

Learning and Teaching

at Unitec Institute of Technology



Tahuna te ahimura o te ako
LIGHT UP WITH LEARNING



Contents

Introduction	3
Curriculum Approach and Characteristics	4
Principles of Learning and Teaching	8
Poutama	12
Learning and Teaching Models	16
Components of the Learning and Teaching Models	18
Learning and Teaching Approaches	22



At Unitec, our goal is to ensure an engaging learning experience for all.

Our educational purpose is to support our graduates to develop their capabilities and skills for success in their careers and contributions to their community.

Learning and teaching approaches are inevitably evolving in response to new research and emerging trends in society, education and innovation. We are constantly monitoring and analysing these trends and their impact on our current and future learners, which then enables our unique Unitec offering.

This guide has been created to provide an overview of the way we approach learning and teaching, and to encourage ongoing evaluation and development of programmes and courses so that Unitec graduates are a force for social and economic sustainability and growth.

Linda Keesing-Styles

Dean, Teaching and Learning,
Unitec Institute of Technology



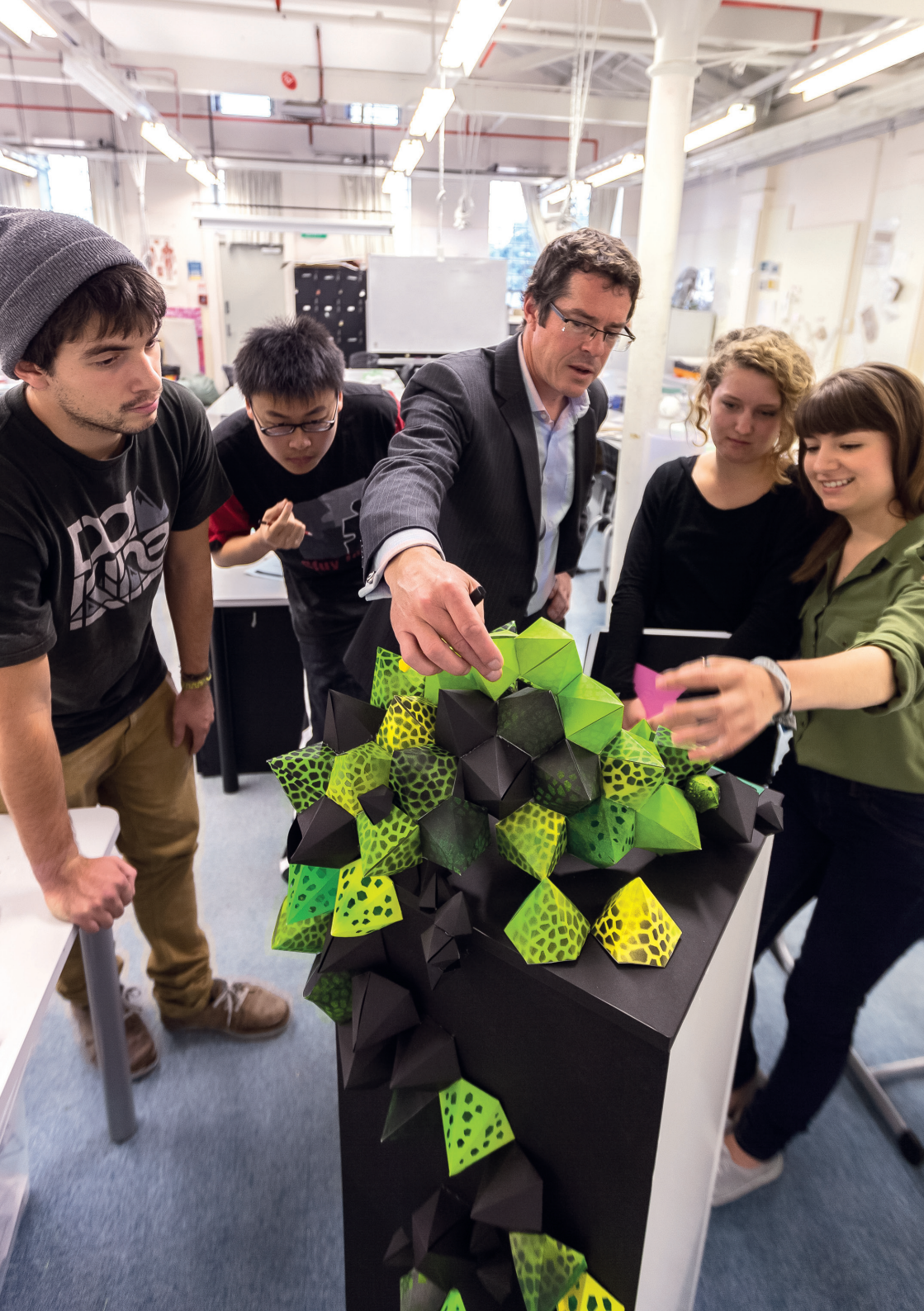
Curriculum Approach and Characteristics

All of our Unitec programmes are structured around an approach that we call the Living Curriculum.

