How can Networked Learning promote student-directed learning at AUT?

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Abstract
Auckland University of Technology (AUT) is a young university in Aotearoa New Zealand, focusing on the student experience. This paper looks at the learning environment in that context and questions where networked learning principles could contribute to the strategic goal of student-directed learning. The paper explores central notions in networked learning as strengths and weaknesses, and redefines student-directed learning for the context of AUT.

Keywords
Student-directed learning, Networked learning, higher education, learning design, SWOT, dialogue

Introduction
In the previous symposium contributions, we discuss design principles taken from the Networked Learning framework for the course level and a case study illustrating an initial implementation. This paper focuses specifically on designing the student experience on an institutional (policy) level in the context of a higher education institution in Aotearoa New Zealand and how a networked learning framework can inform that.

It makes sense to dedicate a paper in this series to the student experience, as this is central to AUT’s mission of creating Great Graduates. After situating AUT's learning and teaching framework in detail, the paper specifies strengths and weaknesses of incorporating networked learning principles for student-directed learning and formulates opportunities for the AUT context. Rather than adding threats, the paper formulates areas for further research where these suggestions are implemented. Paper 4 details future research in more detail.

AUT's strategic priority: the student experience
As discussed in paper 1, Auckland University of Technology (AUT) is a young dynamic university with a strong tradition in Aotearoa New Zealand. It has chosen the student experience as a strategic priority and conceptualises that priority by offering so-called exceptional learning experiences. Creating exceptional learning experiences is the first theme in AUT’s strategic directions and central to that strategy is designing student-directed learning. According to AUT Directions to 2025 (AUT Directions, 2019, p.2) student-directed learning enables students to:

- Explore and build programmes from broad curricular and co-curricular options (…). Students' options will include modes of delivery and engagement.

Student-directed learning at AUT means that students will be offered choices to build individualized programmes, whereby there are explicit expectations to the quality of the programmes ("high quality, relevant, supported with effective learning and teaching services") as well as the teaching ("creative, interactive and responsive, characterised by its contemporary approaches, technologies and resources" and teachers' expertise).

- To enhance their sense of purpose and confidence, and their employability and enterprise skills.

The aim of student-directed learning at AUT is broader than for students to be educated and employable, and additionally aims to "gain core and transferable skills with which to navigate the shifting opportunities of work and enterprise and contribute in all aspects of their lives" (AUT Directions, 2019, p.2).
So far, this strategy has proven successful, making AUT the second largest university in New Zealand and ranked among the top 1% of universities in the world (Times Higher Education, 2021). Moving forward, AUT continues to prioritise designing student-directed learning as a strategic goal (Morris, 2019) and therefore looks at the (formal and informal) learning environment. Where strategic directions focus on creating (high-quality) options for students with the clear goal to enhance their career competences and employability, the networked learning framework further specifies the learning environment that develops students’ ability to optimally make those choices. This leads to this paper’s problem identification: How can networked learning be used to further student-directed learning (AUT strategic goal)?

**Student experience framework at AUT**

At the institutional level, the pedagogical agenda is formalised in the Xceptional Learning Experiences (XLE) framework, illustrated in Figure 1 (AUT, 2019). Central is the student experience, that is contextualised (work and social connection) and collaborative (interdisciplinary collaboration) and aimed at learning for living (authentic assessment). We will discuss this framework further in more detail.

![AUT's XLE framework](image)

**Figure 1.** AUT’s XLE framework (AUT, 2019).
The new strategic directions coincide with a review and adoption of a new learning management system (LMS) at AUT. An institution-wide change of LMS is not a small change, nor something an institution does often. Given the rare opportunity to affect a wider change, AUT has chosen to support the implementation of the new LMS with a Canvas@AUT Change Approach as a "once in a generation opportunity to align a pedagogical reform agenda with key infrastructure updates" (Canvas@AUT, 2021a, para 2). It involves the development of all AUT courses by development teams made up of Course Leads and supporting Learning Designers, Learning Technologists and Digital Media support staff and has the potential to transform the AUT learning experience.

