TAKING THE LEAD

Strategic Management for e-Learning

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Strategic Management for e-Learning

SOME KEY MESSAGES

This report is for the chief executives and senior executive officers of New Zealand's tertiary education institutions and organisations. It is designed to help you consider the contribution you can make to the strategic development and management of e-Learning in your institution.[1]

'e-Learning' in its various forms is transforming the way New Zealand tertiary educational institutions are teaching and supporting their students. It is a transformation involving fast-developing technologies, some complex re-design and integration of institutional systems and the recruitment of new categories of specialists to assist teachers and managers use these new technologies. Much of the detail of this transformation process, quite appropriately, will be managed by specialist staff and middle managers rather than by senior executive staff. However, if these developments are to achieve the key strategic objectives of the institutions, senior leaders and managers do need to exercise strong leadership in a number of key areas. The purpose of this study has been to identify these key areas and to offer guidance to institutional leaders as to how they might be addressed.

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1   In this report, 'e-Learning' is being used as shorthand for digitally mediated teaching and learning or the application of Information and Communication Technology to teaching and learning. In general, the discussion and the case studies are referring to computer-mediated teaching and learning. However, there is a fine line between this and other digital technologies, such as teleconferencing and even broadcasting and much of the discussion and the guidelines apply equally well to this larger grouping of technologies.

This document is an executive summary of the complete report of the "e-Learning Management Resource Project." Nine themes are explored in the full report, which is a substantial document of 100+ pages. These nine themes were drawn from an earlier study on quality assurance for e-Learning. In seeking to prepare a much shorter and tighter summary document, we have reduced and tightened these categories to just six:

Strategy;

Structure;

Resourcing;

Decision-making;

Collaborating and outsourcing;

Selecting technologies.

Within these six themes we have not covered all the areas and challenges of which senior leaders should have some knowledge. However, they are the areas requiring strategic direction from the most senior levels of their institutions where challenges cannot be resolved by middle managers, technical experts or teachers, without senior executive involvement.

In this summary document, we briefly expand each of these six themes, suggest the strategic questions that chief executives need to ask under each theme, and identify some of the principal options that are available to them.

An important part of the larger project was to look at current institutional practice and develop a set of case studies illustrating the themes explored in the report. We have appended the case studies to the larger report. In this summary report, a few of the key links are drawn between each theme and the case studies.

Strategy

The primary questions senior executives might ask under this theme are:

What are the medium and long-term strategic goals and objectives of your institution?

How are these strategic goals reflected in your institution's Learning and Teaching Plan? and,

How are these strategic goals reflected in your institution's more specific plans for e-Learning?

e-Learning solutions are often promoted and endorsed without a clear understanding of the strategic objectives they are intended to serve. There are probably five reasons for an institution to introduce e-Learning:

- to meet the service expectations of students, staff and stakeholders;
- to allow an institution to enhance the quality of the student learning experience;
- to improve access and flexibility of study for students;
- to increase enrolments by targeting new groups of potential students;
- to deliver teaching services more efficiently.

Any of these could be legitimate objectives, but it is highly unlikely that all will be achievable within the same application, programme or even institution. It is also highly unlikely that any e-Learning solution that meets reasonable standards of quality for teaching or student support will be significantly cheaper than a conventional delivery option.

The key challenge for institutional leaders, with respect to strategy, is to ensure that institutional strategy drives e-Learning strategy. All too often, an institution's e-Learning strategy will be a solution-based plan that has been developed by a committed group of enthusiasts somewhat detached from the broader strategic goals of the institution.

In the case studies, we identify a range of responses to this need to drive e-Learning strategy from core institutional strategy. In the **Otago Polytechnic** case study, we present an example of strong strategic direction at a corporate level. In another case study drawn from Otago University, we see an example of an e-Learning strategy nested within a teaching and learning plan, which, in turn, is nested within a university strategy. Each level of the strategy is monitored and driven by a governance group. At **Canterbury University**, senior leaders have avoided the danger of technology capture by not developing an explicit plan for e-Learning at all, preferring to drive all planning for e-Learning from their broader teaching and learning plan.

