



The LATTE Initiative at AUT

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I have never been afraid of what will happen when I finish university and go out into the 'real world' because as far as I'm concerned, I've already been working in the real world!!
(Judit Klein – Founder LATTE, 2011-present)

Introduction

The LATTEs (Learning and Teaching Technology Enablers) are a team of students employed to assist with the challenges of enhancing the digital capability of AUT staff. The initiative began in 2011, following the launch of the iPad and in support of the Learning and Teaching Enabled by Technology (LATENT) strategy developed by the Director of ICT Services and the Director for Learning & Teaching.

Not long after the release of the first iPad, it was already being hailed as the 'game changer' for education (Brown-Martin 2010). But the default in most institutions is to use the iPad as a simple replacement for existing tools, substituting it for previous methods and processes without leveraging the pedagogical benefits (Laurillard 2008). Like all institutions, AUT University faces a major challenge of changing this default, and developing the digital capability of staff to use these new devices for transforming practice to engage a new generation of digitally aware students.

Such challenges require a range of strategic initiatives, grounded in a 'pessimistic approach' (Selwyn 2011). At the Centre for Learning and Teaching (CfLAT) we found that as iPad use increased—with many staff either purchasing their own iPads or being supplied with one through departments or funded projects—it was necessary to find effective ways of supporting staff as they came to grips with the new paradigm and affordances of the 'post-PC' device (Murphy 2011).

Remembering that an NZ school had met a similar challenge in 2002 by employing senior students to teach their teachers about computers (Bolstad & Gilbert 2006), the Director of Learning and Teaching appointed a team of undergraduate students to act as 'learning and teaching technology enablers' (LATTEs) who provided support and coaching to staff with their new iPads. Using existing budget the first group of 3 students in 2011 grew into the team of 8 LATTEs in 2013, with a total of 15 currently employed in 2104.¹



2013 LATTE team (L-R)

Theresa Kendrick, Charlotte Alexander, Kate Wanless (front), Emily Whitehead, Christine Probert, Judit Klein, Conal Lewes (front), Thomas Hall.

¹ See appendix for full details

Drop in for a LATTE

Since mobile devices are deeply entwined with all aspects of students' personal and social lives (Traxler, 2010) students are ideally placed to teach staff about the effective use of the iPad. The LATTE team is a diverse group ranging from first year through to postgraduate level, sharing a common interest in technology and its place in the changing world of higher education. In most cases the LATTE work informs the students' learning, in terms of assignments, studio papers and electives in the Bachelor of Creative Technologies and other programmes.² The students are paid on the hourly pay scale for teaching and research assistants, and also gain valuable experience in research and academic development. Working closely with CflAT staff, the LATTE team provides a range of different services, approaches and resources for all staff at AUT.

The primary focus over the first two years has been 'first-line' support, where staff can become familiar with basic operational use of the device in a relatively informal and user-friendly 'drop-in' setting. Drop-in sessions are scheduled weekly and other specific sessions - e.g. to support a departmental roll-out as in the Business School - are arranged on request.

The LATTE team keeps a detailed record of all sessions and calls for assistance—using an online system designed by the students themselves. In 2012 the team recorded 344 jobs that were resolved with an 88% success rate, and in 2013 the team logged 247 jobs with an 89% success rate.

Examples from LATTE job logs

The LATTE job logs contain a mine of useful information about issues in relation to first-line support of the iPad, e.g:

"Staff member X was keen for a one-on-one tutorial to help her hone her text-editing skills on the iPad. Our primary focus was gesture recognition, in particular, copying, pasting and deleting chunks of text. This led into a discussion of the best practices for note-taking on the iPad."

"Staff member Y recently received her iPad and had gotten as far as connecting the Unisurf network and Exchange mail account and needed help setting the rest up. We signed into the Cache and created a home screen button for it, created an Apple ID, signed into the Store, verified the account, signed into iCloud, ran through everything in Settings including creating a Passcode and explaining about Wifi and 3G."