The Living Curriculum is more than course content or a syllabus – it is a holistic learning programme. It is about an active, dynamic process of learning that is jointly owned by learners and teachers, which gives life to the notion of ‘ako’ (the reciprocal relationship between learning and teaching).

The Living Curriculum has 11 characteristics which are present in every programme. These are:

- 1. Involves complex conversations** - teachers, learners and other relevant industry or community partners exchange and challenge ideas, and provoke new thinking.
- 2. Is curiosity/enquiry led, and stimulating** - the learner’s interest and curiosity is stimulated and enquiry forms the basis of the learning experience.
- 3. Integrates learning with work** - knowledge and practice from the workplace are an implicit part of the learning experience which can occur in any context.
- 4. Is socially constructed** - self-sufficiency and collaboration are equally valued, and together they help nurture resourcefulness and resilience.



5. **Embeds mātauranga Māori** - Māori concepts and perspectives are woven into the holistic learning experience.
6. **Blends face-to-face and web-based learning**
 - each process offers valuable contributions to the learning process.
7. **Is research-informed and encourages research engagement where appropriate** - there is a reciprocal relationship between research and learning.
8. **Has a discipline base, and is also interdisciplinary**
 - contemporary workplaces require the ability to work within and across disciplinary boundaries.
9. **Develops literacies for lifelong learning**
 - which can include digital, information, academic and workplace literacies.
10. **Includes embedded assessment** - assessment is a learning event in itself. Learners benefit from timely feedback.
11. **Considers issues of sustainability** - which includes environmental, social, economic and other relevant sustainability issues.





Principles of Learning and Teaching

The Living Curriculum gives rise to a set of principles that guide learning and teaching approaches. Learners should expect to experience these as part of their studies.

Conversation

Learners and teachers engage in the exchange of ideas within and beyond the learning community (including with industry and community partners).

Curiosity/Enquiry

Learners and teachers ask and answer questions to help develop meaning.

- » Teachers become facilitators and co-learners and learners become investigators, seekers and problem-solvers.

Collaboration

Learners take responsibility for their own learning and participate actively within a wider learning community.

- » Teaching and learning occur within a teacher-led community of enquiry.
- » Teachers model skills and procedures, and progressively fade to encourage learner engagement.
- » Teachers provide regular and timely feedback to learners.
- » Learners are encouraged to work closely with peers, teachers and other community resources.



Self-efficacy

Learning is focused on the development of confidence and capability.

- » Teachers ensure that learners are supported to develop foundational knowledge to aid their learning.
- » Learners are helped to become independent self-monitors of their learning.
- » Teachers engage in the ongoing development of their teaching practice.

Problem-solving

Learning is anchored in meaningful problem-solving environments.

- » Learners are involved with creating solutions to authentic problems through the development and completion of projects.

Reflection

Learners and teachers reflect on the consequences and implications of actions associated with learning and teaching.

- » Learners and teachers collectively reflect on, and evaluate, the learning and teaching environment and processes.
- » Learners and teachers consider the implications of learning outcomes on the practice environment.

Creativity

Learners are encouraged to find creative alternatives to known situations to gain new skills and construct new understanding. Teachers nurture learners' resourcefulness and resilience.