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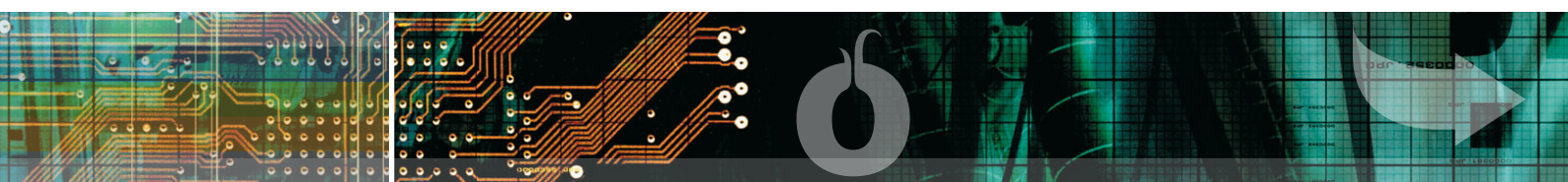
Structure

Form should follow function and it may seem perverse to give early prominence to questions of form and structure. However, the frequency with which institutions reorganise the units responsible for supporting e-Learning justifies this prominence. Questions of organisational structure and responsibility also tend to be the province of senior institutional managers rather than being left to the discretion of those working within these structures. For these reasons, it is important that senior leaders ask and find answers to the following questions:

> How should you organise and manage for e-Learning?
>
> More specifically, who should be responsible for what and how should their various efforts be integrated and led?

Conventional classroom teaching is generally a one-person activity in the higher education sector. The teacher undertakes all the lesson planning, classroom teaching, assessment, student advising and administrative duties associated with delivering a course. It is also an activity that lends itself to autonomous decision-making. e-Learning requires each of the above tasks to be performed, but also requires the development of online teaching resources, the management of some form of learning management system, and the provision of a range of network services to allow both teachers and students to make use of the system. Some important decisions must be made about how each of these roles will be supported within an institution.

One set of decisions needs to be made about the extent to which teachers will be assisted in their development of online teaching materials. Ideally, a subject teacher will have the help of an instructional designer, a multimedia expert and a web developer who will work alongside the teacher as a 'production team.' However the realities of cost and time tend to preclude such an intensive approach. Most institutions opt instead for a small, central support unit comprising instructional developers who help teachers develop and manage their online courses. The extent of this assistance is likely to depend on the size of the support unit and the number of courses that are developed and redeveloped each year.

Another set of decisions needs to be made about the location of these online support people within the institution. One option is to establish a separate e-Learning support unit. While an arrangement like this provides a concentrated focus, it is likely to create overlaps and discontinuities with the institution's other systems for teacher and student support. Instead, institutions are increasingly trying to co-locate all their academic support staff to ensure the optimum use of limited support personnel and to avoid divorcing e-Learning from other modes of teaching and learning. A related issue is whether teaching units should be encouraged to appoint their own e-Learning facilitators to ensure a more responsive and customised support for teachers.
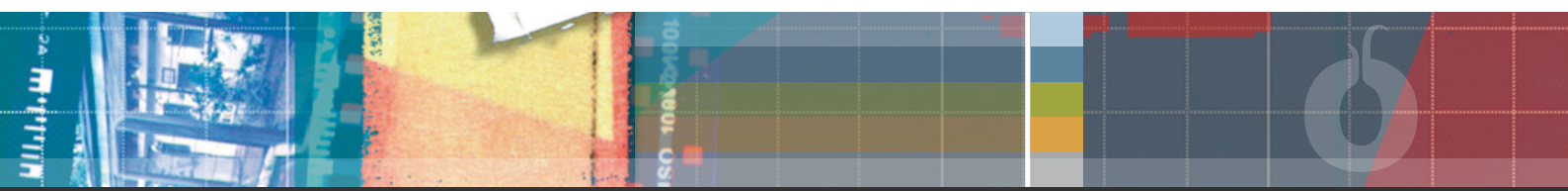
Again, this is a fairly expensive option that requires strong and sustained encouragement by leadership if it is to succeed and be sustained.

Most institutions have no trouble separating teaching support and network support operations. The latter commonly remain the responsibility of institutional IT units. As these are the units with the appropriate expertise and mandate, there is seldom any dispute about assigning these responsibilities to them. Problems are likely to arise where there are ill-defined accountabilities between these various service units or where there is inadequate institutional leadership for the e-Learning programme. One example, occurring in more than one institution, is the decision concerning the purchase or replacement of a learning management system. Both the IT unit and an e-Learning support unit are likely to bring quite different principles and assumptions to such a decision and it is likely to need the involvement of a senior institutional leader to reach a balanced decision.

