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Summary Report

Strategies for engaging learners in a blended environment

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STRATEGIES FOR ENGAGING LEARNERS IN A BLENDED ENVIRONMENT

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To see the full report visit the project space at: www.akoaotearoa.ac.nz/blended-approaches-learner-engagement

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Introduction

This project sought to identify effective strategies that teachers can use within a blended learning environment to enhance learner engagement and achievement.

Blended learning has its roots in both classroom teaching and online learning so it is not surprising that engagement strategies that work in these two environments are also going to be important in a blended course. What distinguishes the blended course is the careful planning needed to blend these two modes to maximise learning for students.

Blended learning is an area that does not have a widely accepted definition in the literature. The project team used the following definition: "at its simplest, blended learning is the integration of classroom face-to-face learning experiences with online learning experiences" (Garrison & Kanuka, 2004, 96).

There were six overarching objectives in this project. These were to:

- identify appropriate engagement strategies in a blended learning context
- identify student preference for, and perceptions of, a blended learning environment
- determine the effect of blended learning strategies on student engagement and the students' perceptions of the quality of their learning experience
- establish the relationship between student learning orientations and engagement strategies in a blended learning context
- determine effective methods in a learning management system of identifying students at risk of disengagement
- develop an integrated toolkit of effective engagement strategies that will help academic staff to scaffold and support student learning.

A mixed-method approach, using both quantitative and qualitative methods, was used to collect and analyse data. In total, 541 participants from two North Island universities participated in this project.

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"at its simplest, blended learning is the integration of classroom face-to-face learning experiences with online learning experiences"

(Garrison & Kanuka, 2004, 96)

A framework for considering engagement in a blended environment

Overall, the literature highlights considerable reluctance among academics to engage with online learning. This has often been attributed to reluctance by academic staff to take up online teaching. Over the past 15 years there has been a substantial body of research around the factors that encourage and discourage academic staff in the tertiary sector to teach in online environments. Furthermore, given that many academics receive little teacher education or training, the idea of adopting a new way of interacting with students becomes quite daunting. Organisations and teachers are encouraged to consider the 10 following strategies in light of their practices.

This project draws upon the framework presented below, which illustrates the three key types of student engagement strategies,[1] which are:

- capturing engagement
- maintaining engagement, and
- re-engaging those who have either never engaged or have become disengaged.

This framework is used in this project to describe the key learnings from the literature on blended learning engagement strategies and to describe the results of this study. Critically, the best learning outcomes occur when engagement strategies focus on all areas of this framework.

Start of the course
Get students engaged:
- Primers for getting attention
- Social presence and belonging

During the Course
Maintain engagement:
- Clear content structure
- Unambiguous instructions and guidelines
- Challenging tasks
- Authentic tasks
- Timely feedback
- Elaborated feedback

Re-Engaging
Recapturing the disengaged:
- Monitor for early identification
- Personal contact with student and appropriate support

1 Please note these strategies are not listed in order of priority but rather in relation to the framework. A comprehensive account of each strategy is presented in Jeffrey *et al.* (2012).

Top 10 engagement strategies from the literature

The literature points to 10 engagement strategies that have particular potency in enhancing outcomes for learners. These strategies are not interchangeable. Each strategy represents a critical aspect of the learning process and all are required to achieve the maximum benefit. Each strategy is considered in the context of the framework presented above (see page 2).

Getting students engaged

Capturing student attention at the start of the course has the biggest impact on the retention of students. Two major types of strategies were identified as being important:

1. *Primers for getting student attention: Curiosity, relevance*

   The literature identifies two possible approaches: curiosity and relevance. Students experience curiosity when they become aware of a gap in their knowledge and are motivated to find the answer. One interesting aspect of curiosity is that it grows as knowledge grows, which suggests that teachers may need to prime curiosity early in a course. When students see a subject or topic as having personal relevance they are more likely to experience an optimal level of arousal for learning.