The goal with the implementation of this new LMS is to enhance student engagement in their online learning environment. Although flexible for variation in requirements at the individual course level, the implementation of the new LMS is driven by 10 principles reflecting the institutional priorities. Among these principles is to support the student learning experience (clear and accessible structure for learners to navigate and orientate), active learner participation (learners are encouraged to share their learning resources, interact with each other, and participate in activities) and communication (consistent online communication with and between learners and online teacher presence to help learners feel connected to a community of learning) (Canvas@AUT, 2021b).

Both the XLE framework and the Canvas principles are designed to enhance students' learning experiences at AUT. Taken together they provide a framework for blended learning at AUT, (further) embracing opportunities of the online learning environment. This has become particularly relevant university-wide under the impulse of the global pandemic.

**Networked Learning: principles for practice**

The AUT context described so far is distinguished by attention to (at least) three sets of phenomena (based on NLEC, 2021):

- collaborative engagement in valued activity: XLE framework that shapes our view on formal and informal learning (see Figure 1)
- technology: new LMS providing the infrastructure for modern blended, technology-mediated learning
- interpersonal relationships: situated in Aotearoa New Zealand, our university community is strongly influenced by mātauranga Māori (Māori knowledge and world view) where establishing relationships or whakawhanaungatanga is key

We look at Networked Learning as a field of research and practice that could further inspire AUT's learning environment because the combination of these phenomena is the focus of the field of Networked Learning. That field is broad, as Networked Learning has amassed multiple definitions over the years and with the evolution of technology, to suit the particular use/context. For the scope of this symposium, we start from the Networked Learning Editorial Collective's suggested definition of networked learning (NLEC, 2021) as:

A view of learning that relies upon actants’ engagement in valued activities that are situated and contextualised, in a learning environment that cultivates connections between the actants. …

=> aligns with our XLE's Work and social connection

The actants operate as a learning community in which individual actants are connected to one another and to the resources of the community and where critical reflexivity is practiced by the community. …

=> aligns with our XLE's Interdisciplinary collaboration

Networked learning is designed and facilitated to support collaborative reciprocal co-construction of meaning, identity and other products which represent ‘learning’.

=> aligns with our XLE's Authentic Assessment

This definition at first glance seems to align with our learning and teaching framework. Our central question is how networked learning can further promote student-directed learning at AUT. Can we find inspiration in networked learning to further AUT's learning and teaching framework? In what follows, we will explore networked learning principles for our particular use (student-directed learning) and context (a specific higher education institution in Aotearoa New Zealand).
**Principles for AUT practice**

Our starting point are the eight principles for networked learning as developed by Ponti and Hodgson (2006, in Hodgson & McConnell, 2019) and discussed in the first paper. In table 1 and the discussion that follows, we connect the networked learning principles to the Xceptional Learning Experiences (XLE) framework and discuss its merits and challenges for student-directed learning, both from a theoretical and practical point of view.

Table 1. Networked learning principles for AUT practice.

<table>
<thead>
<tr>
<th>Focus</th>
<th>Networked learning experiences</th>
<th>Roles and responsibilities in networked learning</th>
<th>Networked learning outcomes</th>
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<tbody>
<tr>
<td>AUT context (XLE)</td>
<td>Work &amp; social connection</td>
<td>Interdisciplinary collaboration</td>
<td>Authentic assessment</td>
</tr>
<tr>
<td>Principles underpinning networked learning designs</td>
<td>Learning is situated and context dependent.</td>
<td>Learning is supported by collaborative or group settings. Responsibility for the learning process should be shared (between all actors in the network).</td>
<td>Dialogue and social interaction support the co-construction of knowledge, identity and learning.</td>
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<td></td>
<td>The focus is on learning which has a perceived value to the learners.</td>
<td>Time has to be allowed to build relationships. The role of the facilitator/animator is important in networked learning.</td>
<td>Critical reflexivity is an important part of the learning process and knowing.</td>
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<td>S</td>
<td>Dialogical learning environment</td>
<td>Shared responsibility for learning: - stages - students as critical participants, teachers as facilitators</td>
<td>Lifelong learning and agency</td>
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<td></td>
<td>Emancipatory transformation</td>
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<td>W</td>
<td>Tradition of knowledge transfer (one-directional)</td>
<td>Student and teacher perceptions</td>
<td>Time and resource consuming</td>
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<td></td>
<td>Pressure to conform</td>
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<td>O</td>
<td>Learning experiences: Active learner participation + resources Accessibility + inclusivity</td>
<td>Expectations for learning/participation: Orientation Teacher presence</td>
<td>Feedback: Assessment Communication</td>
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<td>T</td>
<td>Contributes to perceived value?</td>
<td>Contributes to active learner participation?</td>
<td>Contributes to learning?</td>
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Although we acknowledge that it is the combination of the principles that makes up networked learning, for the purpose of this paper we look at the networked learning principles under those 3 foci.