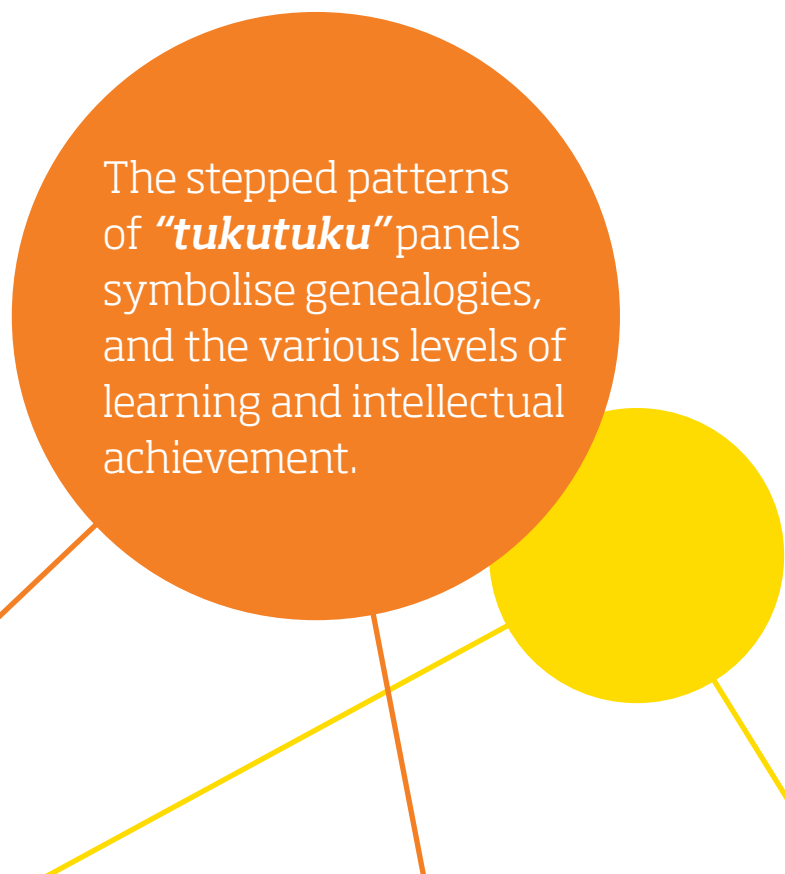


Poutama

The embedding of mātauranga Māori is one of the characteristics of the Living Curriculum. This is guided by the Poutama which was created to support teaching departments, support services and academic leaders, to embed Mātauranga Māori in curriculum.

The Poutama has six pou, each of which has three levels of progression. The pou represent the following key areas of learning and teaching – relationships, assessment, pedagogy, course content, te reo and community.

Contact the Kaihautū for support and more information.