2. *Social presence and belonging: Teacher enthusiasm, immediacy and an inclusive environment*

   The social context plays an important role in encouraging student engagement. Students who feel a part of the class and a part of the subject discipline are less likely to feel alienated or isolated and are consequently more likely to become engaged. Teachers, particularly in the online environment, are an important aspect of social presence. Impersonal environments are more likely to alienate students. Teacher immediacy – a sense of the presence of the teacher – is reassuring to students.

Maintaining engagement

Maintaining student engagement through the course requires the following six strategies:

3. *Clear content structure*

   When students start a new course most of the material will be uncharted territory for them. The constants they expect in a course are a clear course outline that includes the content structure and other organisational features. Students become very disgruntled with disorganised courses and changes to the expected programme.

4. *Clear, unambiguous instructions and guidelines*

   Students are intensely interested in assessment instructions and guidelines. They may experience high levels of anxiety associated with this part of the course, which increases the need for clarity in these matters.

5. *Challenging tasks*

   Challenging tasks are those that make the student stretch to their limits of performance. Learning happens when students make an effort and the greater the effort, the greater the sense of achievement and motivation. Students are not motivated when given high marks for simple tasks, but nor are they motivated when the task is far beyond their ability.

6. *Authentic tasks*

   Students are further motivated when they engage in tasks that they perceive as preparing them for the 'real world'. They understand that effort now has a later benefit. Transfer of learning occurs when learning tasks are structurally similar to real world tasks.

7. *Timely feedback*

   The weight of evidence strongly suggests that in most circumstances immediate feedback is more effective than delayed feedback. Immediate feedback allows students to correct errors quickly, making learning more efficient.

8. *Elaborated feedback*

   Studies consistently report that highly specific feedback that elaborates on the ways students can improve their performance results in better learning.

Re-engaging students who drift away or fail to engage

In most courses a proportion of students will procrastinate at the start of the course or stop engaging, usually at key points such as assessment. The literature identifies two critical strategies for re-capturing the engagement of these students:

9. *Monitoring and early identification*

   Early identification through monitoring student engagement is essential to identify disengaged students. The earlier the identification, the greater the chance of success. Ideally, this should start in the first week. Learning management systems such as Blackboard and Moodle make this a very simple process. Taking rolls at class is also recommended. Students who are performing poorly are also at risk of dropping out and should be monitored.

10. *Personal contact and negotiated conditions for re-engagement*

    Having identified students who are not engaged, the most effective strategy for re-engaging is personal contact with the student by the teacher. A personal email to each student is one simple option. Follow-up contact for students who do not respond initially is also important. Such contact is most effective when the teacher works with the student to provide help and support for problems the student may have.

Findings

Here we highlight sixteen major findings from our study:

Finding 1: Students value blended learning.

Students showed a strong liking for blended modes of learning. While previous research shows preferences for traditional modes of teaching, the results of our study suggest that the value of blended learning is increasing over time.

Finding 2: Blended learning may offer a richer learning experience than either online or traditional modes of learning.

Current literature indicates that a blended learning environment, rather than being a compromise between two extremes of traditional and fully online learning, offers the student a wider range of affordances to enhance the learning experience.

Finding 3: Teachers are the gatekeepers to student experiences.

Teachers, through their selection and design of learning experiences, will influence the nature and quality of student learning. What students learn is determined by what they have the opportunity to do when they engage in the experiences and activities designed by teachers. Student perceptions of the usefulness of such experiences to their learning are strongly influenced by their opportunity to use them.

Teachers should be strongly encouraged to systematically incorporate all 10 engagements strategies, not to mix and match them, into each course for maximum effect on student engagement and retention.

Finding 4: Teachers are more conservative and less enthusiastic than students about embracing opportunities offered by technology.

Teachers held deep reservations about the role of technology and had a strong belief that teachers should still be the central actor, with technology playing a minor support role. They thought that lectures were useful for explaining theory, and that tutorials provided the opportunity for students to actively engage with the theory at an applied level. Online learning environments were seen primarily as a central repository for all course-related information.