The last point illustrates the crucial need for strong leadership from a designated member of the senior management team. Where this is the chief executive, so much the better. However, this is not always practical where a chief executive does not want to be championing individual projects or causes. It may be just as effective if another member of the senior team takes on this role of championing and driving the e-Learning programme.

There is also a danger in delegating final responsibility for the e-Learning strategy and programmes still further down the management line to, say, the director of an e-Learning unit. The latter will probably lack the resources or the mandate to drive a strong strategy across the institution. Directors of e-Learning units might find it difficult to solicit the continuing cooperation of divisional and programme heads, and to promote their own resource and system requirements against the competing claims of other, larger units.

In the case studies, we present a variety of organisational arrangements for supporting e-Learning. At the **University of Auckland**, the e-Learning support unit has been brought into a larger aggregation, comprising all the teaching and student support units. At **UCOL**, senior leaders have recognised the central role of the Library in knowledge management and located their e-Learning support services within that unit. In the **AUT University** case study, we see an interesting example of a senior manager seeking to exercise strategic leadership over his institution's teaching and learning activities, including e-Learning. At **NorthTec**, leadership is being driven strongly by the chief executive. At **Bay of Plenty Polytechnic** and **Manukau Institute of Technology**, strong leadership is being exercised at the e-Learning support unit level.
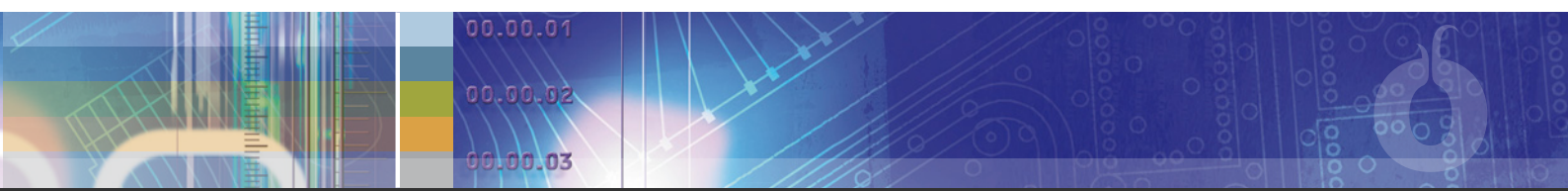
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Resourcing

Chief executives need to be clear about two questions with respect to the resourcing of e-Learning:

How should e-Learning be resourced within your organisation? and,

What will it cost?

While the second question may be of more immediate interest to senior managers, the first question is probably more important. In the full report we chart a common evolution of resourcing for e-Learning among New Zealand institutions. This goes as follows: early adopters are supported by targeted grants; a pilot programme receives similar targeted funding; as the numbers of users increase, gaps are identified in the provision of services; central services are established and resourced to fill these gaps; e-Learning support services are made available to teaching units generally without charge; as usage grows, these units have to start rationing their provision of support.

By this stage, most institutions have a fairly stark choice to make when it comes to funding the wider development of e-Learning strategies. The first option is to 'ring fence' the resourcing and management of e-Learning and treat it as a centrally-planned, centrally-resourced and largely stand-alone stream of activity and funding. Under this option, the development of e-Learning strategies is generally resourced by 'top slicing'. The central e-Learning unit is allocated sufficient resources to develop a given number of courses to a given standard. Some selection process then determines which courses will be developed and to what standard. A common variant of this approach is the use of development grants, which are awarded on the basis of applications from across the institution.

This second approach has a number of strengths. It allows a corporate and strategic decision to be made about which programmes will make use of e-Learning and how they will deploy it; it tends to encourage a programme-wide approach to e-Learning rather than a more piecemeal, course-based approach; and it may act as a strong incentive for programme groups to make the effort to develop their online programmes.

