in all assessments and increase the transparency of the assessment design process, including opportunities for meaningful feedback, co-design and student agency where appropriate.

6.4 Technology-Enhanced Learning

- 11. Make a pedagogical recommitment to Canvas and the TEL ecosystem to encourage innovation while getting the basics right, and providing equitable and accessible teaching:
 - a. Offer support for staff and students (tools and ongoing support related to using the digital environment) and training for staff (on the effective use of tools and academic development).
 - b. Communicate a clear vision for what learning and teaching look like at Waipapa Tuamata Rau | University of Auckland for students and staff. This will include inperson, blended and online environments..
 - c. Ensure a consistent experience for students as much as possible.

6.5 Long-Term Strategy – longer term commitments to enable the above

- 12. Empower and enable staff to meet the students where they are, adapting our learning and teaching delivery accordingly. This requires:
 - a. Raising the perceived importance of learning and teaching, including a Universitywide Learning and Teaching web presence, review of teaching workloads, and ensuring time and space for staff training.
 - b. Investing in a TEL Road Mapping exercise to provide a long-term plan for TEL and support for flexible eLearning at Waipapa Taumata Rau | University of Auckland.
 - c. Re-imaging and reconfiguring existing spaces to support and our long-term commitment to relationship learning and teaching by capturing opportunities for change in our digital and physical infrastructure.

7 References

Aspelin, J. (2020) Teaching as a way of bonding: a contribution to the relational theory of teaching. *Educational Philosophy and Theory*, 53(6), 588-596.

Bacro, T.R., Gebregziabher M., Fitzharris T.P. (2010) Evaluation of a lecture recording system in a medical curriculum. *Anatomical Sciences Education*, 3 (6) (2010), pp. 300-308

Biesta, G (2021) The three gifts of teaching: Towards a non-egological future for moral education, Journal of Moral Education, 50:1, 39-54, DOI: 10.1080/03057240.2020.1763279

Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, 22(2), 151–167.

Cardall S., Krupat E. & Ulrich M. (2008) Live lecture versus video-recorded lecture: are students voting with their feet? *Academic Medicine* 83(12),1174–8.

Clark, M. C., & Rossiter, M. (2006). "Now the Pieces Are in Place...": Learning through Personal Storytelling in the Adult Classroom. *New Horizons In Adult Education & Human Resource Development*, 20(3), 19-33.

Ellis, C., van Haeringen, K., Harper, R., ... Saddiqui S. (2020) Does authentic assessment assure academic integrity? Evidence from contract cheating data, *Higher Education Research & Development*, 39:3, 454-469, DOI: 10.1080/07294360.2019.1680956

Forsyth, H. & Kung, N. (2007) Āta: a philosophy for relational teaching. *New Zealand Journal of Educational Studies*, 42(1&2), 5-14.

French, S & Kennedy, G. (2017) Reassessing the value of university lectures. *Teaching in Higher Education*, 22(6), 639-654.

Gulikers, J.T.M., Bastiaens, T. J., and Kirschner, P (2004) The Five-Dimensional Framework for Authentic Assessment. *Educ Techology, Research & Development 52(3), 67-86*

Gupta A, & Saks NS. (2013) Exploring medical student decisions regarding attending live lectures and using recorded lectures. *Medical Teacher*, 35(9), 767-71.

Iannone, P & Simpson, A (2017) University students' perceptions of summative assessment: The role of
context, Journal of Further and Higher Education, 41(6) 785-801.DOI: 10.1080/0309877X.2016.1177172

Johnston, A.N.B, Massa H, & Burne, THJ, (2012) Digital lecture recording: a cautionary tale. *Nurse Educ Pract.13*(1),7-25.

Konrad, S. C., (2010) Relational learning in social work education: Transformative education for teaching a course on loss, grief and death. *Journal of Teaching in Social Work*, 30(1), 15-28.

Kwiatkowski AC, & Demirbilek, M. (2016) Investigating veterinary medicine faculty perceptions of lecture capture: issues, concerns, and promises. *Journal of Veterinary Medicine Education*. 43(3) 302–9.

Lindsay, E., & Evans, T. (2021) The use of lecture capture in university mathematics education: a systematic review of the research literature. *Math Ed Res J.* https://doiorg.ezproxy.auckland.ac.nz/10.1007/s13394-021-00369-8

Miles, C., & Foggett, K. (2019) Authentic assessment for active learning, presentation at Blackboard Academic Adoption Day

Peters, T., Johnston, E., Bolles, H., Ogilvie, C., Knaub, A. & Holme, T. (2020) Benefits to Students of Team-Based Learning in Large Enrolment Calculus. *PRIMUS*, 30(2), 211-229. DOI: 10.1080/10511970.2018.1542417

Schwartzstein, R., & Roberts, H. (2017) Saying Goodbye to Lectures in Medical School — Paradigm Shift or Passing Fad? *New England Journal of Medicine*. August. 377:605-607 DOI: 10.1056/NEJMp1706474

Skaik & Borg, 2018 Towards deterring contract cheating: Stimulating students' motivation through authentic assessment design Conference: 29th Australasian Association for Engineering Education Conference 2018, Hamilton, New Zealand

Sotiriadou, P., Logan, D., Daly A., & Guest R. (2020) The role of authentic assessment to preserve academic integrity and promote skill development and employability, *Studies in Higher Education*, 45:11, 2132-2148, DOI: 10.1080/03075079.2019.1582015

Stobart, G. (2012). The validity of formative assessment. In J. Gardner (Ed.), *Assessment and learning* 2nd edn. (pp. 133–146). Sage.

Van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, 28, 100281. https://doi.org/10.1016/j.edurev.2019.05.003

Wagner D., Laforge P., Cripps D. (2013) *Lecture material retention: a first trial report on flipped classroom strategies in electronic systems Engineering at the University of Regina*. Proceedings of the CEEA13, Montreal https://ojs.library.queensu.ca/index.php/PCEEA/issue/archive

Wehling J, Volkenstein S., Dazert S., Wrobel C., van Ackeren K, Johannsen K & Dombrowsk T. (2021) Fast-track flipping: flipped classroom framework development with open-source H5P interactive tools. *BMC Medical Education* (21) 351 https://doi.org/10.1186/s12909-021-02784-8

Wiggins, Grant (1990) The Case for Authentic Assessment, Practical Assessment, Research, andEvaluation:2.DOI:https://doi.org/10.7275/ffb1-mm19.https://scholarworks.umass.edu/pare/vol2/iss1/2

William, D., & Black, P. (1996). Meanings and consequences: A basis for distinguishing formative and summative functions of assessment? *British Educational Research Journal*, 22(5), 537–548.