Finding 5: Teachers lack sufficient time, support and resources to create effective blended learning environments.

Competing academic pressure for research outputs reduces time for developing online teaching sites. Teachers also felt frustrated they did not have time to learn to use the system properly nor to be able to personalise it to reflect their own approach to teaching and learning. A lack of time for development and infrastructural support were also significant inhibitors to developing suitable online experiences.

Finding 6: In a blended environment students will engage in a blend of learning behaviours and activities that have personal efficacy and relevance for them.

Students choose their own idiosyncratic mix of engagement activities for learning with some favouring a greater online blend and others more traditional components in their blend. It would appear that while a range of blends might be successful in promoting learning, not all blends are equally effective.

Finding 7: High levels of engagement and persistence in structured and other learning activities are associated with academic success.

The most successful students were those who reported being deeply engaged in structured learning activities designed by teachers. These students were high on planning and persistence, and low on procrastination. They used a wide range of learning resources and approaches, including talking to teachers, collaborating with other students, using additional resources and online forums.

Finding 8: Levels of engagement are strongly influenced by assessment and online activities such as quizzes.

The levels of students' online engagement fluctuated widely during the semester, but generally followed a similar pattern; peaking strongly immediately prior to assessment dates, then dropping sharply. However, this pattern was moderated when online quizzes or activities were used. In courses that included online activities such as quizzes,[2] the level of engagement between peaks was higher and more sustained than for other courses. Teachers reported a steady decline in attendance at lectures, though these also peaked immediately prior to an assessment. Some classes had only 25 percent attendance levels by the end of the semester.

Finding 9: Using the 10 engagement strategies at the appropriate time increases student engagement.

The application of the 10 engagement strategies at the appropriate time had a positive impact on student levels of engagement. Courses that incorporated engagement strategies in their online environment experienced much higher levels of student activity online. We found clear evidence of the efficacy of using specific types of engagement strategies at appropriate stages in the teaching process.

2 Quizzes did not have to be for credit to enhance engagement.

Finding 10: The greatest potential for improving student engagement comes from using primers.

Most teachers did not use online primers[3] to stimulate interest and curiosity, though most used some kind of priming strategy in the classroom. With one exception teachers did not rate this strategy as very important and did not seem to invest a great deal of time thinking about stimulating curiosity or demonstrating relevance. Changes here would have a significant effect on student engagement at a time when students are particularly vulnerable to dropping out.

Finding 11: Potential dropouts can be retrieved while they are in the 'zone of discontent'.

Teachers who actively monitored engagement and then applied strategies to recapture disengaged students were able to re-capture students with relatively little effort. Our results suggest there are times during which some students experience discontent with their studies and become vulnerable to disengagement. However, most of these students can be re-engaged if contacted before making the final decision to withdraw. The key is early identification through monitoring, personal contact and negotiation for a workable solution for the student.

Student learning depends on the level and quality of their interaction with learning experiences. Students who reported being deeply engaged in structured learning activities, using a wide range of learning resources and approaches, including non-structured learning resources, talking to teachers, collaborating with other students, and online forums, achieved the highest learning outcomes.

3 Primers are examples or activities that are designed to stimulate curiosity and/or demonstrate personal relevance of learning.

Finding 12: Most teachers had well-organised courses with good structures.

These online learning sites were well organised and structured. They were divided into appropriate chunks, easy to navigate, followed a logical structure and had clear guidelines and instructions. Students prefer well-organised courses and dislike ambiguity. Carefully structured courses increase student confidence and competence and are an important determinant of a student's tendency to follow a deep or surface learning approach.

Finding 13: Social presence is largely underdeveloped in most online environments.

Most online sites had contact details, a welcome message and a discussion forum; however, these tended to be informational and it was hard to get a sense of the teacher from them. Teacher presence is felt as a sense of immediacy and intimacy in the way teachers communicate with their students. Forums were almost wholly teacher-to-student. Teachers reported that student forums are important for establishing a sense of community.