On the other hand, in a regime of devolved funding, targeted central funding can distort the decisions that programme managers are making about how their programmes should be delivered. As the scale of an institution's e-Learning grows, this mode of funding e-Learning will represent an ever-growing proportion of each unit's total funding. Therefore it is probably not conducive to ensuring the accountability of individual unit and programme managers.
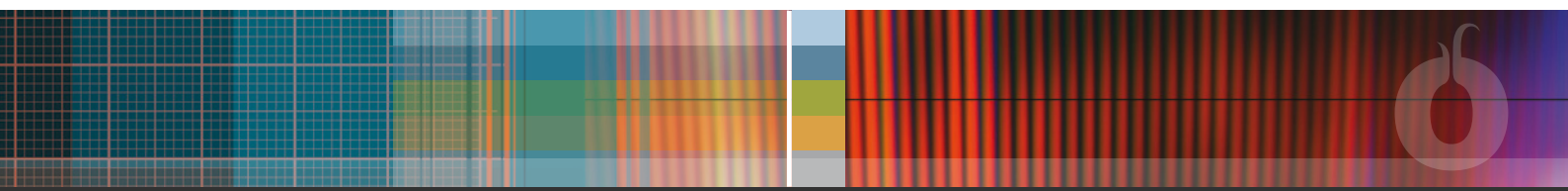
The other alternative is to keep the level of centrally-funded support services to a minimum and encourage divisional and programme leaders to view e-Learning as just one of the many delivery options that they should consider resourcing from their current income. In theory, this should encourage programme leaders to make rational and cost-effective choices among competing delivery options. The downside may be that the uptake of e-Learning will be slower than with a more centrally-funded approach. More seriously, the quality and range of approaches adopted across the institutions are likely to be much more variable, and, therefore, likely to attract the attention of a quality assurance unit.

On balance, the evidence seems to favour a continuing level of central resourcing for central services. Institutions with development grants to facilitate e-Learning are able to target developments on a more strategic basis and ensure a more even standard of provision. The scale of such grants can vary considerably. One or two regional polytechnics are investing up to $1 million in targeted development projects each year, while a couple of much larger universities are investing $100,000 to $200,000 across a large number of projects.

In the **Massey University** case study, we present an example of an institution endeavouring to resource its e-Learning development on a fully-devolved funding model. The **Otago University** and **AUT University** case studies are examples of competitive grant systems delivering modest support for selected programmes. The **NorthTec** and **Otago Polytechnic** case studies are examples of larger-scale central investment in e-Learning on a targeted basis.

Case study links

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Decision–making

The key question to ask here is:

> Who makes the decisions about which courses and programmes will use e-Learning and how they will do so?

The locus of decision-making within institutions about the use of e-Learning is a matter of strategic importance. It is also an issue that is closely related to the previous discussions on leadership, organisational structure and resourcing.

As with these previous issues, the options can be viewed in terms of a continuum. At one end, decisions are made primarily by the individual teachers on behalf of each of their courses and according to their own preferred teaching mode. In most divisions of most New Zealand universities, e-Learning is viewed as an option which teachers can elect to adopt, or not. There are support services available to assist teachers in using the institutional learning management system and there will generally be opportunities for teachers to undergo targeted training in this mode of delivery. However, only rarely are teachers instructed to deploy a given mix of e-Learning tools to support the delivery of their courses. In these institutions, academic developers tend to see their role as supporting and encouraging teachers to develop and teach in the ways that best suit them. It is not their role to enforce an institutional standard or to prevail on the unwilling to adopt a new mode of teaching.

> To a greater or lesser degree, all the universities represented among the case studies tend to leave the decisions about the use of e-Learning to individual teachers.

Some institutions are recognising that decisions about mode of delivery should sensibly be made on a whole-of-programme basis rather than a course-by-course basis. Students commencing a programme should reasonably expect some continuity in their mode of study rather than being subject to the vagaries of choice from a sequence of teachers. A programme that has been developed for a particular student demographic may be seriously compromised if some teachers opt not to employ the delivery mode suited to that target market. In such institutions, these decisions are made increasingly at a divisional or, more commonly, a programme basis.

A decision might be made, for instance, that a programme will target the part-time student market in a particular region. In order to meet the needs of that market, the programme might offer a blend of face-to-face block courses, supported by a suite of online learning resources and communications services. A minimum level of online service is specified for the programme and all teachers contributing to the programme are actively assisted to prepare

their courses to meet these requirements. These standards might conform to a wider, divisional or institutional standard, or they might be specific to the programme in question.

Arguably, every institution should strive to achieve a functional level of programme-wide service. It will certainly require the active intervention of programme leaders and, ideally, of divisional leaders, but it should not be seen as a threat to academic freedom. Teaching with e-Learning methods is no more an attack on academic freedom than the implicit expectation that conventional courses will be delivered in lecture and seminar rooms, that teachers will be available to tutor and advise students and that the course will normally last for the duration of a semester.