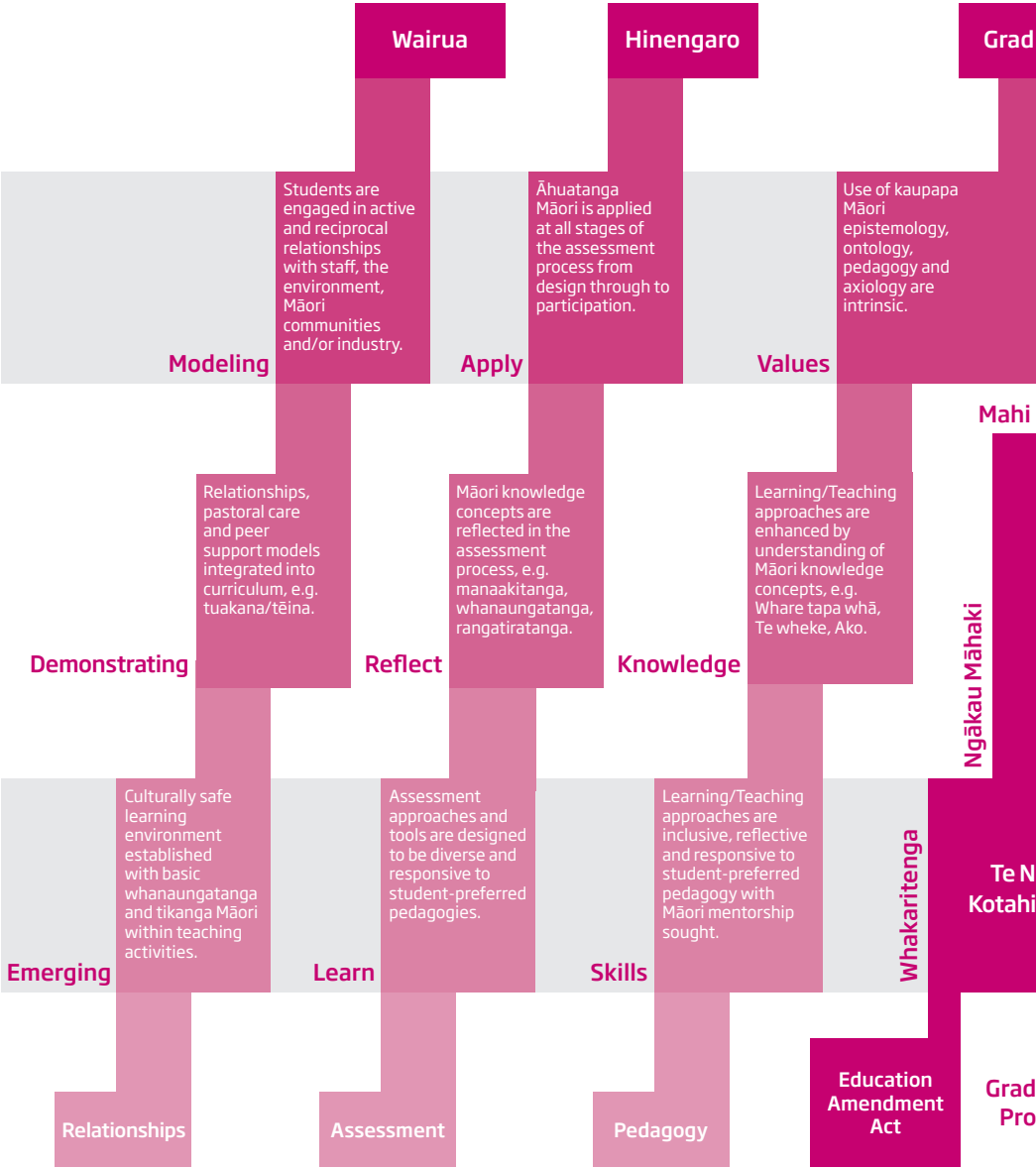


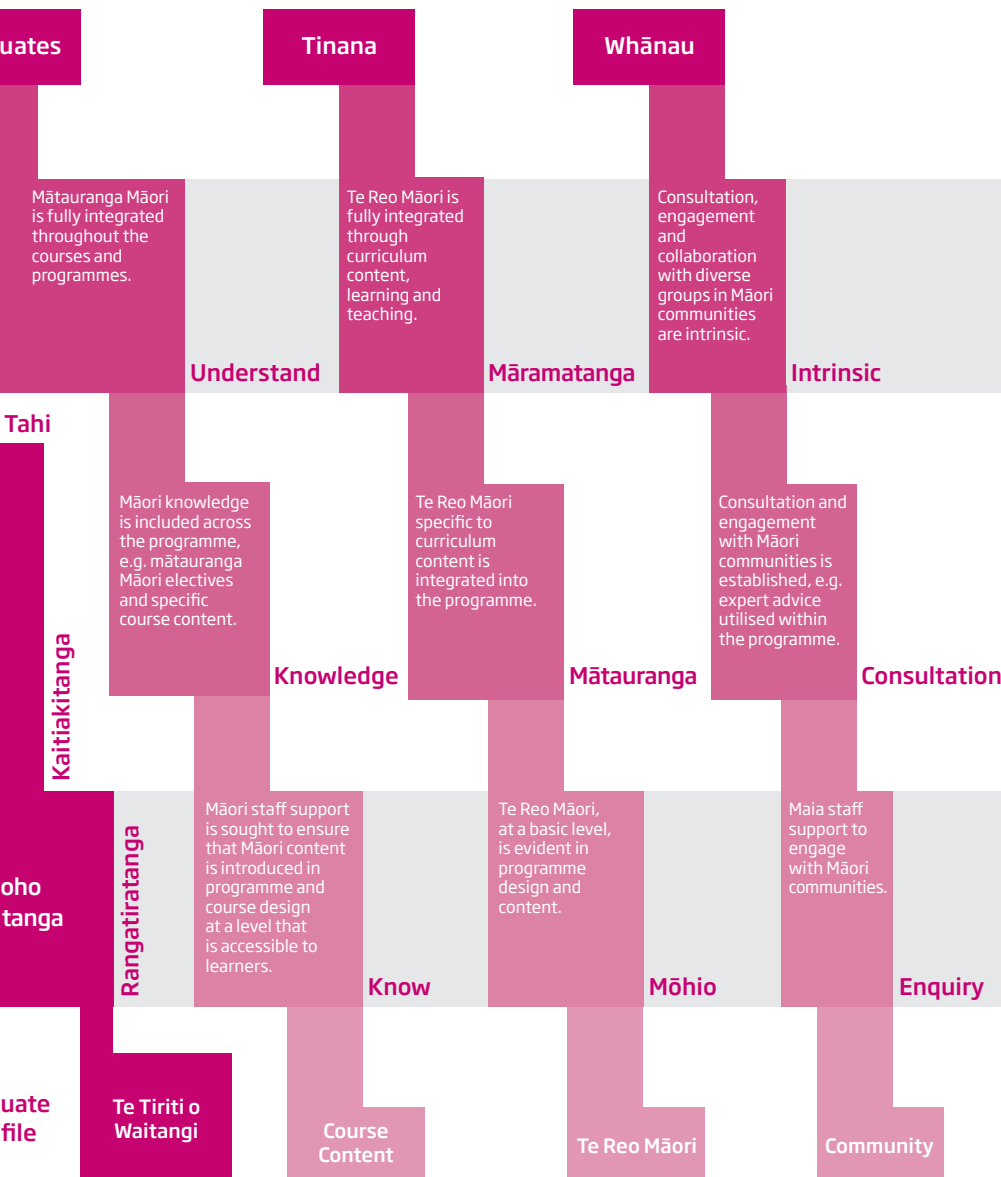
The stepped patterns of “*tukutuku*” panels symbolise genealogies, and the various levels of learning and intellectual achievement.