**FOCUS 1 - Networked learning experiences**

Learning experiences are central to AUT and the focus is on curating work and social connections. The XLE framework focuses on work and social connections through work-based and problem-based learning: "Connecting students with industry/professions/community/iwi through a range of internships, practicums, work integrated learning, inquiry and research" (AUT, 2019). The networked learning principle that learning is situated and context dependent echoes that position. Additionally though, the principles specify that the focus is on learning which has perceived value to the learners. Let's explore that notion in depth, for the strategic goal of student-directed learning.

There is strong support from the literature for this principle, although the implementations in practice vary from pragmatically including the real-world relevance of subjects hoping students perceive their value to more fundamental ways as illustrated by Meijers (2013) in his introduction to the special issue of the International Journal for Dialogical Science:

In order for education to be truly meaningful for students and teachers alike, educational environments must be developed where (a) experiential learning is considered key (b) conversations take place about the personal and societal meaning of concrete experiences in all life domains, and (c) theoretical knowledge is offered “just in time and just enough” based on questions that students and teachers need to have an answer to (Meijers, 2013, p4).

Research shows that developing students' ability to make choices for employability as well as life-long learning (Savickas et al., 2010) requires a learning environment that combines relevant experiences (Dewey, 1960) with a dialogue about the meaning of those experiences (Meijers & Lengelle, 2012; Kuijpers & Meijers, 2012), as well as theoretical knowledge. For students to attach meaning to their experiences and use that as the direction for their learning, learning environments need to become dialogical learning spaces where personal connections, both cognitive and interpersonal, are valued.

However, subsequent research showed that learning environments, even those with rich curated experiences, are still very traditionally organised around information transfer to students (monologic), and that changing that requires a paradigm shift (Kuijpers & Meijers, 2017; Winters et al., 2012; Draaisma et al., 2017). Lane (2016) has made similar observations for learning management systems that focused much more on the content and content-delivery systems than on how the classroom or educational process can be co-constructed.

For AUT, networked learning can be a relevant addition here by advocating the importance of dialogue to enhance the perceived value for students of their exceptional experiences. On a curriculum level, when students connect with work (industry/professions) and social (community/iwi), do we provide dialogical spaces to discuss the meaning for the student of those experiences? On a course level, do we provide resources to the students, or design learning activities for the students?

Ideally the learning environment allows for connecting with students on a personal level, accepting their frameworks and discussing the meaning of experiences from different perspectives. A dialogical learning space is described as collaborative and aiming to co-construct and negotiate meaning (see further), and it values personal connections. Especially with the focus of student-directed learning, that deems the question: whose experiences, whose connections, whose problems (in PBL), and whose values (in Aotearoa)?

Networked learning has an emancipatory element in it, going back to Freire (1970) positioning education away from a particular model of delivering information (where the educator shares a point of view, a primary source or a piece of interpreted information), to a dialogical process between teacher and students (Nguyen, 2019). Aspiring this is especially relevant for us in the context of Aotearoa New Zealand, with strong values based in mātauranga Māori. Whakawhanaungatanga, for example, is the process of building relationships "through shared experiences and working together which provides people with a sense of belonging" (Māori Dictionary). But in practice it is challenging trying to co-construct meaning. Several authors (e.g. Perriton & Reynolds, 2013; Hodgson & Reynolds, 2005) have written about how differences and inequality almost inevitable lead to practical and ideological pressures to conform rather than negotiate meaning.

For AUT on a curriculum level, networked learning reiterates the importance of including (awareness for) all perspectives. For the course level, we wonder whether the use of networked technologies as part of the learning environment may provide additional opportunities to shape the dialogue (e.g. Peacock & Cowan, 2017; Ravencroft, 2011; Silva et al., 2013). Learners are encouraged to participate and interact with each other, and share learning resources. These resources have strong ties to community and practice and are optimally accessible and inclusive.