> In the **Whitireia Regional Polytechnic** case study, we present an example of an institution deciding as a matter of policy that decisions about e-Learning will be made on a programme basis and that support services will be targeted at the programmes and programme teams rather than individual courses and teachers.

Further along this continuum are those institutions where the decisions about what is taught and how it is taught are made at a corporate level and for strategic ends. This model is normally accompanied by a strong injection of central resourcing and central support. This approach is favoured by much of the early literature on e-Learning. Potentially, it allows a concentration of development resource and effort on those programmes that are likely to yield the greatest educational and financial return for the institution. It allows a relatively rapid development and roll-out of a high quality product. This approach requires hard choices to be made between competing options for scarce resources. It will therefore work much better in an institution with a relatively corporate culture. It will also require a high level of commitment among the leadership team to a shared vision and a steady uptake of this vision by the staff at large.

> A highly-centralised corporate approach to managing e-Learning is evident in the **Open Polytechnic** case study. All decisions about e-Learning are made by the senior executive team on the basis of thorough business plans prepared on a programme-by-programme basis. It is the senior executive team that is driving the uptake of e-Learning at Otago Polytechnic as well, though here, there is greater use of targeted central funding to assist programme teams in making the change.

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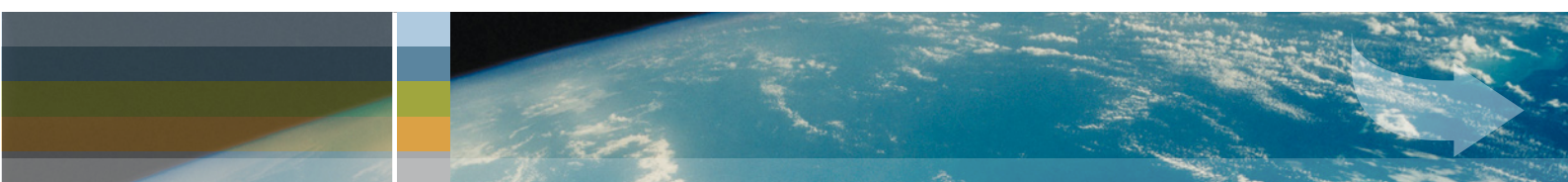
Collaborating and outsourcing

e-Learning, more than many other teaching modes, lends itself to collaboration with other institutions or outsourcing to contracted service providers. Senior executives need to consider their options for either collaborating or outsourcing various aspects of their e-Learning activities.

The full report canvasses a number of reasons why an institution might collaborate with another entity to support its e-Learning activities. These include:

- to gain access to specialist expertise, knowledge, systems, courseware, networks or hardware;
- to expand the visibility and market reach of an institution's teaching programme;
- to take advantage of the regional footprint and support services of an institution in another region;
- to achieve economies of scale by increasing the size of the student market and the institutions' combined capacity to meet this market; and
- to comply with an external policy, regulatory or funding requirement for such collaboration.

The choice is usually between collaborating or outsourcing a set of services or developing them in-house. Collaboration or outsourcing may enable an institution to make an earlier commitment to a new service; it should allow them to plan and control their costs more reliably; and it may allow them to buy in services that lie outside their 'core business.' The downsides of such relationships may include a loss of direct control over the processes; a disinclination to develop these services in-house; some alienation from the contracted services and the service provider; and the high cost of managing such relationships. Nevertheless, institutional leaders are well advised to view the opportunities for collaboration and outsourcing on a case-by-case basis rather than decide one way or the other by principle alone.

The following case studies are examples of what can be achieved by collaboration and outsourcing. **TANZ** (Tertiary Accord of New Zealand) is a collaboration among six medium-sized regional polytechnics. Right from the outset, TANZ members have seen greatest scope for collaboration in the planning, development and provision of e-Learning programmes and services. Early success has been achieved in offering joint programmes in applied business. Plans are underway for larger-scale collaborative offerings.

For a number of years, **Wintec** has contracted Intuto to deliver a range of e-Learning services and products. The relationship has allowed Wintec to take advantage of a market opening that it would have been unable to service on its own. It is a commercial relationship that undergoes constant change as the nature of the service mix changes.

Case study links

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Selecting technologies

Periodically, chief executives are faced with making decisions about purchasing or upgrading ICT systems. These are often very high-cost items in terms of both capital and recurring costs. The technology itself can be very complex and challenging for a lay person to fully appreciate. On some occasions, chief executives may feel they are virtually ambushed by the proponents of such solutions, especially, if few viable alternatives are presented for the preferred option and the issue is presented as 'mission-critical.'

