



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Effective practice for e-learning

Designing learning to engage

How do we engage learners?

‘Engagement’ encompasses attracting and holding students’ attention. ‘Designing for engagement’ also includes sparking students’ interest so they will participate fully in the course content and activities. To design courses that motivate students’ engagement, teachers often have to put aside their preconceived ideas about e-learning, re-think their traditional teaching approaches, and plan authentic and active learning environments in which they are facilitators rather than lecturers. In blended learning, traditional teaching and learning approaches can be integrated with the approaches made possible through technology.

Consider these five key dimensions of learner engagement when you design a course.

Learners should:

1. engage with self
2. engage with content
3. engage with other learners
4. engage with the teacher
5. engage with technology.

1. Engage with self

What does the research say?

There are many theories about the ways learners learn. Learner profiles, which are based on cognitive/affective, cognitive, perceptual, and behavioural factors, provide a holistic view of a student’s approach to learning, and can be useful guides to providing diverse learning environments and activities.

But regardless of which theory you use, individual students should understand how they learn before they can get the best out of other dimensions of engagement.

To participate in new ways of learning, students need to be more independent than they were in traditional modes – independent learners are therefore more likely to be successful. Dependent learners tend to prefer traditional teaching such as lectures.

Some students also come to e-learning with a set of attitudinal barriers that affect the degree to which they engage, and their chance of completion. Being aware of these barriers, and having strategies to overcome them, will raise their chances of success.

What does this mean in practice?

- Assess learner readiness for e-learning, and provide appropriate support.
- Find ways for learners to understand their own learning profile.
- Promote the development of skills that enable self-directed learning.
- Provide a range of teaching formats.
- Use technology in ways that provide interesting, interactive learning.
- Scaffold learners to develop the skills they need to use technology effectively.
- Be aware of potential barriers and the critical success factors to overcome them.

2. Engage with content

What does the research say?

Good design, development, and presentation of course materials enhances students' learning, motivates them to engage with the content, and inspires them to complete their study.

Students are more likely to engage with courses that have clear links between outcomes, activities, resources, and assessment.

Initial engagement is improved by content that is both challenging and at an appropriate level.

What does this mean in practice?

- Ensure that a learner's first course is challenging and relevant, and that it reflects the general level of their programme.
- Make clear links between course outcomes, activities, and assessment.
- Use signposts that help independent learners to set their own objectives while helping more dependent learners to make better decisions.
- Include authentic activities and content that learners will recognise as relevant to their own workplace and future.

3. Engage with other learners

What does the research say?

Research literature on effective pedagogy shows the importance of interaction between students – most students do not want e-learning at the expense of this interaction. It is therefore important to identify the types of interaction that are most productive for learning, and to encourage students to use appropriate strategies for communication and collaboration online.

What does this mean in practice?

- Provide opportunities for social interaction before and during courses through a range of synchronous and asynchronous pathways including email, telephone, online chat/forums, and face-to-face meetings.
- Teach the skills necessary for collaborative learning.
- Continuously monitor the quality and quantity of learner participation.
- Reflect the importance of group contributions in the assessment process.

Practical skills for veterinary nurses

The National Certificate in Veterinary Nursing is offered by Otago Polytechnic in two modes: face to face/fulltime; and distance/part time.

The distance/part time option used a blend of media, Internet delivery, and practical block courses, but the distance students had fewer opportunities to ask questions and discuss veterinary procedures. They found it more difficult than the face-to-face students to retain the practical skills they learned in the block courses.

The solution was to produce a visual and interactive resource that they could take home from the block course. Initial video footage of tutors and procedures was immediately useful in face-to-face classes and on tape for the distance students. Over the next 18 months it was edited and produced on an interactive and easily navigable CDROM – this digital content can be supported with text or voiceover.

The certificate-level veterinary nurse students are predominantly kinaesthetic and visual learners. The interactive CDROM gives these students more choice in the type of learning activity they engage in – they can stop and think, ask questions, and make conceptual links without placing a real procedure at risk. They have the time to consider authentic situations, and can review the material and formative assessment exercises as often as they like.

For more details about these case studies, go to <http://elg.massey.ac.nz>
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4. Engage with teacher

What does the research say?

Interaction between student and teacher is equally important. The transition from traditional to newer forms of teaching increases the options for how this interaction can occur.

Students engage more effectively with their teacher when they have constructive help from the institution (teachers and support staff) before the course and in its early stages.

Student retention improves when teachers respond quickly and formatively to student feedback.