POUTAMA

Mātauranga Māori in the Living Curriculum







Learning and Teaching Models

We have endorsed three Unitec Learning and Teaching Models which apply to all programmes. These models are based on international trends in education as well as our aspirations to ensure our graduates are highly productive, talented, and have the capabilities to be lifelong learners. Every programme sits within one of the models, which are:

1. Primarily on-campus

Blended but with a strong face-to-face focus

2. Highly blended

Blended but with a strong web-based focus

3. Authentic work-based learning





Components of the Learning and Teaching Models

Each model has four components that reflect the Living Curriculum's characteristics and contribute to blended provision. These components can be approached in multiple ways and vary in distribution across the three models, but every programme will contain all four. The components are:

1. Collaborative, On-campus Teaching and Learning

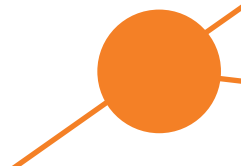
Place On campus

People Learners and teachers¹

Process Active, face-to-face collaborative teaching and learning experiences that might include: flipped classroom, studio, lab teaching, workshops, wānanga, lectures, online participation, work-integrated learning.

Practice In the Medical Imaging programme, on-campus collaborative learning involves the use of a team-based learning approach that engages students in active collaborative learning processes that challenge them to make their own meaning of specific contexts and situational factors.

¹ Teachers in this context can include lecturers, tutorial assistants, industry professionals and supervisors.



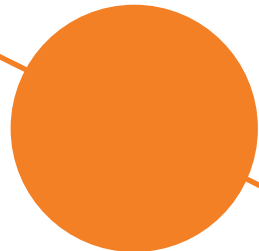
2. Web-based Learning That Has a Taught Component

Place Web-based (typically, but not always, off campus)

People Learners and teachers

Process Active, collaborative web-based teaching and learning experiences that may be synchronous or asynchronous. Materials and learning and teaching processes are developed and learners participate actively as a requirement of the course, supported by teaching staff. This may utilise a wide range of platforms including, but not limited to, Echo360, Blackboard Collaborate, myPortfolio and Moodle.

Practice In the Common First Semester initiative, a bring-your-own-device (BYOD) approach sees learners able to participate in their learning anywhere, anytime through the use of a range of teacher-supported web-based learning platforms.



3. Authentic Work-based Learning

Place Authentic workplace environments

People Learners and workplace supervisors (Unitec and non-Unitec)

Process Work-based learning is defined as learning that occurs wholly or predominantly in authentic workplaces and is therefore distinguished from work-integrated learning which does not necessarily occur in the workplace. This can include but is not limited to: placements; practicum; industry projects; apprenticeships; clinical practice and work experience.

Practice Landscape Architecture students developed designs for Otara Lakes – a work-based project where students responded to a brief for a real issue and presented their concept design work for the remediation to key stakeholders.



4. Independent Learning

Place Range of places and circumstances, including online

People Learners

Process This component of the course is primarily managed by the learner. Any web-based component may involve some resources or provocations previously added by the teacher as part of structuring and preparing for the course. It does not, however, require direct teacher support for the learner.

Practice In the Certificate in Automotive and Mechanical Engineering, the teachers take a curatorial approach to resources to assist learners in independent enquiry and identification and analysis of information.