"Staff member Z is going to be teaching in the new WG lecture hall which has two screens with the potential to display two different things from different inputs so she wanted to know the best way to prepare material for her lecture. She was preparing a

² The expanded LATTE team in 2014 includes students from Art & Design, Law, Applied Science, Engineering, and Computer Science. Note that students in Te Ara Poutama are also employed for various projects in digital media design and production in a similar model.

Powerpoint and wanted to have her slides on one screen and images on the other. We set it up so she will be using the computer in the lecture hall to show the powerpoint and her iPad as a separate input for her image."

The LATTE team then analysed the job logs, collated answers, created a set of FAQs, and created 19 iBooks on the themes emerging from the database - e.g. Apple ID, setting up email, document management, iCloud, using the iPad overseas, etc. These resources are freely available at <http://cflat.aut.ac.nz> (click on LATTEs). Over 1,000 iPads have been purchased to date for AUT staff, and as staff have become more familiar with basic use of the device the need for a dedicated 'helpdesk' has fallen away. ICT Services now provide this kind of first-line support.

LATTEs going forward

There are two key aspects of the LATTE initiative. The first level or phase is aimed at the provision of enabling tools and enhancing digital capability. This aspect addresses the critical need to provide learning opportunities and resources for staff to use new technologies. Although research is needed on staff perceptions of the effectiveness of being assisted by students,³ the data in the job logs and anecdotal feedback suggests that staff feel able to discuss naive questions without feeling anxious or intimidated, and develop confidence in the basic functions of the device.

The second phase of the LATTE initiative focuses on the critical aspects of transforming practice. Support in the basic functions and choosing which apps to use is necessary, but not sufficient for understanding why the iPad can provide valuable learning opportunities for students. The LATTE model supports a realisation that dominant practices in the university do not align with a 21st century view of education. As Bolstad and Gilbert (2006) note: "Teachers must have the opportunity to compare their existing ideas and practices with '21st century' ideas, to debate these ideas, and to accept constructive challenges to their own ideas and practices. This is likely to be a slow process requiring ongoing shared professional learning among staff."

The LATTE team is currently involved in a number of communities of practice (CoP) projects in the annual Learning and Teaching Development Fund (LTDF). Academic staff in Cflat facilitate the CoPs, with a focus on encouraging members to think about how the iPad, and indeed iPhone, might transform practice and enhance learning. These projects encourage staff to engage with emerging pedagogical practices enabled by technology, and to learn from each other. Social media platforms keep the discussion going outside the weekly meetings, demonstrating the potential for blended discussion forums and inter-departmental support networks.⁴

³ Staff will be surveyed in semester 2 this year about their experiences with the LATTE team

⁴ In 2014, 11 LATTEs will be involved in 23 projects

Underpinning the second phase is the development of blended learning modules. Each module will introduce a different aspect of using the iPad in the design and development of 21st century higher education, where mobile social media together with emerging concepts of practice inform new modes of learning and teaching. The modules will contribute a new postgraduate paper to be provided by CfLAT in conjunction with Te Ara Poutama called *Academic Practice in the Changing World* that will run in the second semester this year.

The next phase of developing the LATTE model is not without challenges. Thus far the initiative has been informal, creative and fluid, with students driving the innovation—much like the initial phase of a Silicon Valley tech startup company (but alas, nowhere the scale of resources). The students have literally been left to their own devices. It is amazing to see the ways in which they have developed the model, designed support systems, T-shirts and logos, and the successes achieved.

Accolades

For example, the iBook on the use of Zotero won the award in the student section of the 2013 Cyclone iBooks competition in NZ. The poster produced by the LATTE team won the ‘peoples’ choice’ prize of best poster at the 2013 HERDSA conference. The initiative is attracting international recognition, with CfLAT being invited by Apple to assist the University of Western Sydney with their rollout of 12,000 iPads to students in 2013, and endorsement of the model as ‘unique and innovative’ by Richard Northam (CEO of CAUDIT) at the 2013 ICT visioning day at AUT.