The most successful students were those who reported being deeply engaged in structured learning activities designed by teachers. These students were high on planning and persistence, and low on procrastination.

Finding 14: Levels of disengagement in the classroom are of concern to teachers.

Most teachers expressed concern at the poor levels of class attendance, some of which were as low as 25 percent. Most teachers attributed this to the provision of online materials, which they believe convinces students they did not need to attend class. Despite this belief teachers feel pressured by student demand to supply these materials. Class attendance is important for academic success. Although tertiary teachers may feel resistant to monitoring attendance, evidence strongly supports its efficacy.

Finding 15: About one third of students either dropped out or seriously considered dropping out.

By the end of the semester, 15 percent of students had dropped out, and a further 15 percent had actively considered doing so. Teaching quality was most frequently identified as the main reason. These students described their teachers as 'boring' and 'not very good'.

Finding 16: High dropout rates are associated with higher course grades.

Surprisingly, courses with higher average marks had higher dropout rates. One possible explanation is that students who drop out are struggling with either the course work or course load, raising the overall mean marks of the remaining students.

Conclusions

Drawing upon these findings we reached five conclusions. Tertiary teachers and organisations are encouraged to think about these conclusions with reference to their context and current practices.

1. *The quality of learning depends on the depth of student engagement in the learning process.*

   Student learning depends on the level and quality of their interaction with learning experiences. Students who reported being deeply engaged in structured learning activities, using a wide range of learning resources and approaches, including non-structured learning resources, talking to teachers, collaborating with other students, and online forums, achieved the highest learning outcomes. These students were also highly organised in their study and persisted with difficult problems. What students DO matters.

2. *The systematic application of all 10 engagement strategies identified in this study to both online and classroom learning gave teachers the best chance of achieving high levels of student engagement.*

   Engagement is enhanced when all 10 strategies are used: primers, social presence, challenging and authentic tasks, timely and elaborated feedback, clear course structures, unambiguous instructions and guidelines, monitoring and early identification of students in the 'zone of discontent', and personal contact with the student.

   These strategies should be applied both online and in the classroom, though the application in different contexts will vary. Applying these strategies online is more difficult for most teachers because of their greater familiarity with classroom teaching.

3. *The skill and effort that teachers use to create learning experiences is the single most important determinant of the quality of the learning environment.*

   This skill was most evident in how well teachers used the 10 engagement strategies. The quality of the learning experience is rooted in the application of the 10 engagement strategies. Teachers who use these strategies when integrating an online component with classroom teaching are able to create a greater variety of learning experiences for their students. These offer students greater flexibility in structuring their own

learning and multiple perspectives of the learning content. The most successful students used a blend of online and classroom elements. Unless teachers consciously entice, stimulate, curate, structure, communicate and attend to student needs then all that remains is a volume of undifferentiated resources that students must interrogate alone. Students are not trained, nor do they have the time, to do this. It would be more honest to give them a library card and tell them to go and find out what they need.

Teachers who developed high-quality engagement strategies made measurable differences to the level of engagement by their students. This was most evident when teachers applied the engagement strategies online as well as in the classroom. Students in these classes worked harder and longer. Even good students will struggle in poorly developed learning environments.

Teachers who lacked these skills or effort created much less satisfactory learning experiences and increased the incidence of withdrawal. These withdrawals represent lost income and wasted resources. The key to improving retention is to improve the quality of the learning experience, and enthusiastic, competent teachers are one of the main means of achieving this aim.

4. *Teachers are time-poor and lack adequate technical support and training in pedagogical principles.*

Many teachers are unclear about the pedagogical benefits of a blended environment. Most saw it as a repository for resources and an opportunity to ease the burden of student questions. Teachers were harried to have their online sites ready for the semester and had little time for exploration or reflection on the opportunities presented by the digital environment. They had had minimal training and very little technical support. Not surprisingly, these teachers were much less enthusiastic about merging traditional and digital modes of teaching than students.