It is not realistic to expect the average chief executive to master the technical details of many of these solutions. However, they do need to have some way to assure themselves that they are reaching a decision on the basis of a reasonable understanding of the fit between the strategic needs of their institution and this particular 'solution.' Ideally, they should have a set of diagnostic questions that they can ask of each proposed solution. The following is a basic list:

Key Questions To Consider

STRATEGY QUESTIONS

- What is the problem that this technology will solve or help us with? What sort of priority is it?
- Do our teachers/students wish to teach/study in this way? How do we know students will achieve their learning outcomes?
- Will we suffer if we simply don't adopt it?

STAFF DEVELOPMENT QUESTIONS

- What are the implications for staff workload? Can this be managed? Can our teachers use and manage this technology themselves or will they be dependent on support personnel? What are the implications for staff development?

MARKETING QUESTIONS

- Will the technology open up new markets (geographic, demographic, subject) for us?
- How does this technology impact on the existing mix of technologies both for supporting and delivering teaching and for administrative/support systems? Does this technology offer the necessary range or quality of functionality and interoperability?
- What are collaborators and competitors using? Why would we want to use the same or a different system?
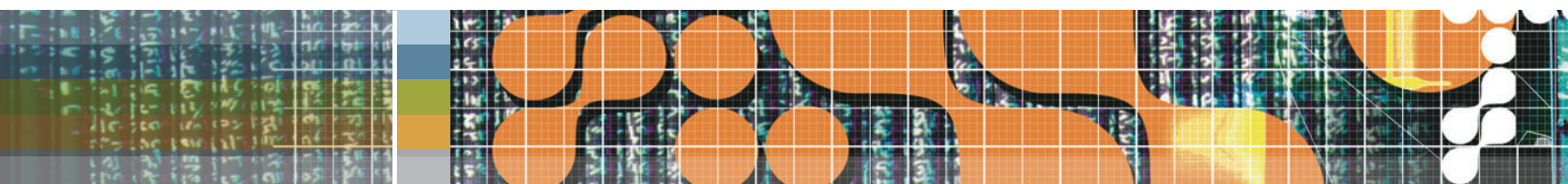
FINANCE QUESTIONS

- Is it a cost-effective solution in terms of capital and recurrent costs?
  - how do the anticipated costs compare with current technologies?
  - will it displace any current services and associated costs?
  - can we control and/or anticipate future costs?

TECHNOLOGY QUESTIONS

- Is it a robust technical solution?
  - is it emerging, 'bleeding edge', established or 'twilight edge'?
  - what is the size of the user base?
  - can we access support both locally and remotely?
- Is this technology readily scalable?
- Can we support/maintain this technology ourselves or will we be dependent on an outside supplier?
- What infrastructure will be needed to support this system? Do we have it already? If not, what will it cost to develop?
- What level of disruption will this technology bring to our operations?
- How dependent will this technology make us on outside providers? To what risks are we exposed?
- Have we an exit strategy for this technology?

INTELLECTUAL PROPERTY/PRIVACY QUESTIONS

- What implications does this technology have for intellectual property – both our use of others' IP in the technology itself, and others use of our learning materials developed using this technology?
- Does this technology bring with it any implications for student/staff privacy?
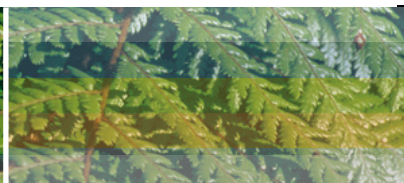
Conclusion

IN THIS SUMMARY REPORT, we have covered the strategic issues for which senior executives, and only senior executives, can take responsibility. There are other important dimensions of e-Learning that senior executives should certainly understand so they can provide leadership. These include quality assurance, instructional design and development, teaching and learning, staff development, student support, assessment and moderation and technological infrastructure and support. These areas are all addressed in the larger report. However, they tend to be issues which can be identified and addressed quite adequately by staff at other levels in the organisation. The purpose of this project, and this summary document, is to assist senior institutional executives to address the issues for which they are uniquely responsible.

For a fuller appreciation of the issues surrounding e-Learning, we recommend that you read the case studies referenced in this summary. This material contains many useful insights and ideas for discussion.