What does this mean in practice?

- Conduct course orientation programmes that aim to increase participation.
- Create clear lines of responsibility for communicating with learners, and let them know who to contact for specific issues.
- Ensure that learners understand learner-teacher-institutional responsibilities for interaction.
- Draw on a range of teaching approaches to meet diverse learner needs.

5. Engage with technology

What does the research say?

For students to engage with course content, teachers, other students, and themselves, they need to successfully engage with the technology. Prospective students therefore need to develop skills to use educational technology before they start the course.

Technology can be the conduit for all of these dimensions of engagement. But it is important to recognise the challenges students face in managing the technology itself.

Once they start their course, e-learners need reliable access to help that is relevant, easily understood, and available as and when they need it. For some students, engaging with technology is a significant barrier to participation and success. They often identify problems with technology as being significant factors in deciding whether to continue or withdraw from a course.

What does this mean in practice?

- Provide clear information about access to courses from institutions, workplaces, and home.
- Provide learners with clear guidelines about how to access technical support, and who is responsible for particular issues.
- Commit to sending prompt and informative replies to learner requests for help.
- Allow learners time and opportunities to develop the skills they need before they engage in critical activities.

A case study in collaboration

The New Zealand Tertiary College and the University of Wisconsin-Milwaukee collaborated to deliver professional development to early childhood faculty and trainers. The challenge was to design and develop online material for teachers who had low technology skills, were sceptical of the potential for using technology in education, and who preferred the sense of community they found in face-to-face classes. The learning styles of these students showed a preference for social interaction, and that they had significant concerns about learning their subject matter at a distance. They felt they would be isolated and detached from one another and from the learning experience.

There were a number of critical elements in designing and developing the new programme: developing the tools to create a community; building that community; keeping the instructional design simple; making it accessible and easy to navigate.

Course evaluations now show that students enjoy this mode of study. They feel that it gives them more opportunity to engage with their teachers and their classmates than they had in face-to-face classes.

'We've seen an incredible amount of sharing and exchange of ideas and information among child-care professionals who – in another setting – might see themselves as competitors, but who – online – feel part of a community of learners who offer affirmation, support, advice, and proven strategies to one another.'

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Blended learning

Students may find it difficult to engage in online learning for a number of reasons – inexperience, an inability to cope with self-directed learning, difficulties in adjusting to hypermedia, and poor learning design – but they respond well to content that is presented in formats that are appropriate to both them and the message. Support and encouragement help them to become more independent of their teachers, and motivate them to continue and complete their studies.

Student engagement is therefore not guaranteed by any single design strategy. Evidence suggests that many students are more likely to accept and respond to courses that include familiar teaching modes, and that they benefit from a blended approach.

A blended course can include a variety of physical and technical learning environments and a range of teaching strategies. Delivery methods can include face-to-face workshops or tutorials, online scenarios and activities, peer teaching and learning, and online discussion – with each method chosen after considering learner profiles, the course, and a range of technologies.

Technology for teaching and learning is now available in many educational and vocational/ industry training organisations. Every year, teachers have more opportunities to build on their level of technical literacy to further develop course learning activities that promote student participation and collaboration. Blended learning can successfully embed new technologies in mainstream teaching and learning if it is also used to facilitate engagement between students and teachers, students and content, and students and their peers. Successful design is at the heart of creating an environment that engages students.

This bulletin is based on the following research reports:

Clayton, J., & Elliott, R. (2007). *E-learning activities in Aotearoa/New Zealand industry training organisations*.

Clayton, J., & Elliott, R. (2008). *Overview of work-based and work-placed e-learning landscapes*.

Koloto, A., Kaotanga, A., & Tatila, L. (2006). *Critical success factors for effective use of e-learning by Pacific learners*.

Jeffrey, L., Atkins, C., Laurs, A., & Mann, S. (n.d.). *Learning profiles: Diversity in learning*.

National Council for Educational Research. (2004). *Critical success factors and effective pedagogy for e-learning in tertiary education*.

Renwick, J., & Owen, S. (2005). *The e-learner support project: Measuring the worth of e-learner support systems – developing a possible benchmarking method for evaluating effectiveness*.

Winter, M. (2006). *Evaluation research on the TANZ-PSTO online NCFLM course*. Final report.

Winter, M. (2004). *Why do learners withdraw from the online National Certificate in First Line Management course?*

LDnet is New Zealand's support network for learning designers.

For more details, go to <http://ako.aotearoa.ac.nz/communities/ldnet>