From the above initial exploration, we propose a redefinition of AUT’s strategic priority: Designing student-directed learning at AUT means designing a dialogical learning environment that develops students' ability to transform valued experiences through situated and context dependent learning into new knowledge. Future work includes researching, upon implementation of these principles, how this contributes to perceived value (for students and teaching staff). Case studies, detailing the implementation of networked learning principles described here, would work well for this intention.
**FOCUS 2: Roles and responsibilities in networked learning - interdisciplinary collaboration**

In discussing a networked learning environment for student-directed learning, there are expectations for the roles and responsibilities of all those involved. The XLE framework focuses on interdisciplinary collaboration: "Immersing students in inter-disciplinary/bi-cultural/inter-cultural ways of knowing, doing and being that focus on problem-framing and collaboration" (AUT, 2019). Learning as collaborative process is a networked learning principle as well. We emphasize the role of shared responsibility over time and the teacher as facilitator for student-directed learning.

Shared responsibility for the learning process is - in itself - part of a collaborative dialogue that can include contacts from professional and personal networks. It broadens the student experience and brings in additional perspectives. Garrison (2011) refers to communities of learning where individuals "collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding" (p.15). We have mentioned higher how this concept of community of learning is problematised, however consistently described as critical in the literature about learning. So the question becomes how to get it right.

It is important to allow time for relationships to develop. Networked learning is achieved through participation in a collaborative dialogue where responsibilities are scaffolded and negotiated between all those involved. Meijers and Kuijpers (2015) distinguish phases in that development, from a division of responsibilities where all actors do their thing in the learning process without explicit arrangements about expectations, over learning together and designing together based on agreed responsibilities, to eventually innovating together as true shared responsibility for the learning process. It is where students have the potential to co-design and co-create their curriculum. Cutajar (2014) describes categories in the student experience of networked learning, from supporting access to resources and individual self-managed learning, to learning in connectivity for increasing personal learning and eventually a consciousness of facilitating others' learning as well.

For AUT, design principles at the course level include helping learners orientate themselves by outlining how they are expected to learn and engage. The networked learning perspective can be a relevant addition for the curriculum level by advocating the importance of relations that have the opportunity to grow over time and scaffolding responsibilities for students.

With the focus of student-directed learning, the expectation is that students learn to take on the role as critical participants and agents of their own learning (Freire, 1970) with the teachers as facilitators curating connections/resources/experiences, providing focus for learning experiences and stimulating dialogue and reflection (Christian et al., 2020). Student-directed learning implies growing autonomy for students regarding the choices they make, to develop their ability to give direction to their careers. To be able to support that, the learning environment needs options/choice as well as guidance/dialogue to make those choices.

However, Healey et al. (2015) note that these roles and responsibilities require "a significant shift in the way that student and staff roles are conceptualised towards a more constructive, dialogue-based relationship between staff and students" (p.143). Digital tools could empower students, as they can curate and share content and networks, but they are mainly a tool. Crucially the role expectations need to change, and research evidence points out that that is challenging in practice: e.g. because of the need to avoid the image of experts yet keeping a critical stance whilst building a close relationship with the community of learning (Margalef & Pareja Roblin, 2016).

At AUT the learning management system facilitates teacher presence to give learners a sense of belonging and help them feel connected to a community of learning. Networked learning broadens the design principles here to include a growth perspective where the student and teacher role is clearly outlined and scaffolded over time.

From the above, we again propose a redefinition of AUT's strategic priority: Designing student-directed learning at AUT means designing a collaborative dialogical learning environment that through shared responsibility over time develops students' ability to transform valued experiences through situated and context dependent learning into new knowledge. When implementing these principles, future work includes case studies researching how this contributes to active learner participation (for students and teaching staff).
FOCUS 3: Networked learning outcomes - authentic assessment

In designing for (networked) learning we consider the desired outcomes again, going back to AUT's strategic priorities. AUT wants great graduates, with a focus on student-directed learning for employability and purpose. The XLE framework focuses on authentic assessment: "Evidencing student learning that matters outside the classroom and equipping our students for learning beyond the university" (AUT, 2019). From the networked learning principles, we emphasize the role of co-construction of learning and critical reflexivity for student-directed learning.