We found clear evidence of the efficacy of using specific types of engagement strategies at appropriate stages in the teaching process.

5. ***Blended learning can make a difference.***

We conclude that blended learning has the ability to make a major, positive impact on tertiary teaching. Learning management systems are capable of helping identify students who are at risk of disengaging and that, with substantial staff development, and improved digital teaching strategies, levels of student disengagement can be minimised. This is an important finding because in a constrained financial environment, each student who disengages is a substantial loss not only to the institution but also to the nation as a whole.

The most successful students used a blend of online and classroom elements.

Recommendations

The results of this study can be considered from a national, organisational or teacher's perspective. Below we consider the key recommendations at each level.

National Recommendations

Much learning and development in the practice of good teaching in a blended environment can be achieved through the creation of a national community of learning for tertiary teachers. One example of an existing community of practice is the Ako Aotearoa Academy of Tertiary Teaching Excellence. Additional groups could be established, that might:

a. host online wiki(s) for tertiary teachers to share teaching and learning strategies, examples and tools for blended learning
b. engage in further research to measure the effect of engagement strategies both in the classroom and online.

Institutional Recommendations

Retention has clear economic and reputational implications. In addition to the broader obligations to develop a sense of belonging and social integration, institutions must take a leadership role in changing the teaching culture. A key area of focus would be the 30 percent of students who withdraw or consider withdrawing from their studies. A major strategy should be to improve teacher performance and accountability. This could include:[4]

a. developing objective procedures and practices for evaluating teaching practice (see Stein *et al*., 2012). Reviews of teacher performance should consider retention rates and success in creating engaging courses that result in higher levels of learning
b. collecting data at the institutional level to identify areas having particular retention problems.

Blended learning, when it is the "*thoughtful integration* of classroom face-to-face learning experiences with online learning experiences" (Garrison & Kanuka, 204, 96), can have a powerful effect on student engagement, and through this, retention and student satisfaction. Improving teacher capacity to develop these more sophisticated courses is urgently needed. Teachers need time, resources and support to develop both their skills and their courses. These may include:

a. workshops to give teachers the opportunity to explore learning technology and/or to develop blended courses, supported by technical staff to minimise frustration and maximise learning

4 Note that these recommendations are consistent with current good practices in other parts of the sector.

b. the opportunity to view sample courses that integrate the 10 engagement strategies
c. providing course templates that teachers can populate with their own materials
d. time release for teachers to develop their blended learning courses.

Teacher Recommendations

Teachers should redesign their courses for blended learning, not just by adding an online component to their regular teaching. The best courses we saw had been thoughtfully considered and the online and classroom components coherently integrated. These courses had been designed starting with a blank slate.

Teachers should be strongly encouraged to systematically incorporate all 10 engagements strategies, not to mix and match them, into each course for maximum effect on student engagement and retention.

Teachers should monitor student engagement online (learning analytics) and in the classroom (taking rolls) for early identification of dis-engagement. This is essential to improving retention.

Blended learning environments should allow students to select their own preferred blend of learning components to foster diverse ways of learning. This carries the proviso that students are given guidance in selecting useful blends.

Toolbox

A toolbox has been developed to support tertiary organisations and teachers to engage with blended learning effectively. The toolbox contains strategies, tools and examples that can be used when designing blended learning courses. These are presented in a framework that allows the user to work systematically through the design process, or to select items that have particular value.

The design process outlined in the toolbox involves five steps:

- needs analysis
- design of layout and format
- development of content
- evaluation of the course
- reflection.

A wide range of tools and strategies is included to cover the 10 engagement strategies identified in the project. It is envisaged that teachers will use these tools and strategies to assist with the design and development of their own blended courses.

The toolkit is presented as a wiki, available through the Ako Aotearoa website at http://akoaotearoa.ac.nz/blended-approaches-learner-engagement.

The website is in the form of a wiki to encourage teachers to add their own tools and examples for other teachers.

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