However, to further embed the model in practice requires some formal structure and criteria. This will unfortunately constrain some of the informality and excitement evident in the start-up phase, but on the other hand will enable a more sustainable model. A key point here is the tight linking of LATTE work to academic performance—to be a good LATTE also means being a successful student (if a student drops a paper/s they are no longer eligible for the team). LATTE work needs to inform aspects of student learning.

Some admin resource has been allocated to manage recruitment, selection and ongoing development. Recruitment in 2014 was more formal, using a full-page ad in Debate magazine (see appendix), and the Student Job Search website. Over 30 applications were received. The team has expanded to 15 members in 2014 with varying commitments of hours and working across all three campuses.⁵ The LATTE team contributed a student-led project to the LTDF2014 on the topic of ‘student visions for learning and teaching’. Currently there is one LATTE student member with 2 ex-LATTEs now working as digital media designers in CfLAT.

⁵ Although it is a stretch, the CfLAT budget can accommodate this in 2014—but if the expanded model is successful we will need extra resources to sustain it.

Takeaway – outcomes and significance

The LATTE model provides significant benefits for both the institution and the student members, and some unexpected outcomes. Consistent positive feedback from staff affirms that they feel well-supported in using their devices, knowing that they can get ‘on-demand’ advice and assistance in an informal and collegial setting. This is an important aspect of professional learning for staff. Many staff simply don’t engage with the traditional ‘helpdesk’ model of IT support, and also the device was initially ‘not supported’ by ICT Services. The LATTE model removes much of the anxiety and frustration associated with learning about new technologies, and many staff remark on the user-friendly experience of being patiently assisted by a ‘tech-savvy’ student.

We are starting to see major changes in conceptions of learning and teaching as the use of mobile devices and social media embeds into mainstream curricula and assessment (Cochrane & Narayan, 2013). The iPad is increasingly finding its way into research, where there are major developments in the use of mobile devices in healthcare, sport science, journalism, science, languages, to name only a few. There are additional productivity and efficiency gains in the administrative aspects of university activities with staff using devices to mark assignments, enter data, take minutes, annotate agendas and save on printing paper. The enabling of capability through the LATTE model is an important component of any digital strategy for enhancing the core business processes of higher education.

On another level, the LATTEs gain valuable experience and skills that complement their formal studies, and also feel that they are participating more deeply in the fabric of university life: ⁶

...reinforced this feeling of what we were doing was worthwhile and really meant something.! ! Because the nature of the work was tied to my study, it also made me feel like my research was worthwhile. The conversations I had with teachers really helped me understand the needs of education in a way that wasn't yet documented in research papers.... (Judit Klein)

On a personal level, I have gained an understanding of the challenges involved in facilitating the needs of a large institution. Moreover, I have been inspired by the academics I have worked alongside and their passion for cultivating a forward-looking approach to education. As an employee of the university working alongside lecturers and pastoral care providers, I felt empowered to support my educational community... (Conal Lewes)

Throughout my time as a LATTE I have learnt many skills...I have been able to refine my abilities to be patient, to give clear directions and to connect with those who I might not normally relate to. I had entered university straight from high school, and