In networked learning, what is being assessed is students' learning for living, life-long and life-wide (Law et al., 2002). It includes academic knowledge, as well as identity and career learning (Geijsel & Meijers, 2006) and aligns with AUT's focus of learning for employability and purpose. That learning is co-constructed, with opportunities for students to include their personal connections, and requiring student agency as we mentioned higher. As for how to assess, Costa and Kallick (2004) propose assessment strategies for self-directed learning assessing students' progress towards becoming self-managing, self-monitoring and self-modifying:

- Self-managing = the willingness to be engaged in activities with awareness of the results for their learning and the academic load, and essential information they need, and use of prior experiences, looking forward to signs of achievement, and generating substitutes for accomplishment
- Self-monitoring = having adequate self-awareness about what is effective, employing cognitive and metacognitive strategies to assess their learning
- Self-modifying = thinking over, assessing, and constructing meaning from experience and utilizing their knowledge to future activities, and tasks

Assessing self-directed learning is essential in developing life-long, self-initiated learning habits and critical reflexivity. For example, Trede and Jackson (2021) discuss a critical transformative stance to students' work integrated learning (WIL) experiences and emphasise how reflexive debriefings are important to foster agency and development. These debriefings, or feedback for learning, are dialogical in nature providing an engaging learning environment.

At AUT authentic assessment is a fundamental aspect of our learning and teaching framework. In design principles the assessment requirements need to be clear and relevant. Networked learning can add to that by embodying the crucial role of formative feedback, as dialogical communication.

Authentic assessment tends to move away from summative testing, towards continuous evidencing learning and formative feedback. Feedback provides the students with the opportunity to learn how to reflect on their learning (Hounsell, 2003). Designed right, the LMS can serve that dual purpose: providing both a dialogical space for feedback and a platform for showing formal and informal learning outcomes. Plenty of case studies outline the advantages of this view on learning and assessment, however the process is more resource and time consuming and this is an important potential road block for implementation in practice.

Including these reflections, our final proposed redefinition of AUT's strategic priority in this paper: Designing student-directed learning at AUT means designing a collaborative dialogical learning environment that through shared responsibility over time develops students' ability to transform valued experiences through situated and context dependent learning into new knowledge as co-construction and develops critical reflexivity for evaluating and examining the learning process and resultant actions. When implementing these principles, future work includes outcome studies researching how this contributes to actual learning.

Conclusion - Designing the student experience at AUT

This paper explores how networked learning can promote student-directed learning, a strategic priority at AUT. To answer our leading question for this paper we have discussed networked learning principles taking 3 foci from the XLE framework, resulting in a redefinition to suit AUT's context and use for student-directed learning:

Designing student-directed learning at AUT means designing a collaborative dialogical learning environment that through shared responsibility over time develops students' ability to transform valued experiences through situated and context dependent learning into new knowledge as co-construction and develops critical reflexivity for evaluating and examining the learning process and resultant actions.
Through our exploration of the literature, dialogue has emerged as a central notion. The (renewed) attention for dialogue proposed in networked learning helps to meet AUT's strategic goal of student-directed learning for employability and career learning: a dialogical space where students can include and discuss experiences that are of value to them, curate and share resources and networks as their responsibilities grow and make choices, and co-construct knowledge in engaging discourse with feedback for learning. Our recommendation is to consider refinements to the XLE framework at the program/institutional level and organise a collaborative dialogue to discuss shared responsibility with students, teaching staff, professional and research connections and management.

However in the translation to practice, we anticipate friction when it comes to the ability to make a shift to a curriculum that not only pushes for exceptional student experiences but is designed with space to discuss and value these experiences and students' informal learning and connections (pragmatic). We wonder if students are prepared to take on the suggested pro-active role in learning and if teaching staff is equipped to support this type of learning (motivational). And our main concern is organising this in a way that gives opportunities to all students (equity).

The papers making up this symposium see Eberhard et al. discuss priorities in designing for networked learning at the course level, depending on the course context, requirements and experiences. In a case study for a Health course, Nguyen et al. take these elements as design principles and apply them at the course level. And Sim et al. set out our research agenda proposing an interpretivist method to understand teaching and learning experiences once these design principles have been implemented within our higher education institution.

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