Learning and Teaching Approaches

Our models also require new - and emerging - approaches to learning and teaching, some of which are described below.

Flipped Classroom

This implies a change from traditional teaching. Students are exposed to new material outside of class, often through short lecture videos or readings, and then class time can be used to do the harder work of assimilating that knowledge through strategies such as problem-solving, hands-on experimenting, discussion or debate.

Gamified Learning

This takes elements of video game design that make them fun and motivate players to keep playing, and applies those elements in a non-game context to support learning. This can include the immediate feedback and stimulation of games to motivate students to remain engaged in learning activities. Not to be confused with ***game-based learning***, where students learn through playing commercially produced video games OR design and create their own games.



Laboratories (*Equipment-based Learning*)

Used in areas such as science, health, engineering and computing education, this approach enables first-hand experience through observation and manipulation of materials in laboratories. Laboratory-based learning allows students to apply concepts, solve problems, experiment and test. It develops critical and analytical thinking skills.

Hands-on laboratory time is increasingly combined with virtual laboratory work that either simulates the laboratory, demonstrates techniques, or allows remote collaboration by students within real laboratory settings.

Makerspaces

Dedicated communal workspaces where learners work on class and self-directed projects, sharing tools that are not commonly available to individual students (e.g. video equipment, laser cutters or 3D printers). Makerspaces are often hosted on campus by libraries. The emphasis is on *making*.

Mobile Learning (*mLearning*)

Mobile Learning is 'learning across multiple contexts, through social and content interactions, using personal electronic devices'. mLearning tools include tablets, smartphones and hand-held computers – any device that is mobile enough to allow learning to take place anywhere. mLearning emphasises collaborative activities such as feedback, recording activities, blogging and polling (Crompton, 2013).

Noho Marae

Literally means to stay/sleep on the marae. The phrase typically refers to a stay on a marae, with an educational/developmental purpose. Māori cultural concepts are a central element in the content and/or purpose of learning, e.g. experiencing how physical, spiritual and emotional aspects of culture can be applied to learning (process and purpose) as well as te reo Māori (content).

Online Learning (e.g. Collaborate, Echo360, Moodle, Web-based)

This refers to access to learning experiences through the use of technology. Online learning is underpinned by notions of connectivity, collaboration, active learning, individualisation of education, flexibility, and the promotion of varied interactions in order to facilitate the creation of knowledge (Moore, Dickson-Deane & Galyen, 2011).



Project-based Learning (PBL)

Project-based learning is based on the use of authentic, significant (i.e. substantial and requiring some time) projects which require students to work through an enquiry process. Students often work across courses and cohorts on projects. PBL projects are often integrated into an actual professional setting, e.g. workplaces. PBL aims to tap into students' decision-making ability, curiosity and interest in 'real world' experiences that align with their interests and typically vocational aims.

Studio-based Learning (SBL)

Studio-based learning is an investigative and creative mode of learning based in action and making. Studio-based learning is most common in disciplines such as architecture, design and performing arts, but is also used in many other areas such as carpentry, engineering and computing.

It is typically undertaken through projects that involve making an artefact, often collaboratively and through a 'research' process that combines applied theory and professional practice.

Feedback and 'studio critique' (the 'crit') of student work in studio is often provided through moderated sessions by a combination of peers, teachers and practitioners (Australian Learning and Teaching Council).



Team-based Learning (TBL)

This involves a structured form of small-group learning where students prepare knowledge out of class (often through reading) and have to apply that knowledge in class in groups. Typically, in class time students complete a test individually and then complete the same test with group members using collaborative discussion to reach consensus about the answers. TBL taps into the strengths of group work that arise when team members associate closely with their team and are motivated to compete with other teams.

Work-based Learning (WBL)

At Unitec, we adopt the following definition of work-based learning: "Learning through work, i.e. through engagement in the activities and purposes of the workplace" (Reeve and Gallagher, 2000). This encompasses new, emergent and current practices that enhance students' work-readiness skills or expand existing professional capabilities.

For more information on any of the material contained in this brochure, please contact the Dean, Teaching and Learning, or Te Puna Ako Learning and Teaching Centre on extension 7361.



phone 0800 10 95 10
fax +64 9 815 2905
web www.unitec.ac.nz
address Private Bag 92025
Victoria St West
Auckland 1142
New Zealand

Mt Albert campus
139 Carrington Rd
Mt Albert
Auckland 1025

Waitākere campus
5-7 Ratanui St
Henderson
Auckland 0612