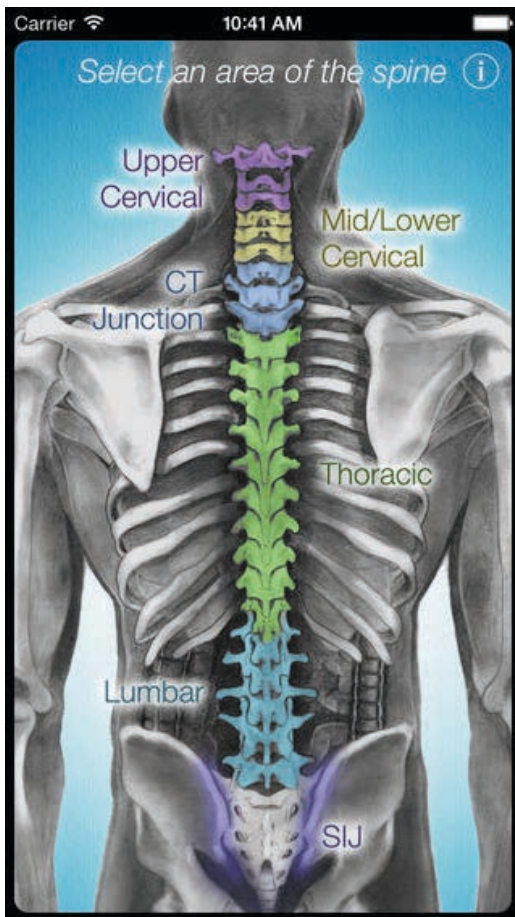
⁶ Detailed reflections from LATTEs on their experiences are attached in the appendix

up until this point there had been little reason for me to socialize with those senior to myself, as these people were simply my superiors. Learning to communicate with, and be a peer to, those more “grown-up” than I was an important lesson...
(Charlotte Alexander)

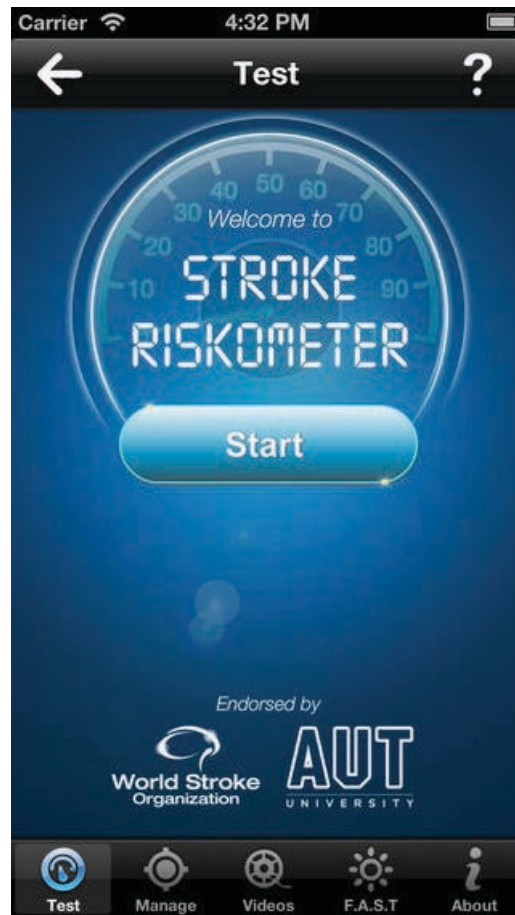
It helps increase confidence through dealing with staff everyday and succeeding in work, it gives a real boost as you wander off to class a couple of hours later. It also is interesting as suddenly when you are working with academics and staff members, you are seen as equal. Whereas as a student, especially in first year, they seem to be in the lofty heights of unimaginable knowledge, so it breaks down those boundaries and facilitates a good channel of communication between students and staff...
(Emily Whitehead)

Creating job makers

Perhaps the most important outcome from the LATTE initiative was not formally planned or anticipated. This is the way in which the LATTE experience is informing career choice and assisting students to develop skills in innovation and entrepreneurship whereby they can start their own businesses or gain a competitive edge in a crowded job market. The best example is SeaMonkey Media Ltd, which developed the *AUT Dynamic Spine* and *Stroke Riskometer* apps now selling successfully on the App Store.



Dynamic Spine



Stroke Riskometer

SeaMonkey was started by one of the founder LATTEs in 2011 (Seamus McCarthy, together with Taylor Abernethy who was a fellow BCT graduate).

Judit Klein (founder LATTE in 2011) has been the recipient of three Apple student scholarships to attend the annual Apple Worldwide Developers Conference in San Francisco, and is created an app for her Masters in Creative Technology thesis. Judit recently landed a job as an iOS engineer with Apple at the main campus in Cupertino.

Judit coordinated a 'summer project' app prototype,⁷ where two postgraduate Science students (Stephanie Borelle and Jarrod Cusens, under the supervision of Dr Sebastian Leuzinger) had an idea for an enhanced approach to teaching the dynamic interrelationships between the carbon cycle and the water cycle. An integrated knowledge of these cycles is critical for understanding the contributions of human activity to global warming and climate change. The further development of this app into a marketable product was funded as an LTDF2014 project. In 2015 the Global Change app (search 'global change' on the Apple or Google stores) was shortlisted in the Wharton QS Stars 'Reimagine Education' awards.

Judit also played a key role in an 'industry engagement' project, where the Rotary Newmarket club heard about the LATTEs and approached AUT for advice and support in their Digital Learning Rooms (DLR) project. This project supplied 80 tablet devices for two schools on the island of Taveuni in Fiji (equivalent to decile 1 schools in NZ). The LATTE experience of supporting staff with iPads proved invaluable for the success of this project, where the iPad minis donated to the schools literally transformed the educational experience for both the staff and students involved.



This form of engagement with the social entrepreneurship community (i.e. Rotary) has important benefits for AUT's profile, and is also transformative for the LATTEs involved. As Judit notes,

⁷ With contributions from Kate Wanless (design) and Emile Drescher (code).

*It was definitely challenging and we all had our doubts, but it was one of the best experiences I've had working hands on with the technology, really felt like I was putting into practice not just my degree but everything I've learned during my time at CfLAT. I know that whole experience will stay with me for a long time.*⁸

Other ex-LATTEs have found employment and been inspired by their experiences. As Judit, Seamus and others note:

I want the outcome of my time as a LATTE and in the Creative Technologies degree to contribute to the world of knowledge in a practical way through an app built from the knowledge gained from the many discussions I've had during my LATTE journey!! I have never been afraid of what will happen when I finish university and go out into the 'real world' because as far as I'm concerned, I've already been working in the real world!! (Judit Klein)

I'm currently working on (building) desktop web applications for a company, once the current one is finished (well, released, anyway, are they ever finished?) I will concentrate further on mobile applications along with other desktop apps with optimisations for touch devices and smaller screens, utilising some of the technologies unique to the devices, perhaps becoming acquainted with native code. It's hard to pinpoint one thing as leading one down a certain path, lots of things have gone the mix, but exposure to LATTEs is certainly one of them... (Chris Clifton)

Since leaving AUT I have started my own tech company making apps. We are still small fish but have been in business for over two years now and are absolutely loving it. I have no doubt my time with CfLAT helped me focus my career goals and opened up professional opportunities once we entered 'the market'... (Seamus McCarthy)

Working as a LATTE influenced my study. I produced a unique design project in my final semester based around app design. This has meant that I am heading into an exciting growth industry in digital design. This study then fed back into my work as a LATTE, which creates an interesting feedback loop. It is great working on a job that is so woven into your current study. Working on design projects within this team gave me the real work experience needed to get job interviews... (Kate Wanless)

Where to from here

The LATTE model has the potential to be developed as a significant response to AUT's reputation as a leading university of technology. Such a reputation could be built on the following activities

- Expansion of the LATTE model as a distinctive feature of our curriculum, including new programmes, if not a culture of innovation and entrepreneurship
- Engagement with industry to build contract/RGA revenues

⁸ The project was covered in the Fiji Times <http://www.fijitimes.com/story.aspx?id=261997> and other NZ suburban papers. Photographs above (from Bucalevu and Niusawa high schools) by Judit Klein.

- Support of alumni to build new start businesses (SeaMonkey, potential similar developments in 2014 LATTE team)
- The development of an 'app lab' at AUT to provide a more sustainable footing for the LATTE initiative.

AUT has a strong reputation for real world learning and close relationships with business and industry. The LATTE initiative—along with the other benefits for digital capability and student learning outlined above—is an unexpected contribution to this aspect of the University's status. The author would like to thank Professor Pare Keiha for his enthusiastic and supportive encouragement, and the CfLAT team for wholeheartedly embracing the model and welcoming the students into the department.

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APPENDIX – LATTE details and reflections

Table 1 – LATTE ‘roll of honour’ : 2011 – present

Name	Field of study	LATTE service
Judit Klein*	Creative Technologies (completed MCT in 2014)	2011 - present
Seamus McCarthy*	Bachelor of Creative Technologies (graduated 2011)	2011
Christine Probert*	Bachelor of Creative Technologies (graduated 2014)	2011 - 2013
Chris Clifton	Creative Technologies (graduated BCT Hons 2013)	2012
Charlotte Alexander	Creative Technologies (completed MCT in 2014)	2012 - present
Emily Whitehead	BA (Ancient History) currently enrolled in MA	2012 - present
Theresa Kendrick	Creative Technologies (graduated BCT Hons 2013)	2012 - 2013
Kate Wanless	Art and Design (graduated BDes in 2013)	2012 - 2013
Thomas Hall	Bachelor of Creative Technologies (graduated 2013)	2012 - 2013
Mike Lewis	Bachelor of Creative Technologies (first year in 2014)	2014
Kevin Kantono	Applied Science (enrolled in PhD)	2014
Deinika Elston	Master of Art and Design (completed in 2015)	2014
Marcel Allen	Creative Technologies (completed MCT in 2014)	2014 - 2016
Michael Anderson	Computing and Mathematical Sciences (first year in 2014)	2014 - present
Maryna Babych	Business and Communication Studies (first year in 2014)	2014
Nicanor Basabas	Bachelor of Engineering (third year in 2014)	2014 - 2015
Ann Marie Gribble	Bachelor of Creative Technologies (second year in 2014)	2014 - 2015
Samuel Joe	Creative Technologies (completed MCT in 2014)	2014
June Kim	Creative Technologies (completed MCT in 2014)	2014
Amro Mohamed	Bachelor of Law (first year in 2014)	2014
Natalia Spreys	Art and Design (third year in 2014)	2014
Taylor Pringle	Bachelor of Creative Technologies (third year in 2015)	2015
James Smith	Honours in Communication Design	2015

* Founder LATTEs

Be a LATTE!



Are you...

The person who finds the new apps first?

Always energetically helping your friends and family with mobile devices, apps and computers?

Skilled in using Apple and Adobe tools for creating digital content ?

We want you!

The LATTEs (Learning and Teaching Technology Enablers) are AUT University's student team that works with university staff to develop the best ways to make the student learning experience cool and engaging - while getting paid for it!

We are now recruiting students to join our first-class LATTE team.
You must be passionate about new ways of learning in the digital world.

You will assist AUT staff to set up devices and learn about digital tools. You will take an active part in AUT's Centre for Learning and Teaching (CfLAT) projects, assist with production of digital content, contribute in team meetings and attend training sessions.

Get the low down on our LATTE team at <http://cflat.aut.ac.nz> and see why they are AUT's best. For any questions please email Pam Wyse: cflat@aut.ac.nz

Please apply in writing, with your CV (including references) and a covering letter detailing why you would make an excellent LATTE, to cflat@aut.ac.nz by Friday 14th March.

Requirements:

You

will be sussied in using mobile devices and social media. Expertise in content creation tools like Adobe Photoshop, In Design, etc will be an advantage.

You

will have the ability to learn and teach others about new digital modes of learning

You

will be confident, friendly, patient and enthusiastic

You

will be a current full-time student enrolled at AUT University for 2014

All shortlisted candidates will be invited to attend an interview between the 18th and 20th March, and participate in a training day on Friday 28th March.

AUT UNIVERSITY **LEARNING+ TEACHING**